

HSBC North America Holdings Inc.

2017 Comprehensive Capital Analysis and Review and Annual Company-Run Dodd-Frank Act Stress Test Results

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This document has been prepared pursuant to the disclosure requirements set out in the regulations issued by the Board of Governors of the Federal Reserve System ('Federal Reserve') and the Office of the Comptroller of the Currency ('OCC') under the Dodd-Frank Wall Street Reform and Consumer Protection Act ('Dodd-Frank Act') related to the annual company-run stress testing exercise.

References to 'HSBC' are to HSBC North America Holdings Inc. and its subsidiaries.

This document makes certain references that are not historical facts, including statements about HSBC's beliefs and expectations, which are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as 'may', 'will', 'should', 'would', 'could', 'appears', 'believe', 'intends', 'expects', 'estimates', 'targeted', 'plans', 'anticipates', 'goal' and similar expressions are intended to identify forward-looking statements but should not be considered as the only means through which these statements may be made. These matters or statements will relate to our future financial condition, economic forecast, results of operations, plans, objectives, performance or business developments and will involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from that which was expressed or implied by such forward-looking statements. The projections disclosed in this document should not be viewed or interpreted as forecasts of expected outcomes or capital adequacy or of the actual financial condition of either HSBC or HSBC Bank USA, N.A. Rather, these projections are based solely on the hypothetical adverse scenarios and other specific conditions required to be assumed by HSBC 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 HSBC's capital position. Forward-looking statements speak only as of the date of this document. HSBC makes no commitment to revise or update any forward-looking statements to reflect events or circumstances occurring or existing after the date of any forward-looking statements. Factors that could cause HSBC's actual results to differ materially from those described in forward-looking statements can be found in the annual report on Form 10-K for HSBC USA Inc. and HSBC Finance Corporation. Additionally, please refer to the HSBC USA Inc. annual report on Form 10-K for a broader description of our capital planning and risk management processes.

1. Overview of the Comprehensive Capital Analysis and Review and Dodd-Frank Act Stress Tests

Pursuant to the Dodd-Frank Act, the Federal Reserve and the OCC have issued regulations requiring Bank Holding Companies ('BHCs') and national banks, respectively, with average total consolidated assets of US\$50 billion or more to conduct annual company-run stress tests ('Dodd-Frank Act stress test'). HSBC North America Holdings Inc. ('HSBC North America') and HSBC Bank USA, N.A. ('HSBC Bank USA') are required to participate in the Dodd-Frank Act stress tests and provide herein the disclosure of their 2017 stress test exercise, as required under these regulations. In addition, BHCs, including HSBC North America, are required to conduct mid-cycle company-run stress tests. The Federal Reserve is also required to undertake an annual supervisory stress test of BHCs, as defined above. On January 30, 2017, the FRB indicated that so-called "large and noncomplex" firms, which are firms with less than \$250 billion in total consolidated assets and less than \$75 billion in total nonbanking assets, are exempt from the CCAR qualitative assessment. HSBC North America does not currently fall into the category of "large and noncomplex" and will, therefore, remain subject to the qualitative review in the 2017 CCAR cycle.

The company-run stress test is a forward-looking exercise to assess the impact of hypothetical macroeconomic baseline, adverse and severely adverse scenarios provided by the Federal Reserve and the OCC on the financial condition and capital adequacy of a BHC or bank over a nine quarter planning horizon, beginning, for the current exercise, in the first quarter of 2017. For HSBC North America, the Dodd-Frank Act stress test was conducted in conjunction with the Federal Reserve's annual Comprehensive Capital Analysis and Review ('CCAR'). Under CCAR, the Federal Reserve also undertakes an assessment of a BHC's capital adequacy process and HSBC North America submitted its Capital Plan in compliance with the CCAR requirements.¹ BHCs, such as HSBC North America, are required to receive a 'non-objection' from the Federal Reserve before executing a capital action, other than those capital distributions with respect to which the Federal Reserve has indicated in writing its non-objection.

HSBC North America and HSBC Bank USA are required to disclose the results of their Dodd-Frank Act stress tests under the Federal Reserve and OCC's severely adverse stress scenario (the 'supervisory severely adverse scenario').² For the 2017 annual stress testing cycle, the supervisory severely adverse scenario is characterized by a severe global recession that is accompanied by a period of heightened stress in corporate loan markets and commercial real estate markets.

In this scenario, the level of U.S. real GDP begins to decline in the first quarter of 2017 and reaches a trough in the second quarter of 2018 that is about 6.50% below the pre-recession peak. The unemployment rate increases by about 5.25%, to 10.0% by the third quarter of 2018. Headline consumer price inflation falls to about 1.25% at an annual rate by the second quarter of 2017 and then rises to about 1.75% at an annual rate by the middle of 2018. As a result of the severe decline in real activity, short-term Treasury rates fall and remain near zero through the end of the scenario period. The 10-year Treasury yield drops to 0.75% in the first quarter of 2017, rising gradually thereafter to around 1.50% percent by the first quarter of 2019 and to about 1.75% by the first quarter of 2020. 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 about 5.75% by the end of 2017, an increase of 3.50% relative to the fourth quarter of 2016. The spread between mortgage rates and 10-year Treasury yields widens to over 3.50% over the same time period.

Asset prices drop sharply in this scenario. Equity prices fall by 50% through the end of 2017, accompanied by a surge in equity market volatility, which approaches the levels attained in 2008. House prices and commercial real estate

¹ See Board of Governors of the Federal Reserve System, 'Comprehensive Capital Analysis and Review 2017 Summary Instructions and Guidance', February 2017, for the CCAR and Dodd-Frank Act stress test instructions.

² For the supervisory severely adverse scenario description and macroeconomic variables, see Board of Governors of the Federal Reserve System, '2017 Supervisory Scenarios for Annual Stress Tests Required under the Dodd-Frank Act Stress Testing Rules and the Capital Plan Rule', February 10, 2017, available at <https://www.federalreserve.gov/newsevents/pressreleases/files/bcreg20170203a5.pdf>

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prices also experience large declines, with house prices and commercial real estate prices falling by 25% and 35%, respectively, through the first quarter of 2019.

The international component of this scenario features severe recessions in the EU area, the United Kingdom, and Japan and a marked growth slowdown in developing Asia. As a result of the sharp contraction in economic activity, all foreign economies included in the scenario experience a decline in consumer prices. The U.S. dollar appreciates against the euro, the pound sterling, and the currencies of developing Asia but depreciates modestly against the yen because of flight-to-safety capital flows.

It is important to note that the scenarios provided by the Federal Reserve and OCC are not forecasts, but rather hypothetical scenarios to be used to assess the strength and resilience of institutions in baseline and stressed economic and financial market environments. In addition, the stress test results summarized in this report are not comparable to the results of other stress tests performed by HSBC North America and HSBC Bank USA due to a number of factors including the uniqueness of the scenario assumptions used to prepare each stress test, differences in market conditions and differences in the companies' financial positions and exposures at the time each stress test is performed. Differences also arise due to the evolving risk quantification methodologies and regulatory capital frameworks that may be applicable to each stress test.

Six BHCs with large trading operations were required by the Federal Reserve to include a global market shock as part of their supervisory adverse and severely adverse scenarios and to conduct a stress test of their trading books, private equity positions and counterparty exposures. In addition, eight BHCs with substantial trading or custodial operations were required to incorporate a counterparty default scenario component into their supervisory adverse and severely adverse stress scenarios. HSBC North America was not required to perform these exercises.

HSBC North America is the holding company for HSBC Holdings plc's operations in the United States. Those operations are primarily conducted through HSBC Bank USA, HSBC Finance Corporation, a holding company for certain run-off consumer finance businesses, and HSBC Markets (USA) Inc. which is the intermediate holding company of, inter alia, HSBC Securities (USA) Inc., a registered broker-dealer.

HSBC Holdings plc is one of the world's largest banking and financial services organizations. With more than 4,000 offices in both established and emerging markets, it aims to be where growth is, connecting customers to opportunities, enabling businesses to thrive and economies to prosper, and, ultimately helping people to fulfill their hopes and dreams, and realize their ambitions.

The results of HSBC North America and HSBC Bank USA's annual company-run Dodd-Frank Act stress test are shown below in Sections 3 and 4, respectively.

2. Forecasting Methodologies Utilized for Dodd-Frank Act Stress Testing

Our stress testing methodologies focus on empirically defining the relationship between macroeconomic variables and business volumes, revenues and losses in order to estimate outcomes that may result from a specific stress scenario. We use a suite of models and estimation methodologies, coupled with management judgment and overlays to modeled results to take account of HSBC North America's specific risk profile, to produce a comprehensive estimate of future business performance. Additional macroeconomic variables are projected to facilitate the forecasting of certain risk- and portfolio-specific factors. Stress testing methodologies are subject to considerable uncertainties and modeling limitations including uncertainty about the extent to which historical relationships between macroeconomic factors and business outcomes will continue to be relevant in a severely stressed economic environment. We regularly consider these uncertainties and the limitations of our estimates when evaluating stress test results. The methodologies apply accounting practices consistent with HSBC's significant accounting policies, generally accepted accounting principles (GAAP) in the U.S., and the regulatory capital rules in place at the time of the stress test.

The forecast methodologies employed by HSBC to quantify the impact of the hypothetical assumptions over the stress testing forecast period, include, but are not limited to, the following areas presented below.

Pre-Provision Net Revenue

HSBC's revenue forecast, under the supervisory severely adverse scenario, reflects a detailed process in which business-segment projections are developed over the nine quarter capital planning horizon. These forecasts incorporate the impact of the hypothetical macroeconomic and market environment prescribed under the scenario on net interest income, non-interest income and non-interest expense. The revenue forecast also reflects the level of resources projected to be employed by each business segment over the capital planning horizon, as well as HSBC's expectations of customer behavior and competitive dynamics.

Balance Sheet

The forecast balance sheet under each scenario reflects projected changes over the planning horizon based on the macroeconomic environment of each scenario, business growth and planned activity, changes in carrying values resulting from mark-to-market and other balance sheet impacts, including draws on unfunded commitments and the roll-off of lending and net borrowing or funding.

Losses

Stress losses from market risk, wholesale and retail credit risk and operational risk exposures across HSBC, under the supervisory severely adverse scenario, are measured utilizing the following methodologies:

Market Risk: Market risks included all mark-to-market positions and loans carried at fair value. The potential impact of market movements on trading positions and mark-to-market losses for fair-value assets not held in the trading book (including loans held for sale or held for investment under the fair-value option) are incorporated as appropriate.

Our approach to projecting market risk trading losses in a stress environment is based on implied market movements under a given macroeconomic scenario and estimating their impact on positions with open market risk exposure. The trading stress test results are computed based on revaluation of the portfolio under the stressed market risk factors.

Credit Risk: Loans to our customers are a significant component of HSBC's total assets, and their related credit risk is among the most significant risks we manage. When estimating loan losses, probability of default, exposure at default, and loss severity, assumptions are incorporated into the loan-loss estimates. Loss estimates take into consideration the unique characteristics of our wholesale and retail loan portfolios.

A variety of models are used to project losses on loans. These models take into consideration many factors, including historical performance, the forecast economic scenarios, current credit characteristics and credit-quality ratings. Where appropriate, we incorporate country-specific, state and local economic variables to reflect geographical concentrations within a given loan portfolio.

Wholesale loss estimates are made based on asset types, specifically commercial and industrial and commercial real-estate portfolios. Within each of these, the portfolio is segmented further to capture key portfolio risk characteristics, such as particular industry concentrations that may react differently under various stress scenarios. Rigorous statistical techniques are used to determine and estimate relationships between probability of default and macroeconomic factors. Probability of default projections are sensitive to and consistent with scenario conditions, resulting in loss rates that are indicative of underlying economic fundamentals. Loss severity is projected using similar techniques.

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Losses on retail loans are projected using statistical models that use economic attributes (such as unemployment rate and housing-price levels) and portfolio credit characteristics within an expected loss framework.

Operational Risk: Operational risk loss estimates are calculated using historical performance, frequency correlation models, scenario analysis and legal-matter analysis. Scenario analysis and legal-matter analysis contribute materially to estimate of stressed losses. Scenario analysis is performed through scenario workshops with a range of relevant stakeholders and subject-matter experts to estimate HNAH's idiosyncratic risks as identified through HSBC's internal risk identification process. The estimates are based on expert judgment and are supported by factual evidence. Legal-matter analysis is performed by the legal team to estimate stressed unfavorable outcomes, including associated legal costs, for matters disclosed in the financial statements.

Capital Position

The capital positions of HSBC North America and HSBC Bank USA are forecast using the projected revenue and loss estimates described above and risk-weighted assets forecast under the supervisory severely adverse scenario.

Common equity tier 1, tier 1, total capital, tier 1 leverage, and supplementary leverage ratios are then projected over the nine quarter stress testing forecast period.

The actual capital ratios as of Q4 2016 and all projected capital ratios are calculated in accordance with the transition provisions set out in the Federal Reserve's revised capital framework implementing Basel III, and using Basel III standardized risk-weighted assets.

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3. Company-Run Stress Tests – HSBC North America Holdings Inc.

The results of our 2017 annual Dodd-Frank Act stress test are shown below. For HSBC North America, the forecasts include prescribed assumptions, as required under the Dodd-Frank Act stress testing requirements, in respect of the capital actions projected over the planning horizon. These are: (i) no issuances or redemptions of regulatory capital instruments, (ii) no payment of common stock dividends based on previous year actual experience, and (iii) payments on any other regulatory capital instruments are equal to the stated dividend, interest or principal due on such instrument in any given quarter. The estimates should not be seen as forecasts of expected outcomes or capital adequacy or of the actual financial condition of HSBC North America. The forecasts for HSBC North America may not necessarily be in alignment with those of other institutions or the Federal Reserve because of differences in modeling techniques, methodologies and assumptions made.

The forecasted change in regulatory capital ratios under the supervisory severely adverse scenario is attributable to a pre-provision net loss driven primarily by significant operational risk losses and higher loan-loss provisions. Despite the projected decline in net income, we forecast regulatory capital ratios to be above all regulatory minimum ratios, as shown in Table 1.

The following tables show projected regulatory capital ratios, projected losses, revenues and net income before taxes and projected loan losses by loan type for HSBC North America under the supervisory severely adverse scenario.

Table 1: HSBC North America projected minimum regulatory capital ratios, Q1 2017 to Q1 2019, and the required regulatory minimum capital ratios for CCAR 2017

	Required regulatory minimum capital ratios	Actual Q4 2016	Stressed capital ratios ^{1,2}	
			Q1 2019	Minimum ³
Common equity tier 1 capital ratio	4.5%	17.9%	11.7%	11.7%
Tier 1 risk-based capital ratio	6.0%	20.1%	14.5%	14.5%
Total risk-based capital ratio	8.0%	25.3%	18.8%	18.8%
Tier 1 leverage ratio	4.0%	9.6%	7.9%	7.9%
Supplementary leverage ratio	3.0%	n/a	6.0%	6.0%

1 All projected capital ratios are calculated in accordance with the transition provisions set out in the Federal Reserve's revised capital framework implementing Basel III and using Basel III standardized risk-weighted assets from January 2016.

2 The capital ratios are calculated using capital action assumptions prescribed under the Dodd-Frank Act stress testing requirement.

3 The minimum capital ratios represent the lowest projected ratio in the period Q1 2017 to Q1 2019 and do not necessarily occur in the same quarter.

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Table 2: HSBC North America projected losses, revenues and net loss before taxes for the nine quarters

	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue/(loss) ²	(3.70)	1.4%
<i>less</i>		
Provisions	2.98	1.1%
Realized losses/(gains) on securities (AFS/HTM)	0.03	—%
Trading and counterparty losses ³	—	—%
Other losses/(gains)	(1.13)	0.4%
<i>equals</i>		
Net loss before taxes	(5.59)	2.1%

1 Average assets are calculated as the nine quarter average of total assets.

2 Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, unfavorable movements in the lower of amortized cost or fair value adjustments on the fair value of real estate receivables held for sale and other real estate owned ('OREO') costs.

3 HSBC North America was not subject to the global market shock component or counterparty default scenario component of the stress test. Therefore, no losses are reported in this line.

Table 3: HSBC North America projected loan losses, by loan type for the nine quarters

	Billions of dollars	Portfolio loss rates (%) ¹
Loan Losses	2.50	3.4%
First-lien mortgages, domestic	0.14	0.8%
Junior liens and HELOCs, domestic	0.05	3.8%
Commercial and industrial ²	1.45	4.5%
Commercial real estate, domestic	0.52	4.9%
Credit cards	0.13	17.2%
Other consumer ³	0.01	2.7%
Other loans ⁴	0.20	1.8%

1 Cumulative loss rates calculated over the nine quarter planning horizon as a percentage of average loan balances (excluding loans held for sale and loans held for investment under the fair-value option).

2 Commercial and industrial loans include small and medium enterprise loans and corporate cards.

3 Other consumer loans include student loans and automobile loans.

4 Other loans include international real estate loans.

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4. Company-Run Stress Tests – HSBC Bank USA, N.A.

The following tables show projected regulatory capital ratios, projected losses, revenues and net income before taxes and projected loan losses by loan type for HSBC Bank USA under the supervisory severely adverse scenario.

Table 4: HSBC Bank USA projected minimum regulatory capital ratios, Q1 2017 to Q1 2019, and the required regulatory minimum capital ratios for CCAR 2017

	Required regulatory minimum capital ratios	Actual Q4 2016	Stressed capital ratios ^{1,2}	
			Q1 2019	Minimum ³
Common equity tier 1 capital ratio	4.5%	15.7%	13.3%	12.7%
Tier 1 risk-based capital ratio	6.0%	17.6%	15.3%	14.4%
Total risk-based capital ratio	8.0%	21.1%	18.7%	17.9%
Tier 1 leverage ratio	4.0%	11.1%	11.7%	10.9%
Supplementary leverage ratio	3.0%	n/a	8.4%	8.0%

1 All projected capital ratios are calculated in accordance with the transition provisions set out in the Federal Reserve's revised capital framework implementing Basel III and using Basel III standardized risk-weighted assets from January 2016.

2 The capital ratios are calculated using capital action assumptions prescribed under the Dodd-Frank Act stress testing requirement.

3 The minimum capital ratios represent the lowest projected ratio in the period Q1 2017 to Q1 2019 which do not necessarily occur in the same quarter.

Table 5: HSBC Bank USA projected losses, revenues and net loss before taxes for the nine quarters

	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue/(loss) ²	(0.69)	0.4%
<i>less</i>		
Provisions	2.98	1.7%
Realized losses/gains on securities (AFS/HTM)	0.03	—%
Trading and counterparty losses ³	—	—%
Other losses/gains	(0.70)	0.4%
<i>equals</i>		
Net loss before taxes	(3.01)	1.7%

1 Average assets are calculated as the nine quarter average of total assets.

2 Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and OREO costs.

3 HSBC North America was not subject to the global market shock component or counterparty default scenario component of the stress test. Therefore, no losses are reported in this line.

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Table 6: HSBC Bank USA projected loan losses, by loan type for the nine quarters

	Billions of dollars	Portfolio loss rates (%) ¹
Loan Losses	2.50	3.4%
First-lien mortgages, domestic	0.14	0.8%
Junior liens and HELOCs, domestic	0.05	3.8%
Commercial and industrial ²	1.45	4.5%
Commercial real estate, domestic	0.52	4.9%
Credit cards	0.13	17.2%
Other consumer ³	0.01	2.7%
Other loans ⁴	0.20	1.8%

1 Cumulative loss rates calculated over the nine quarter planning horizon as a percentage of average loan balances (excluding loans held for sale and loans held for investment under the fair-value option).

2 Commercial and industrial loans include small and medium enterprise loans and corporate cards.

3 Other consumer loans include student loans and automobile loans.

4 Other loans include international real estate loans.