## **BancWest**

2017 Mid-Year Dodd Frank Act Company-Run Capital Stress Test Disclosure



## **BancWest Overview**

Incorporated in this disclosure are the mid-year stress test results of BancWest Corporation.

### **BancWest Corporation**

BancWest Corporation (BWC), as of June 30, 2017, was the bank holding company (BHC) for Bank of the West (BOW) and First Hawaiian Bank (FHB).<sup>1</sup> As of June 30, 2017, BancWest had \$107.5 BN in assets. BancWest is a wholly owned subsidiary of BNP Paribas USA, Inc. (BNPP USA), which is the intermediate holding company (IHC) for two direct subsidiaries; BWC and BNP Paribas US Wholesale Holding Corp. Post this disclosure, BNPP USA will be the primary filing entity and will issue the stress test disclosure going forward.

## **Subsidiary Banks**

- Bank of the West is a regional bank chartered in California and headquartered in San Francisco, with \$86.9
   BN in assets as of June 30, 2017. BOW operates a network of retail, wealth, commercial and business banking branches and offices in 23 states.
- First Hawaiian Bank is headquartered in Honolulu and is Hawaii's oldest and largest financial institution. As
  of June 30, 2017, it held \$20.4 BN in assets, operated over 60 branches and had a 37% deposit market
  share in Hawaii.

## **BNPP USA (IHC)**

BNPP USA is a wholly-owned subsidiary of BNP Paribas (BNPP). BNPP is a well-capitalized and highly
liquid global bank operating in 74 countries with consolidated assets of \$2.2 trillion as of June 30, 2017.
BNPP established its IHC in July 2016 to consolidate its U.S. operations and comply with the Federal
Reserve Board's (FRB) Enhanced Prudential Standards for Bank Holding Companies and Foreign Banking
Organizations.

<sup>&</sup>lt;sup>1</sup> Bank of the West is a wholly owned subsidiary of BancWest Holding Inc. which in turn is wholly owned by BWC. FHB is a wholly owned subsidiary of First Hawaiian Inc. (FHI). BWC owns 62% of FHI's outstanding shares following an IPO in August 2016 and a secondary offering completed in February 2017



## **BancWest Company-Run Stress Test Results and Process**

The Federal Reserve Board (FRB) and the Federal Deposit Insurance Corporation (FDIC) conduct stress tests every year to ensure banks have enough capital to sustain a severe economic downturn.

BancWest is subject to the Comprehensive Capital Analysis and Review (CCAR) and Dodd-Frank Act Stress Test (DFAST) requirements under the FRB's capital planning rules and the Dodd-Frank Wall Street Reform and Consumer Protection Act.

This report shows the results of BancWest's DFAST stress-test results under the hypothetical BHC severely adverse stress scenario for BancWest.

BancWest projects capital and financial results over a nine-quarter forecast horizon, starting July 1, 2017. This projection is not a forecast of economic conditions or financial results, but rather a hypothetical scenario designed by the BHC to help assess the strength and resilience of financial institutions in the event of a severe economic downturn.

#### **Disclosure requirements include:**

- Description of risks included and methodologies used in stress testing
- Aggregate cumulative financial estimates of major income statement categories
- Cumulative dollar loss and loss rates by portfolio
- Explanation of the most significant causes for changes in capital ratios
- Beginning, ending and minimum values of capital ratios



## **Stress Test Scenarios**

#### **Stress Test Scenarios:**

For the mid-year stress-tests BHCs are required to run at least three economic scenarios, including a BHC base, adverse and severely adverse scenarios to ensure that the BHC and the subsidiary banks have sufficient regulatory capital to continue lending and serving their customers during an economic downturn. Capital is an important measure of a bank's strength. It is a bank's cushion against various types of unexpected losses and protects depositors' money.

BancWest's severely adverse scenario assumes a global banking crisis, resulting in a severe global recession concentrated in the US and Europe. Resulting capital actions are based on required DFAST instructions.

### **BancWest Severely Adverse Scenario:**

- The U.S. unemployment rate more than doubles, rising from 4.4% in Q2 2017 to almost 10% before starting a slow recovery at the end of the scenario period
- Equity prices fall sharply, losing 60% of value in the first four quarters
- Deflation ensues Consumer prices decline steadily at an annual rate of 1.3% in 2018 before reversing course and rising at roughly the same rate through the scenario period
- U.S. Residential real estate prices drop 28% peak-to-trough and commercial real estate prices plunge 40%, with states like California and Hawaii experiencing especially severe shocks
- Treasury yield curves flatten: short-term interest rates turn negative and long-term rates dropping to zero before making a modest recovery in the last two quarters of the scenario period
- The Federal Reserve cuts the Fed funds rate to -30bps and engages in a large scale QE program
- Tech financing is hit hard, causing a high level of corporate defaults with outsized impacts on the Bay Area economy
- Corporate and mortgage rate spreads widen substantially (Mortgage spreads widen by 200bps and BBB Corp bond spreads widen 350bps over comparable Treasury yields) resulting in more defaults and reducing lending revenues
- Application of additional idiosyncratic operational risk scenarios to the stress tests



# **Description of Risks**

CREDIT	Risk that borrower or counterparty will fail to meet the terms of an obligation in accordance with agreed terms.
OPERATIONAL	Risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events. It includes regulatory, compliance, technology and legal risk, but excludes strategic and reputational risk.
MARKET/ INTEREST RATE	Risk resulting from adverse movement in market rates or prices, such as interest rates, foreign exchange rates or equity prices.
LIQUIDITY	Risk of the BHC's inability to meet its obligations as they come due because of inability to liquidate assets or obtain adequate funding or because it cannot easily unwind or offset specific exposures without significant compromise to pricing.
OTHER RISKS	Business/Strategic Risk is the risk that arises from adverse business decisions or business plans. Reputational risk is related to the confidence placed on the BHC by its customers, clients, providers, counterparts, shareholders and regulators. Model Risk is the risk resulting from the use of models that fail to perform the tasks or capture the risks for which they were designed.



# **Summary of Capital and Risk Components Captured in DFAST Projections**

	Capital Components	Key Risks Captured
Pre-Provision Net Revenue (PPNR)	<ul> <li>Projections based on macroeconomic factors and management judgment</li> <li>Major assumptions for growth and runoff are reviewed with lines of business</li> </ul>	<ul> <li>Business/Strategic</li> <li>Interest rate and Liquidity</li> <li>Operational</li> <li>Prepayment and other optionality</li> </ul>
Other Income Related Items	<ul> <li>Net realized gains and losses on sales of securities and other-than-temporary impairment (OTTI)</li> </ul>	<ul><li>Credit</li><li>Interest rate</li><li>Market valuation</li></ul>
Provisions for Credit Losses	<ul> <li>Projections of expected losses, allowance for loan and lease losses, non-performing assets</li> <li>Function of underlying commercial and consumer loan characteristics as well as macroeconomic factors</li> </ul>	<ul> <li>Credit: Changes in probability of default or loss given default (loss severity)</li> <li>Changes in reserve levels</li> <li>Changes in commitment utilization</li> </ul>
Capital Ratios and Projections	<ul> <li>Risk-weighted assets forecast with correlation to historical Call Report trends</li> <li>Tax impact</li> </ul>	<ul> <li>Capital adequacy process including governance and challenge</li> <li>Internal controls, data quality, process maturity and model risk</li> </ul>



## **PPNR Risks and Methodologies**

sheet forecast by scenario

BHC Severely Adverse Scenario Nine-Quarter Cumulative PPNR \$1.2 BN (July 1, 2017 – September 30, 2019)

### Net interest income Non-interest income and other fee-related revenues excluding realized gains and losses on investment Scope securities Non-interest expense includes losses associated with operational risk Net interest income components are based upon product level forecast for interest-earning assets and interest-bearing liabilities by scenario Loan yields and portfolio balances include forecasts for new business volumes, prepayments and runoff **Approach** Available funding includes wholesale funds and advances from the Federal Home Loan Bank Fee revenues are generally tied to certain balance sheet forecasts and bank initiatives Major components of non-interest expense are based upon economic scenarios and management's expectations Business/Strategic **Types of Risks** Interest rate and liquidity Identified and Operational **Captured** Prepayment and optionality Statistical models are used for major line item forecasts that link to macroeconomic variables where appropriate **Methodologies** Net interest income output includes scheduled principal and projected prepayments based on balance

Operational losses are based on business indicator model and idiosyncratic scenario analysis



## **Provision for Credit Losses Risks and Methodologies**

**BHC Severely Adverse Scenario** Nine-Quarter Cumulative Provision for Credit Losses \$3.8 BN (July 1, 2017 - September 30, 2019)

#### Represents credit-related loss retained in BancWest's loan and leases portfolios and related Scope commitments through the planning horizon as well as the reserve for the expected losses Expected Losses (EL) are based on the composition and characteristics of loans and lines in the BHC's portfolio Credit quality is modeled using a loan-level approach by projecting and combining Probability of Default (PD), Loss Given Default (LGD) and Exposure at Default (EAD) for each outstanding exposure **Approach** Commercial loans and lines are assessed based upon the BHC's internal credit risk ratings, estimated values of collateral, utilization rate, and other product-specific characteristics Consumer loans are assessed for credit quality based upon delinquency status, FICO score, loanto-value deterioration, and a few other product-specific characteristics Credit loss models also use a set of portfolio-specific macroeconomic drivers as predictors Credit risks, which are impacted by: Loss severity Changes in reserves **Types of Risks** Evolution and current state of BancWest's internal Collateral type and collateral valuation Identified and risk grade for commercial exposures Obligor/product-specific characteristics Captured Consumer loan delinquency status (current, Changes in commitment utilization delinguent, default)

## **Methodologies**

- Statistical analyses that consider the idiosyncratic characteristics of BancWest's portfolio
- Reflects stress reserve levels estimated in accordance with accounting standards, regulatory guidance and BancWest's internal accounting policies
- Losses are computed at the loan-level based upon BHC specific characteristics such as credit quality, geography, product mix and collateral requirements, and then aggregated



## **Capital Ratios and Projections Risks and Methodologies**

BHC Severely Adverse Scenario Ending Projection Period Common Equity Tier 1 Capital \$5.5 BN (July 1, 2017 – September 30, 2019)

## Scope

- Common Equity Tier 1 (CET 1), Tier 1 Capital, Total Risk Based Capital and Tier 1 Leverage Ratios are computed on a quarterly basis
- Granular forecast of risk-weighted assets

### **Approach**

- Full projection of balance sheet and income statement for each scenario
- Based upon Standardized Approach for Revised Regulatory Capital Guidelines (Basel III Standardized) with opt-out impact of AOCI in the capital calculations
- On and off-balance sheet exposures were risk-weighted, taking into account the prepayment, new volume and other outputs from the modeling process
- Internal controls framework overseeing all elements of Capital Planning Process
- Governance review

## Types of Risks Identified and Captured

- Covers all material risks identified throughout the enterprise, which were subject to governance including review and challenge from business units, executive management and the Board
- Data limitations, process maturity and other weaknesses factored into the overlay process.
   Model risk captured directly through the capital buffer

### Methodologies

 Accumulation of all modeling processes for the forecast inclusive of balance sheet, PPNR, loan and lease losses and other elements



## **BHC Severely Adverse Scenario Results (1 of 2)**

	BANCWEST		
Loan losses (\$ in Billions)	9-Quarter losses	Loss rate <sup>2</sup>	
	3.06	4.2%	
First Lien Mortgages, Domestic	0.22	1.9%	
Junior Liens and HELOCs, Domestic	0.13	3.1%	
Commercial and Industrial	1.04	6.2%	
Commercial Real Estate, Domestic	0.77	4.2%	
Credit Cards	0.07	16.6%	
Other Consumer	0.62	3.8%	
Other Loans <sup>3</sup>	0.22	3.5%	

Cumulative P&L Metrics (Q3 2017 through Q3 2019)			
(\$ in Billions)	BANCWEST		
Pre-Provision Net Revenue	1.2		
Other Revenues <sup>4</sup>	0.0		
Provision for Loan and Lease Losses	(3.8)		
Net Income (loss) Before Taxes	(2.6)		

Note: Totals may not sum due to rounding

<sup>&</sup>lt;sup>4</sup> Other Revenues include net realized gains and losses on securities and OTTI



<sup>&</sup>lt;sup>2</sup> Loss rates are calculated by summing the nine quarters of losses and dividing by the nine-quarter average balance for a given loan portfolio. Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option

<sup>&</sup>lt;sup>3</sup> Other Loans include Other Loans and Leases, Loans Secured by Farmland, and Real Estate Loans (Not in Domestic Offices)

## **BHC Severely Adverse Scenario Results (2 of 2)**

	Basel III Capita	al Ratios		
	Actual Stressed Capital Ratios		sed Capital Ratios	
Capital Ratios⁵	2Q17	3Q19	Lowest (over the projection horizon)	Regulatory Minimum <sup>6</sup>
BANCWEST				
CET 1 Ratio	13.5%	6.9%	6.9%	4.5%
Tier 1 Capital Ratio	14.1%	7.4%	7.4%	6.0%
Total Risk-Based Capital Ratio	16.1%	9.6%	9.6%	8.0%
Tier 1 Leverage Ratio	11.5%	5.8%	5.8%	4.0%
BOW				
CET 1 Ratio	12.1%	8.7%	8.7%	4.5%
Tier 1 Capital Ratio	12.2%	8.8%	8.8%	6.0%
Total Risk-Based Capital Ratio	13.1%	10.0%	10.0%	8.0%
Tier 1 Leverage Ratio	10.3%	7.2%	7.2%	4.0%
FHB				
CET 1 Ratio	12.7%	11.2%	11.2%	4.5%
Tier 1 Capital Ratio	12.7%	11.2%	11.2%	6.0%
Total Risk-Based Capital Ratio	13.8%	12.5%	12.5%	8.0%
Tier 1 Leverage Ratio	8.7%	7.2%	7.2%	4.0%

RWA (\$'s in Billions) <sup>7</sup>	Actual RWA Q2, 2017	RWA Projection Q3, 2019
BWC	81.1	80.7
BOW	68.1	67.8
FHB	12.7	12.5

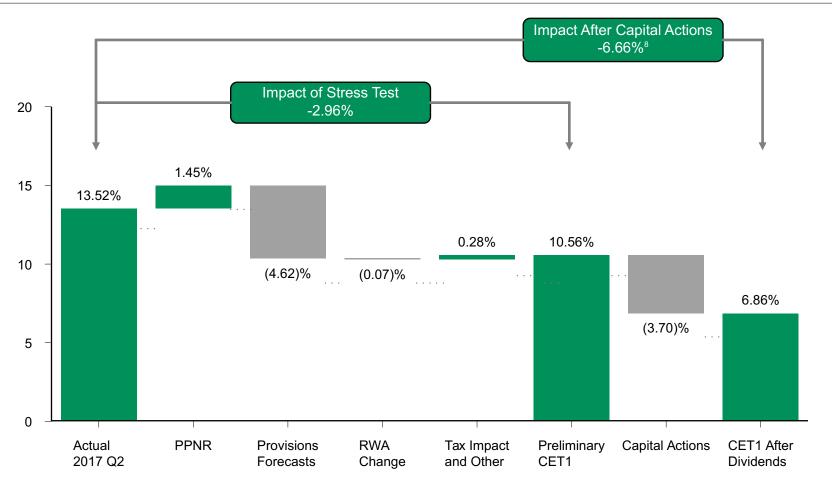
<sup>&</sup>lt;sup>5</sup> For all scenarios Capital ratios include any capital action across the forecasting horizon per the DFAST instructions. For this submission a one-time special dividend was paid out in July 2017 which was mechanically extrapolated over the stress period following the DFAST rule. Under a period of actual stress BWC would reassess the appropriateness of any dividends

<sup>&</sup>lt;sup>7</sup> Risk Weighted Assets calculated under Basel III Standardized Approach. Totals may not sum due to consolidation entries



<sup>&</sup>lt;sup>6</sup> Regulatory minimums as defined in the Comprehensive Capital Analysis Review 2017 Summary Instructions

# Significant Drivers of Changes to the Projected CET 1 Capital Ratio under the Severely Adverse Scenario for BancWest



Note: Totals may not sum due to rounding

<sup>&</sup>lt;sup>8</sup> For all scenarios capital ratios include any capital action across the forecasting horizon per the DFAST instructions. For this submission a one-time special dividend was paid out in July 2017 which was mechanically extrapolated over the stress period following the DFAST rule. Under a period of actual stress BWC would reassess the appropriateness of any dividends



## **Cautionary Statements**

- This disclosure contains statements related to stress tests conducted by BancWest under the DFAST requirements. The stress test projections are based on hypothetical scenarios under severely stressed economic conditions. These estimates are not forecasts of BancWest's actual expected losses, revenues, net income before taxes or capital ratios.
- Forecast includes nine-quarter projection of FHI in consolidated BWC results as submitted. Based on management decision and market conditions, the deconsolidation of FHI might occur prior to the end of the nine quarter forecasting period.
- Capital actions at the Bank Holding Company (BHC) level may be different than capital actions taken at the IDI subsidiaries.
- FRB conducts its own stress testing, based on its internally developed models and methodologies. BancWest may not be able to explain variances between its own internal stress test results and the FRB's projections.
- This disclosure does not constitute an offer to sell, or a solicitation of an offer to purchase, any securities from any of the entities herein.

