# Credit Suisse Holdings (USA), Inc. 2019 Mid-Cycle Dodd-Frank Act Stress Test Results

## CSH USA Severely Adverse Scenario


October 2019

CREDIT SUISSE

# Overview

As part of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act), the Board of Governors of the Federal Reserve System (Board) is required to conduct a supervisory stress test of bank holding companies (BHCs) with $100 billion or greater in total consolidated assets. Credit Suisse has designated Credit Suisse Holdings (USA), Inc. (CSH USA) as its U.S. Intermediate Holding Company (IHC), and the IHC is subject to U.S. capital and liquidity requirements, capital planning and stress testing, risk management and other enhanced prudential standards on a consolidated basis.

On October 7, 2019, CSH USA was required to submit a Mid-Cycle Dodd Frank Act Stress Test using a set of macroeconomic scenarios (internal baseline, internal adverse and internal severely adverse).

- The planning horizon for the scenarios was a nine quarter forecast, utilizing a jump off point of June 28, 2019.

The results on pages 5 - 8 incorporate the following capital action assumptions:

- Actual capital actions completed for the first quarter of the planning horizon
- Payment of common stock dividends equal to the quarterly average dollar amount of recurring common stock dividends that were paid in the fourth quarter of 2018 through and including the third quarter of 2019
- Payments on any other instrument that is eligible for inclusion in the numerator of a regulatory capital ratio equal to the stated dividend, interest, or principal due on such instrument

Credit Suisse Group AG (Credit Suisse) is a leading global financial services company that operates across a variety of geographical markets, including Europe, Middle East and Africa, the Americas and Asia Pacific. CSH USA, an indirect wholly owned subsidiary of Credit Suisse Group AG, is an integrated investment bank serving institutional, corporate, and government clients. CSH USA’s products and services include securities underwriting, sales and trading, financial advisory services, derivatives and risk management products, asset management and investment research.

The DFAST projected results disclosed herein reflect a hypothetical economic scenario, developed by CSH USA, under an Internal Severely Adverse scenario.

# Company-Run Severely Adverse Scenario Overview

The Company-Run internally-developed severely adverse scenario is characterized by a deep economic recession and stressed conditions in the global financial markets. The scenario is designed to expose the risks that are most impactful to CSH USA's capital position, which makes for a challenging and informative stress test. The scenario includes an internal market shock, which is an instantaneous repricing of CSH USA's trading and counterparty exposures.

The impact of stressed economic and market conditions are also captured in a longer-term component of the scenario. The behavior of key variables are projected over a nine-quarter planning horizon:

| Market Conditions | Description |
|---|---|
| **Macroeconomic Backdrop** | ➢ There is substantial weakening in US economic activity. Real GDP declines by about 6.5% over the first year and a half, eclipsing the peak-to-trough contraction of 4.0% experienced during the Great Recession. The unemployment rate increases significantly from 3.6% at the commencement of the projection period to 10.0% by the end of year two, matching its October 2009 high. |
| **Domestic Markets** | ➢ Equity prices drop by 60% over the course of the recession, and the equity market volatility index jumps to a peak of 70 at the start of the scenario. House prices also depreciate, while commercial real estate experiences even deeper price declines than housing. Oil prices fall on reduced global demand, and the CPI shows overall disinflation.<br>➢ Short-term Treasury rates descend quickly but are bounded by zero by virtue of the Fed's reluctance to experiment with negative interest rate. The Fed funds effective rate falls and stays within a target band of 0.0%-0.25%. Longer-term Treasury rates decline as monetary policy becomes increasingly accommodative and the US absorbs flight-to-quality capital inflows. Interest rate volatility posts local highs.<br>➢ Spreads on investment grade BBB-rated corporate bonds and on speculative B-rated bonds widen substantially, with the corporate sector underperforming equities in the recession's early quarters. Mortgage rate spreads widen initially, as well, but then stabilize in response to large-scale MBS and Treasury debt purchases by the Federal Reserve. |
| **International** | ➢ US weakness extends to the Euro area, a political bloc that is already suffering from Brexit negotiations. The dollar appreciates modestly against the euro and the pound. Growth in developing Asia, which has been suffering from trade disputes, slows further. Japan experiences a recession as well, but its currency – treated as a safe haven by investors – appreciates relative to the US dollar. |
| **Recovery Period** | ➢ A slow GDP recovery takes hold at the Q6 trough, and real output expands by a cumulative 2.7% to end the nine-quarter projection period.<br>➢ During the scenario's final three quarters, Treasury rates stage a partial rebound, although short-term rates remain near zero throughout the projection period. |

# Results

# Company-Run Severely Adverse Scenario – CSH USA Results

- **CSH USA maintains capital levels and ratios above its post-stress capital goal and regulatory minima in the Company-Run Severely Adverse Scenario**, for all quarters across the planning horizon and all risk-based and leverage-based ratios
- Capital depletion primarily driven by pre-provision net revenue (PPNR) losses and the Internal Market Shock

| Regulatory Ratio | Actual Q2 2019 | Projected Stressed Capital Ratios[1] | | Regulatory Minimum |
|---|---|---|---|---|
| | | Ending | Minimum | |
| Common Equity Tier 1 Capital Ratio | 24.1% | 13.5% | 13.5% | 4.5% |
| Tier 1 Risk-Based Capital Ratio | 24.8% | 14.2% | 14.2% | 6% |
| Total Risk-Based Capital Ratio | 24.9% | 14.3% | 14.3% | 8% |
| Tier 1 Leverage Ratio | 13.3% | 7.9% | 7.9% | 4% |
| Supplementary Leverage Ratio | 11.8% | 7.0% | 7.0% | 3% |

| Item | Actual Q2 2019 ($BN) | Projected Q3 2021 ($BN) |
|---|---|---|
| Risk-Weighted Assets[2] | $66.5 | $65.3 |

**(1) The capital ratios are calculated using capital action assumptions as described on page 2. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period 2019:Q3 to 2021:Q3.**
**(2) Risk-weighted assets are calculated under the Federal Reserve's Basel III standardized capital risk-based approach.**

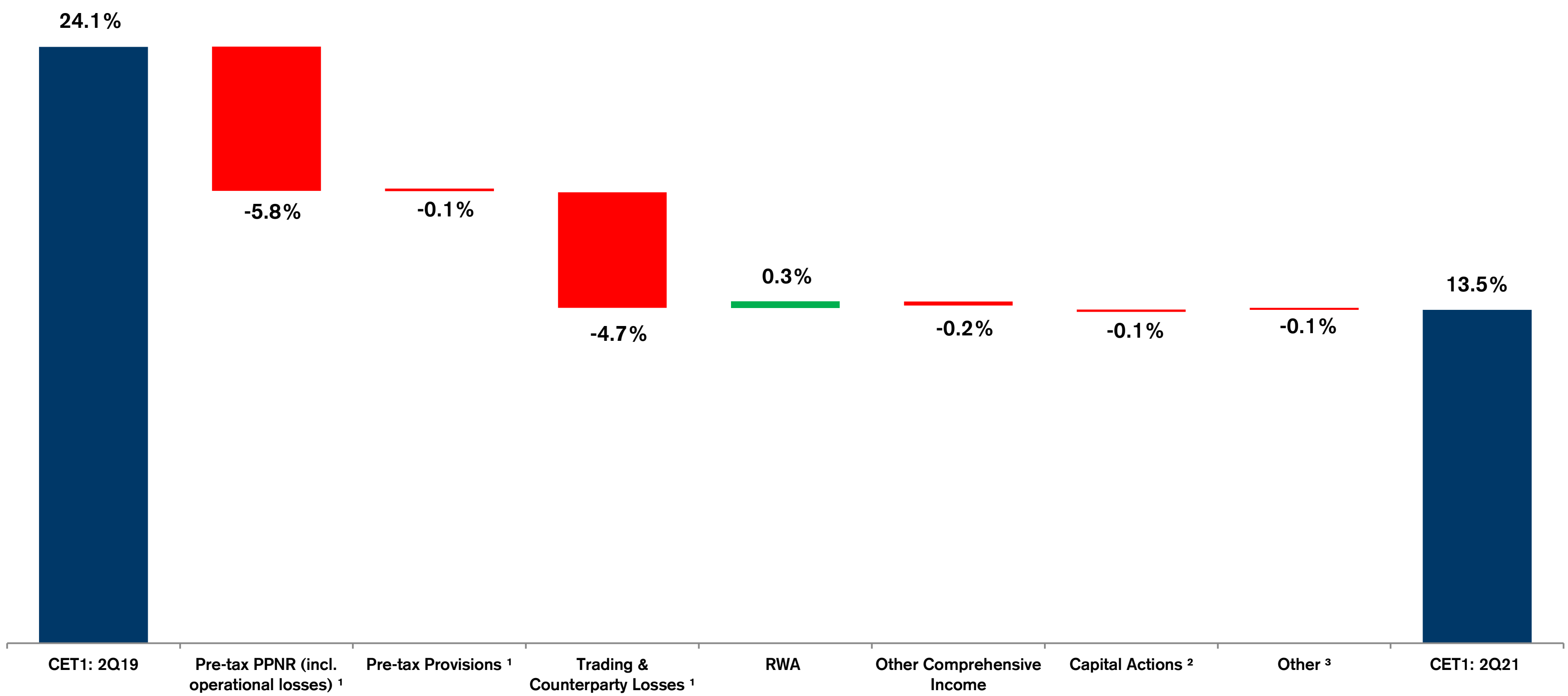
# Company-Run Severely Adverse Scenario – CSH USA Income Statement and Loan Lease Losses

| Item | Billions of Dollars | Percent of Average Assets[1] |
|---|---|---|
| Pre-Provision Net Revenue[2] | (3.9) | -3.6% |
| Other Revenue[3] | (1.5) | |
| *Less* | | |
| Provisions | 0.0 | |
| Realized Losses/Gains on Securities (AFS / HTM) | | |
| Trading and Counterparty Losses[4] | 3.1 | |
| *equals* | | |
| Net Income before Taxes | (8.6) | -8% |
| Memo Items | | |
| Other Comprehensive Income[5] | (0.1) | |
| *Other Effects on Capital* | Actual 2Q 2019 | 3Q 2021 |
| AOCI Included in Capital (in Billion Dollars)[6] | (0.2) | (0.3) |
| **Loan Type** | **Billions of Dollars** | **Portfolio Loss Rates (Percent)[7]** |
| First-Lien Mortgages, Domestic | 0.0 | 0.0% |
| Junior Liens and HELOCs, Domestic | 0.0 | 0.0% |
| Commercial and Industrial | n/a | n/a |
| Commercial Real Estate, Domestic | 0.0 | 0.3% |
| Credit Cards | n/a | n/a |
| Other Consumer | 0.0 | 0.0% |
| Other Loans[8] | 0.0 | 0.3% |
| **Total Projected Loan Losses** | 0.0 | 0.3% |

**(1) Average assets is the nine-quarter average of total assets.**
**(2) Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.**
**(3) Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.**
**(4) Trading and counterparty losses include mark-to-market and credit valuation adjustment (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.**
**(5) Other comprehensive income is only calculated for advanced approaches firms.**
**(6) Represents the life-to-date balance of accumulated other comprehensive income ("AOCI") as of 2Q 2019 and 3Q 2021.**
**(7) Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.**
**(8) Other loans include loans to depositories and other financial institutions and loans for purchasing or carrying securities.**

# CSH USA Common Equity Tier 1 (CET1) Ratio Drivers

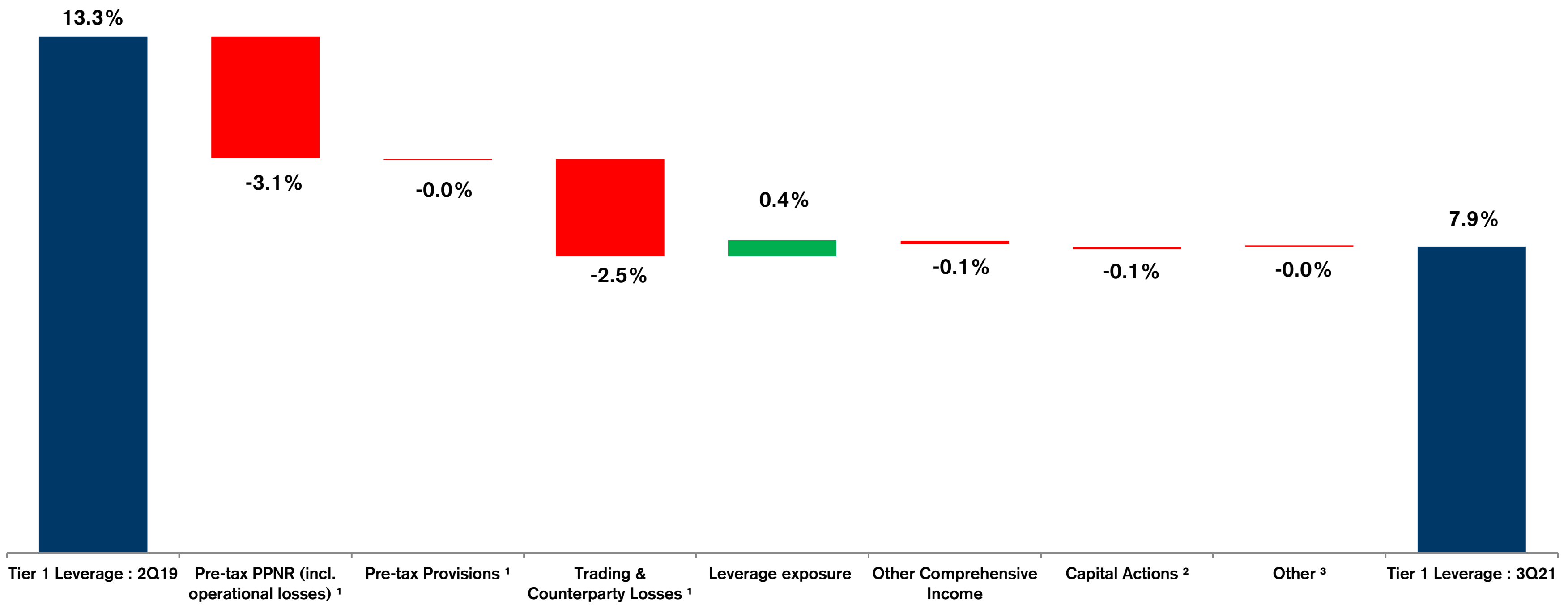
2Q19 – 3Q21; Company-Run Severely Adverse Scenario




(1) Reflects pre-tax impact
(2) Reflects dividends only on preferred stock
(3) Other includes the impact of income taxes

# CSH USA Tier 1 Leverage Ratio Drivers

2Q19 – 3Q21; Company-Run Severely Adverse Scenario




(1) Reflects pre-tax impact
(2) Reflects dividends only on preferred stock
(3) Other includes the impact of income taxes

# Risks and Projection Methodology

# Company-Run Severely Adverse Scenario - Risks

**To facilitate risk management within CSH USA, the Risk Organization classifies risk into classes. The following are the principal risk classes of CSH USA as of 2Q19:**

| Risk Type | Description |
|---|---|
| Market | ➢ The risk to earnings or capital due to adverse changes in market factors, including mortgage and credit spreads, equity, interest rates and other factors |
| Credit | ➢ The risk of financial loss if a customer or counterparty fails to meet a payment obligation to settle outstanding amounts under a contract |
| Non Traded Market Risk & Funding Liquidity Risk | ➢ The risk to earnings, capital or the continuation of business arising from a company's inability to meet both expected and unexpected current and future cash flow and collateral requirements |
| Operational Risk and Compliance | ➢ The risk of financial loss arising from inadequate or failed internal processes, people or systems, or from external events |
| Reputational | ➢ The risk that negative perception by our stakeholders may adversely impact client acquisition and damage our business relationships with clients and counterparties, affecting staff morale and reducing access to funding sources |
| Model | ➢ The risk inherent in the use of financial models |
| Business | ➢ The risk that appropriate business strategy does not deliver on anticipated financial benefits |
| Capital | ➢ The risk associated with the potential inadequacy of capital |

# Projection Methodology

**The table below provides a high level description of the projection methodologies:**

| Projection | Description |
|---|---|
| **Pre-Provision Net Revenue ("PPNR")** | ➢ Revenue projections were performed at a granular line of business / revenue driver level using a set of models and management judgment methodologies linking the performance of the business to projected scenario variables. Expenses are modeled by starting with the budget projections and reflecting the impact of the scenario on expense components driven by transaction volume or profitability (e.g. brokerage fees and variable compensation). |
| **Losses** | ➢ Three types of losses are included in 9Q projections:<br>▪ Trading losses (beyond those as a result of the Instantaneous Market Shock) are included in PPNR projections and recorded as contra-revenue items in Non-Interest Revenues projections where applicable. The methodology varies by business depending on the product type and the availability of internal historical data.<br>▪ Credit risk losses on banking loans, given the small number of loans in CSH USA's portfolio, are projected by on a loan-by-loan basis.<br>▪ Operational risk loss projections consist of three components: run rate losses, litigation losses arising from uncertainty around the existing litigation pipeline and large idiosyncratic loss events. Included is the impact from all material operational risks under stress. The estimation is produced for seven risk segments (Basel defined). The methodology uses a combination of quantitative techniques and expert judgement, with scenario analysis being a core input for large loss estimation. |
| **Balance Sheet** | ➢ Assets and liabilities are projected at line of business level and used as a driver of revenues where applicable. Trading inventory levels and securities lending balances reflect the evolution of asset prices throughout the projection horizon. |
| **Risk-Weighted Assets** | ➢ CSH USA's RWA forecast reflects the application of the Standardized Approach under U.S. Basel III for the Common Equity Tier 1, Tier 1 Capital and Total Capital Ratios. CSH USA's internal RWA forecasting models capture the impact of stress on exposures and risk weights as well as the impact of changes in asset balances produced by the balance sheet models. |
| **Capital** | ➢ Capital forecasts include the impact of all revenue and expense projections and the application of the regulatory capital rules and associated capital deductions (primarily related to goodwill and deferred tax assets) established under 12 CFR Part 217 (the U.S. Basel III rules). |

*Note: Projections are not reflective of any new accounting regulations effective January 1, 2019, unless such regulations had been adopted by December 31, 2018 for reporting purposes.*

# Disclaimer

This document contains forward-looking statements, including projections of financial results and conditions under a hypothetical scenario. The projections disclosed in this document should not be viewed or interpreted as forecasts of expected future economic financial conditions or results or capital adequacy, but rather reflect possible results under hypothetical adverse scenarios and other specific conditions required to be assumed by us for the purpose of Dodd-Frank Act stress testing as well as modeling assumptions necessary to project and assess the impact of the various adverse scenarios on CSH USA’s capital position. A number of important factors could cause results to differ materially from the plans, objectives, expectations, estimates and intentions we express in these forward-looking statements, including those we identify in "Risk Factors” in our Annual Report on Form 20-F for the fiscal year ended December 31, 2018 and in “Cautionary statement regarding forward-looking information" in our 2Q19 Financial Report, published on July 31, 2019 and filed with the US Securities and Exchange Commission, and in other public filings and press releases. We do not intend to update these forward-looking statements.

In particular, the terms “Estimate”, “Illustrative”, “Ambition”, “Objective”, “Outlook” and “Goal” are not intended to be viewed as targets or projections, nor are they considered to be Key Performance Indicators. All such estimates, illustrations, ambitions, objectives, outlooks and goals are subject to a large number of inherent risks, assumptions and uncertainties, many of which are completely outside of our control. These risks, assumptions and uncertainties include, but are not limited to, general market conditions, market volatility, interest rate volatility and levels, global and regional economic conditions, political uncertainty, changes in tax policies, regulatory changes, changes in levels of client activity as a result of any of the foregoing and other factors. Accordingly, this information should not be relied on for any purpose. We do not intend to update these estimates, illustrations, ambitions, objectives, outlooks or goals.

Annualized numbers do not take into account variations in operating results, seasonality and other factors and may not be indicative of actual, full-year results. Figures throughout this document may also be subject to rounding adjustments. All opinions and views constitute judgments as of the date of writing without regard to the date on which the reader may receive or access the information. This information is subject to change at any time without notice and we do not intend to update this information.

The outputs of the analyses and the discussion contained herein may not align with those produced by the Federal Reserve or other financial institutions conducting similar exercises, even if similar hypothetical stress scenarios were used, due to differences in methodologies and assumptions used to produce those outputs. In addition, the results contained herein may not be comparable to results of prior stress tests conducted by CSH USA, the Federal Reserve or other financial institutions due to the evolving regulatory framework, evolving macro-economic and market environment and other factors.