Instructions for Preparation of the

Annual Company-Run Stress Test

Report DFAST-14A

November 28, 2012

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Instructions for Preparation of the Annual Company-Run Stress Test Report DFAST-14A

The DFAST-14A report collects detailed data on national banks' or Federal savings associations' (hereafter "covered institutions" or "banks") quantitative projections of balance sheet assets and liabilities, income, losses, and capital across a range of macroeconomic scenarios and qualitative information on methodologies used to develop internal projections of capital across scenarios. One or more of the macroeconomic scenarios includes a market risk shock that the covered institutions will assume when making trading and counterparty loss projections. The OCC will provide details about the macroeconomic scenarios to the covered institutions. The DFAST-14A report includes data schedules for Summary, Macro Scenario, Counterparty Credit Risk (CCR), Basel III and Dodd-Frank (Basel III), and Regulatory Capital Instruments.

1. Summary Instructions & Background

1.1. *Background*

1.1.1. Section 165(i) of the Dodd-Frank Wall Street Reform and Consumer Protection Act requires national banks and Federal savings associations with total consolidated assets over $10 billion (defined as "covered institutions") to conduct annual stress tests as prescribed by the OCC in 12 CFR 46.

1.1.2. The law requires the OCC to define "stress test", establish methodologies for the conduct of the annual company-run stress test, and to require at least three different sets of conditions (baseline, adverse, and severely adverse).

1.1.3. The company-run Dodd-Frank Act Stress Test (DFAST) will cover a nine-quarter period of time and must begin with position information as of September 30.

1.1.4. The OCC will assess the processes and practices banks have to analyze and assess capital adequacy, along with processes for risk identification, measurement and management practices supporting this analysis.

1.2. *General Administration*

1.2.1. Covered institutions (hereafter, "banks") will report on the DFAST-14Aschedules their quantitative projections of losses, resources available to absorb those losses, balance sheet positions and capital composition on a quarterly basis over the duration of the scenario and planning horizon.

1.2.2. Banks are also required to submit *qualitative* information supporting their projections, including descriptions of the methodologies used to develop the projections.

1.2.3. Data that is collected as part of the annual company-run stress test requirement is confidential. All templates, worksheets and schedules are the property of the OCC and unauthorized disclosure is prohibited pursuant to 12 CFR 4.37.

1.2.4. Banks must submit the DFAST-14A templates to the OCC through an FTP site that allows documents to be managed in a secured environment.

1.2.5. Banks that have significant trading and counterparty positions may be required to run a global market shock. The "as of" date for trading and counterparty positions will be communicated to banks that are subject to the global market shock component by December 1. The OCC will notify banks that are subject to the market shock requirement.

1.2.6. All correspondence and questions regarding DFAST-14A should be directed to a secured mailbox (see section 3.1). Questions will be catalogued and, where appropriate, written responses will be provided to all banks via email and posted to the FTP site. Conference calls may be scheduled to discuss and better understand submitted questions.

1.3. *Overall Summary Instructions*

In general, banks should incorporate the following into their pro forma estimates:

1.3.1. *Definition of losses for loans*: The losses to be estimated for loans held in accrual portfolios in this exercise are generally credit losses due to failure to pay obligations (cash flow losses), rather than discounts related to mark-to-market (MTM) values. In some cases, banks may have loans that are being held for sale or which are subject to purchase accounting adjustments. In these cases, the analysis should anticipate the change in value of the underlying asset, apply the appropriate accounting treatment, and determine the incremental losses.

1.3.2. *Loan-loss estimates*: Banks should describe the underlying models and methods used to project loan losses, and provide background on the derivation of estimated losses. Factors that could be cited to support the reasonableness of estimated losses include (but are not limited to) composition of the loan portfolios within a broad category (e.g., distribution among Prime, Alt-A, and subprime loans within first lien residential mortgages) and specific characteristics of the portfolio within categories or subcategories (e.g., vintage, credit score, loan-to-value ratio, regional distribution, industry mix, ratings distribution, or collateral type). Hypothetical behavioral responses by bank management should not be considered as mitigating factors for the purposes of this analysis. For example, hedges already in place should be accounted for as potential mitigating factors, but not assumptions about potential future hedging activities.

1.3.3. *Commitments and contingent and potential obligations:* The analysis should reflect expectations of customer draw-downs on unused credit commitments under each scenario, as well as any assets and exposures that might be taken back on the balance sheet or otherwise generate losses under stressful economic conditions (e.g., assets held in asset-backed commercial paper conduits and other off-balance sheet funding vehicles to which the BHC provides support). Unconsolidated entities to which the BHC has potential exposure are also within the scope of this exercise and should be considered. If it is envisioned that non-contractual support may be provided during a stressful environment for certain obligations or exposures of sponsored or third-party entities, these should be included in a bank's analysis of contingent or potential obligations, and all associated impacts should be captured.

1.3.4. *Losses on available-for-sale (AFS) and held-to-maturity (HTM) securities*: Each bank should provide projected other-than-temporary impairments (OTTI) for AFS and HTM securities. OTTI projections should be based on September 30, 2012 positions and should be consistent with specified macroeconomic assumptions and standard accounting treatment. If the bank bifurcates credit losses from other losses, the method for deriving the bifurcation should be provided in supporting documentation.

1.3.5. *Allowance for loan losses:* Banks should estimate the portion of the current allowance for loan losses available to absorb credit losses on the loan portfolio for each quarter under each scenario, while maintaining an adequate allowance along the scenario path and at the end of the scenario horizon. Loan-loss reserve adequacy should be assessed against the likely size, composition, and risk characteristics of the loan portfolio throughout the planning horizon in a manner that is consistent with the bank's projections of losses over that scenario.

1.3.6. *Non-U.S. exposures:* Loss, revenue, and loan-loss reserve projections should cover positions and businesses for the bank on a global consolidated basis. To the extent that loss experience on foreign positions is projected to differ from that on U.S. positions, banks should provide supporting information to explain those differences.

1.3.7. *Risk-weighted asset (RWA) projections*: Banks should provide detailed support for all assumptions used to derive projections of RWAs, including assumptions related to components of balance sheet projections (on- and off-balance sheet balances and mix), income statement projections, underlying risk attributes of exposures, and any known weakness in the translation of assumptions into RWA estimates for each scenario. For example, banks should demonstrate how credit RWAs over the projection horizon are related to projected loan growth under the macroeconomic scenario, increased credit provisions or charge-offs for loan portfolios, and changing economic assumptions; and how market RWAs are related to market factors (e.g., equity index levels and bond spreads) and projected trading revenue.

Banks should demonstrate that these assumptions are clearly conditioned on a given scenario and are consistent with stated internal and external business strategies. If bank-specific assumptions (other than broad macroeconomic assumptions) are used, banks should also describe these assumptions and how they relate to reported RWA projections. If the bank's models for projecting RWAs rely upon historical relationships, the bank should provide the historical data and describe why these relationships are expected to be maintained in each scenario.

1.3.8. *Treatment of trading and counterparty RWA:* Banks subject to the market-risk rule must use the following procedures to project RWAs over the planning horizon for any positions subject to the market-risk rule. For the first quarter of the planning horizon, banks must use the market-risk capital rules in effect on December 31, 2012, for purposes of identifying positions subject to the market-risk rule and projecting the RWA amount of these positions. For the second through ninth quarters of the planning horizon, banks must use the market-risk capital rules that were proposed to be in effective on January 1, 2013, for purposes of identifying positions subject to the market-risk rule and projecting the RWA amount of these positions in each quarter.

1.3.9. *Balance sheet projections:* Balance projections are a critical input to loss and revenue estimates. Banks are expected to demonstrate that the approach used to generate those projections is consistent internally, with related processes, and externally, with implications of the macroeconomic scenario.

Balance projections should reconcile to projections for originations, pay-downs, draw-downs, and losses under each scenario. In stressed macroeconomic scenarios, care should be taken to justify major changes in portfolio composition. Loan balance projections should be consistent with internally generated paths of originations, pay- downs, draw-downs, losses, purchases, and sales under any scenario. The losses used in producing balances should be the same as those produced in internal loss estimate modeling for the stress test. Prepayment behavior should link to the relevant economic scenario and the maturity profile of the asset portfolio.

To the extent that changes in the balance sheet are driven by a bank's strategic direction, please document and explain in detail the underlying assumptions in the adverse and severely adverse economic environment.

1.3.10. *Global market shock for the largest trading banks:* Some banks with significant trading and counterparty exposures may be required to apply a global market shock to their trading book, private equity positions, and counterparty credit exposures as of a particular market close date and estimate losses. The OCC will notify banks if they are subject to the global market shock. The OCC will also provide to these trading banks a set of hypothetical shocks to the risk factors most relevant to their trading, private equity and counterparty positions and the date as of which the shocks should be applied no later than December 1 of the current calendar year.

Trading banks must use the set of hypothetical risk factor shocks the OCC provides to produce the profit and loss (P/L) estimates for their trading, private equity, and counterparty credit, and MTM losses for fair-value assets not held in trading, including loans held for sale or held for investment with the fair-value option, and AFS securities. All estimated losses associated with the global market shock the OCC provides as part of the supervisory scenarios should be reported in the first quarter of the planning horizon.

In cases in which the specified shocks are not directly compatible with the bank's internal systems, the bank is expected to interpolate or extrapolate around the given points to determine the appropriate shock. Supporting documentation should include a description of the methods used to interpolate or extrapolate. In cases where there are nonlinearities, banks should not simply multiply their exposures by the corresponding shocks to arrive at a purely linear P/L estimate, but should instead use full revaluation methods to compute their loss estimates.

The result of the global market shock is to be taken as an instantaneous loss and reduction of capital calibrated on the size of applicable trading book positions, private equity positions, and counterparty credit exposures as of a point in time. Banks should not assume a related decline in portfolio positions or risk-weighted assets as a result of these market shock losses. The global market shock should be treated as an add-on that is exogenous to the macroeconomic and financial market environment specified in the adverse and severely adverse scenarios.

1.3.11. *Fair-value loans:* Banks may have loans that are held for sale or held for investment, for which they have adopted fair-value accounting (collectively, fair-value loans). For fair-value loans not held in the trading account, trading banks should apply the risk factor shocks for comparable assets in their trading books, taking into account any forward sales already in place. The shocks applied to retail and commercial real estate whole loans should be generally consistent with the risk factor shocks provided for relevant AAA-rated whole loans. The corporate loan shocks should be generally consistent with the risk factor shocks provided for corporate loans. If trading banks use different assumptions, they should provide supporting documentation that includes the assumptions and explanations for why the assumptions used are more appropriate than those provided by the OCC.

All other banks should report any estimated changes in the value of fair-value loans in other non-interest income under the conditions specified in the macroeconomic scenario (i.e., baseline, adverse, severely adverse).

1.3.12. *Pre-provision net revenue (PPNR):* PPNR estimates should be consistent with the economic and financial environment specified in the relevant scenario. Banks should ensure that PPNR projections are explicitly based on, and directly tie to, balance sheet and other exposure assumptions used for related loss estimates. In addition, banks should apply assumptions consistent with the scenario and resulting business strategy when projecting PPNR.

1.3.13. *Residential mortgage representations and warranties:* As part of PPNR, banks will estimate losses associated with requests by mortgage investors, including both government-sponsored enterprises and private-label securities holders, to repurchase loans deemed to have breached representations and warranties, or with investor litigation that broadly seeks compensation from banks for losses. Banks should consider not only how the macro scenarios could affect losses from repurchased loans, but also a range of legal process outcomes, including worse-than-expected resolutions of the various contract claims or threatened or pending litigation against the bank. Banks should provide appropriate support of the adverse outcomes considered in their analysis.

1.3.14. *Mortgage servicing rights (MSR):* All revenue and expenses related to MSRs and the associated non-interest income and non-interest expense line items should be reported on the PPNR schedules. Banks should not report changes in value of the MSR asset or hedges within the trading shock. Therefore, if derivative or other MSR hedges are placed in the trading book for Call Report purposes and in alignment with Generally Accepted Accounting Principles, these hedges should not be stressed as part of the global market shock scenario. Also, any banks that have adopted fair-value accounting for all or part of the MSR must not include the MSR in the global market shock exercise.

1.3.15. *Operational risk losses:* Projection of losses arising from inadequate or failed internal processes, people and systems, or from external events should be reported by the bank as operational-risk losses, a component of PPNR. Examples of operational-risk loss events include those losses related to improper business practices (including class action lawsuits), execution errors, and fraud. Banks should specifically consider the possibility of support for bank-sponsored entities, as well as potential for charges related to legal reserves and provisions.

1.3.16. *Trading revenues in PPNR:* All banks are expected to project PPNR, including trading-related revenues, conditional on the specifications of the assumed macroeconomic scenario (baseline, adverse, and severely adverse). In this regard, all banks with trading activities and private equity investments, including those banks that are not required to apply the global market shock, should estimate any potential profit and loss impact that these positions might experience under the macroeconomic scenario. Estimated impacts should include those stemming from potential defaults on credit sensitive positions held in the trading account and from counterparty credit exposures, and valuation declines (and recoveries specific to those declines) on loans, securities and other trading or MTM positions, and private equity investments. Private equity-related loss estimates should be broken out from other trading or MTM loss and should include consideration of draw-downs against commitments.

In making these projections, banks should demonstrate that their historical data selection and general approach is credible and applicable for the assumed macroeconomic scenario.

For the trading banks, projections should be made without c onsideration of any MTM losses on trading bank's portfolios that result from the global market shock. The MTM losses resulting from the global market shock should be treated as separate, one-time losses that occur in the first quarter of the planning horizon (e.g., 4Q12, for CCAR 2013). Therefore, banks subject to the market shock should not assume any interaction between the global market shock and projections of PPNR in the form of management actions (such as expense cuts) that would be taken in light of the shock to the trading portfolio or recoveries of the losses resulting from the market shock over the scenario time horizon.

1.3.17. *Basel III:* Banks are to include estimates, under the baseline scenario, of the composition and levels of regulatory capital, risk-weighted assets, and leverage ratio exposures used to calculate minimum regulatory capital ratios (including the capital conservation buffer and any SIFI surcharge that may be required) under the Basel III framework, as set forth by the Final Market Risk Rule and the proposed requirements of the Basel III NPR, the Advanced Approaches NPR for applicable banks, and the Basel Committee's SIFI surcharge framework. Each Bank's submission should include supporting documentation on all material planned actions that the bank intends to pursue in order to meet the proposed Basel III target ratios, including, but not limited to, the run-off or sale of existing portfolio(s), the issuance of regulatory capital instruments and other strategic corporate actions.

1.3.18. *Regulatory Capital:* Banks are to provide data on the balances of regulatory capital instruments under current U.S. capital adequacy guidelines, aggregated by instrument type based on actual balances as of September 30 of the current calendar year and projected balances as of each quarter end through the remaining planning horizon. Banks are to report information both on a notional basis and on the basis of the dollar amount included in regulatory capital.

1.3.19. *Planned Capital Actions:* Banks must calculate pro forma capital ratios using their planned capital actions over the planning horizon under the baseline scenario as well as any alternative capital actions projected under the adverse and severely adverse scenarios. Banks should include projections of capital actions that are realistic, consistent with its capital plan and policies, and prudent relative to hypothetical economic and financial conditions modeled.

The OCC recognizes that decisions on capital actions are not static and may change under varying economic and financial conditions. For the first quarter of the planning horizon, the bank must take into account the actual capital actions taken during that quarter.

2. Who Must Report

2.1. *Reporting Criteria:* Large banks that meet an annual threshold of $50 billion or more in total consolidated assets, as defined by the annual stress test rule (12 CFR 46), are required to submit the DFAST-14A report to the OCC. The annual stress test rule defines total consolidated assets as the average of the company's total consolidated assets over the four most recent consecutive quarters, as reflected on the bank's Consolidated Report of Condition and Income (Call Report FFIEC 041 or FFIEC 031).

2.2. Separate annual schedules must be reported for each scenario. All annual schedules are required to be reported by all banks with the exception of the CCR schedule and the Trading, CCR, and Operational Risk related worksheets of the Summary schedule.

2.2.1. *CCR schedule and Trading and CCR worksheets*: Only banks with greater than $500 billion in total consolidated assets who are subject to the amended market risk capital rule must submit this schedule and worksheets.

2.2.2. *Operational Risk worksheets*: Only banks subject to the advanced approaches risk-based capital rules (12 CFR Part 3, Appendix C) must submit these worksheets.

2.3. Certain data elements within the annual schedules are subject to materiality thresholds. The instructions to these data schedules provide details on whether or not bank must submit a specific data element.

2.4. *Exemptions*: Only banks that did not meet the reporting criteria listed in paragraph one above are exempt from reporting.

3. Where to Submit the Reports

3.1. All banks subject to these reporting requirements must submit completed reports electronically. Banks will be provided information on how to transmit data to the FTP website. Please send requests for FTP website access to the following mailbox and you will receive the website URL and individual access information: DFA165i2.reporting@occ.treas.gov

3.2. The submitted DFAST templates or schedules shall be named using the following naming conventions.

DFAST14A_SUMMARY_RSSD_BANKMNEMONIC_SCENARIO.xlsx
DFAST14A_SCENARIO_RSSD_BANKMNEMONIC.xlsx

DFAST14A_CONTACTS_RSSD_BANKMNEMONIC.xlsx
DFAST14A_CCR_RSSD_BANKMNEMONIC.xlsx
DFAST14A_OPSRISK_RSSD_BANKMNEMONIC.xlsx
DFAST14A_BASELIII_RSSD_BANKMNEMONIC.xlsx
DFAST14A_REGCAP_RSSD_BANKMNEMONIC.xlsx

4. **When to Submit the Reports**

4.1. Banks must file the DFAST-14A report according to the appropriate time schedules described below:

4.1.1. With the exception of the CCR schedule and the Trading and CCR worksheets of the Summary schedule, the data collected will be reported as of September 30. The "as of" date for the CCR schedule and the Trading and CCR worksheets of the summary schedule will be between October 1 and December 1 of that calendar year.

4.1.2. *General Timing*: All schedules will be due on or before January 5 (unless that day falls on a weekend). If the submission date falls on a weekend, the data must be received on the first business day after the weekend. No other extensions of time for submitting reports will be granted. The data are due by the end of the reporting day on the submission date. Early submission aids the OCC in reviewing and processing data and is encouraged.

5. **How to Prepare the Reports**

5.1. Applicability of GAAP, Consolidation Rules, and Other Instructional Guidance

5.1.1. Banks are required to prepare and file the DFAST-14A schedules in accordance with generally accepted accounting principles (GAAP) and these instructions. The financial records of the banks must be maintained in such a manner and scope to ensure the DFAST-14A is prepared in accordance with these instructions and reflects a fair presentation of the banks' financial condition and assessment of performance under stressed scenarios.

5.1.2. Rules of Consolidation: Reference the Consolidated Reports of Condition and Income for general instructions on the rules of consolidation.

5.1.3. Banks should review the following published documents (in the order listed below) when determining the precise definition to be used in completing the schedules:

1) The DFAST-14A instructions;
2) The latest available instructions to the Consolidated Reports of Condition and Income:
   http://www.fdic.gov/regulations/resources/call/index.html

5.2. *Amended Reports*: The OCC will require the filing of amended reports if previous submissions contain significant errors. In addition, a reporting institution must file an amended report when it or the OCC discovers significant errors or omissions subsequent to submission of a report. Failure to file amended reports on a timely basis may subject the institution to supervisory action.

6. **Questions and Requests for Interpretations**

6.1. Banks must submit any questions or requests for interpretations by email to : DFA165i2.reporting@occ.treas.gov

7. **Scenario: General Instructions**

7.1. To conduct the stress test required, a bank may need to project additional economic and financial variables to estimate losses or revenues for some or all of its portfolios, or the bank may chose to report additional scenarios. In such a case, the covered institution must complete the following worksheets as appropriate.

These instructions provide guidance for reporting the variables used in the firm-defined macroeconomic scenarios underlying the projections of losses, revenue, and capital. These scenarios include the DFAST baseline scenario, DFAST adverse scenario, the DFAST severely adverse scenario, as well as, any additional scenarios generated by the bank or supplied by the OCC (Additional Scenario #1, Additional Scenario #2, etc.).Additional worksheets are provided if the bank generated additional variables for the scenarios or reported additional scenarios beyond the baseline, adverse, and severely adverse scenarios. The worksheets in the template are the following.

7.1.1. *Scenario Variable Definitions*: This worksheet must be used to list and define the variables used beyond those provided b y the OCC in the bank's execution of the DFAST scenarios, and any additional scenarios the bank wishes to report.

- The worksheet provides space for the baseline scenario, adverse scenario, and severely adverse scenario, as well as, space for an additional scenario. The sections must be completed. If one or more additional scenarios are provided, then a section should be created for each additional scenario and labeled accordingly (Additional Scenario #1; Additional Scenario #2; etc.)

- For each scenario, list the variables included in the scenario in the column titled "Variable Name."

- Variable definitions must be provided in the column titled "Variable Definition." Variable definitions should include a description of the variable (e.g., "Real GDP") and the denomination and/or frequency of the variable (e.g., "Billions of 2005 dollars" or "in percent, average of monthly values").

- For convenience, the worksheet provides space for 10 variables per scenario, but any number of variables may be reported, depending on the variables actually used in the scenario. Extra lines may be created as needed. The same variables do not necessarily have to be included in each scenario.

- Banks must include all economic and financial market variables that were important in projecting results, including those that affect only a subset of portfolios or positions. For example, if asset prices had a meaningful impact, the assumed level of the equity market and interest rates must be included, or if bankruptcy filings affect credit card loss estimates, then the assumed levels of these must be reported.

- Banks must also include any variables capturing regional or local economic or asset value conditions, such as regional unemployment rates or housing prices, if these were used in the projections.

- Banks must include historical data, as well as projections, for any macroeconomic, regional, local, or financial market variables that are not generally available. Historical data for these variables can be included in a separate worksheet.

7.1.2. *DFAST Baseline Scenario*: This worksheet must be used to report the values of any additional variables generated for the DFAST baseline scenario.

7.1.3. *DFAST Adverse Scenario*: This worksheet must be used to report the values of any additional variables generated for the DFAST adverse scenario.

7.1.4. *DFAST Severely Adverse Scenario*: This worksheet must be used to report the values of the variables included in the DFAST severely adverse scenario.

7.1.5. *Additional Scenario #1/#2/etc.* : These worksheets should be used to report the values of the variables included in any additional scenarios. Please create a separate worksheet (tab) for each additional scenario. Name the worksheets "Additional Scenario #1," "Additional Scenario #2," etc.

7.1.6. *All Scenarios*: The following applies to all of the Scenario tabs.

- The variables must be the same (and have the same names) as the variables listed in the corresponding sections of the *Scenario Variable Definitions* Worksheet.
- List quarterly values for the variables starting with the last realized value (3Q 2012) through the end of the forecast horizon (4Q 2014).
- Please enter all variables as levels rather than as changes or growth rates (for instance, the dollar value of real GDP rather than the GDP growth rate).

8. **Summary Schedule – Overview**

8.1. *Overview*: The DFAST-14A Summary schedule includes data collection worksheets related to the following:

- Income, Balance Sheet, and Equity/Capital Statements;
- Retail;
- Securities;
- Trading;
- Counterparty Credit Risk;
- Operational Risk; and
- Pre-Provision Net Revenue (PPNR).

The covered institution (national bank, Federal savings association) must submit a **separate** Summary schedule for **each** scenario (Use the "Save As" function of the original Excel workbook provided to the institution.). Name the file using the following style:

DFAST14A_SUMMARY_RSSD_BANKMNEMONIC_SCENARIO.xlsx.

In the tab labeled *Summary Submission Cover Sheet*, include:

- The name and Charter Number of the submitting bank;
- The Current Year, Planning Horizon Year 1, and Planning Horizon Year 2
- The date of submission to the OCC;
- Which scenario this Summary Schedule applies to (choose from the drop-down box); and
- A brief description of the scenario.

8.2. *Technical Details*: The following instructions apply to all worksheets within the Summary schedule.

- Do not enter any information in gray highlighted cells.
- Ensure that any internal consistency checks are correct before submission.
- Report income and loss data on a quarterly basis, and not on a cumulative or year-to-date basis.
- Report dollar values in millions of US dollars (unless specified otherwise).
- For worksheets that collect non-scenario dependent data (e.g. the historical data collection on the Retail Repurchase worksheet), report information for the Baseline Scenario only.
- The "projection horizon" refers to nine quarters starting with the fourth quarter of the reporting year.
- If there are no data for certain fields, then populate them with a zero (0).

8.3. *Supporting Documentation on Methodology*: For each part of the Summary Schedule, submit supporting documentation that clearly describes the methodology used to produce the bank's projections. In the documentation, include a description of how the bank translated the macroeconomic factors (or market shock for the Trading and Counterparty Risk sections) associated with the scenario into the banks projections and technical details of any underlying statistical methods used, including information on model validation and independent review. Where judgment is an essential part of the forecast, include documentation that demonstrates rationale and magnitude, as well as the process involved to ensure consistency of projections with scenario conditions. Furthermore, include thorough discussion of any material deviations from the instructions and how the materiality of such deviations was decided upon.

8.4. *Model Risk Management Policy*: Banks must include in their submission their model risk management policies, which should provide the bank's framework for model development, calibration, validation, escalation, and oversight.

8.5. *Documentation of Risk Measurement Practices*: Bank submissions must include internal documentation describing the bank's framework for development, calibration, estimation, validation, oversight, and escalation of key risk identification and measurement practices.

8.6. *Documentation of Internal Stress Testing Methodologies*: Banks must include in their submissions documentation that describes key methodologies and assumptions for performing stress testing on their portfolios. In particular, the design, theory, and logic underlying the methodology should be well documented and generally supported by published research and sound industry practice. The documentation should include:

- discussion of historical data set construction, including data sources, adjustments to the data set;
- rationale for portfolio segmentation and a discussion on how a particular methodology and model captures the key characteristics;
- an explanation of the theory, logic, and design behind each model;
- a description of model selection and specification, variable choice, and estimation methodology;
- an analysis of the model output, including the congruence of inputs with the assumed economic scenario, the justification of any qualitative adjustment;
- a model inventory log specifying, at a minimum, the model's version, the date of model approval, the name of its model owner, the date of the model's last independent validation.

Documentation should also include mapping that clearly conveys the methodology used for each DFAST-14A product line under each stress scenario. If third-party models are used, the documentation should describe how the model was constructed, validated, and any known limitations of the model. Documentation should describe assumptions concerning new growth and changes to credit policy. Documentation should demonstrate that senior management has provided the board of directors with sufficient information to facilitate the board's full understanding of the stress testing used by the firm for capital planning purposes.

8.7. *Documentation of Assumptions and Approaches*: Banks must provide credible support for all assumptions used to derive loss estimates, including assumptions related to the components of loss, severity of loss, and any known weaknesses in the translation of assumptions into loss estimates. Banks should demonstrate that these assumptions are clearly conditioned on the stated macroeconomic scenario, are consistent with stated business strategies, and reflect the competitive environment of each business line. If firm-specific assumptions (other than broad macroeconomic assumptions) are used, also describe these assumptions and how they relate to reported projections. If the bank models rely upon historical relationships, provide the historical data and clearly describe why these relationships are expected to be maintained in each scenario. The impact of assumptions concerning new growth or changes to credit policy on forecasted loss estimates relative to historical performance should be clearly documented.

While judgment is an essential part of risk measurement and risk management, including for loss forecasting, banks should not be over-reliant on judgment to prepare their loss estimations without providing documentation or evidence of transparency and discipline around the process. Banks should adequately support their judgments and should ensure that judgments are in line with scenario conditions.

Supporting documentation also should describe internal governance around the development of stress testing models and methodologies, and discuss how the stress testing methodologies have been implemented in the bank's existing firm-wide risk management practices. The bank should demonstrate that senior management provided the board of directors with sufficient information to facilitate the board's full understanding of the stress testing used by the firm for capital planning purposes and allow for the appropriate level of challenge of assumptions and outcomes.

8.8. *Validation and Independent Review*: Models employed by banks (either developed internally or supplied by a vendor) should be independently validated or otherwise reviewed in line with model risk management expectations presented in existing supervisory guidance, including OCC Bulletin 2011-12, *Supervisory Guidance on Model Risk Management*.

Banks must provide their model validation policy. Institutions should provide model validation documentation on the following elements: conceptual soundness, inputs, transparency, implementation, reporting, model robustness and limitations, use of expert judgment, exception reports, outcomes analysis (backtesting and/or benchmarking) and qualitative adjustments.

9. **Income Statement, Balance Sheet & Capital**

9.1. *Income Statement Worksheet*:

The Income Statement worksheet collects projections for the main components of the income statement. Micro Data Reference Manual (MRDM) codes are provided in the 'Notes' column for many of the line items. Where applicable, use the definitions for the Call Report line items corresponding to the MDRM code. For each scenario used, input the loan loss projections for the various line items in this worksheet. The bank must include losses tied to the relevant balances reported on the Balance Sheet worksheet. Losses associated with accrual loans (i.e., loans held for investment) should be reported in the appropriate line items under the “Accrual Loan Losses” section and any losses due to changes in the fair value of assets that are held for sale or held for investment under the fair value option should be reported in the appropriate line items under the “Losses Associated With Loans Held for Sale and Loans Accounted for Under the Fair Value Option” section.

The Repurchase Reserve/Liability for Mortgage Reps and Warrants line items are included to provide information on the expected evolution of any reserve or accrued liability that has been established for losses related to sold or government-insured mortgage loans (first or second lien). Losses charged to this reserve can occur through contractual repurchases, settlement agreement, or litigation loss, including losses related to claims under securities law or fraud claims; it is likely that most losses charged to this reserve will come through contractual repurchases or settlements. Quarterly reserve/accrued liability levels and quarterly provisions and net charge-offs to the reserve/accrued liability should be reported as forecast under the applicable scenario. To ensure consistency across the sheets of each DFAST-14A summary workbook, the Provisions during the quarter line is linked to the PPNR Projections Worksheet rows where banks are expected to report any provisions to the Repurchase Reserve/Liability for Mortgage Reps and Warrants. For the same reason, the Net charges during the quarter line is linked to Table G.3 in the Retail Repurchase Worksheet.

9.2. *__Balance Sheet Worksheet__***:**

For each scenario used, input the loan balance projections in the various line items in this worksheet. Balances for loans held in the accrual loan portfolio must be reported in the appropriate wholesale line items in the “Accrual Loans” section and balances for held for sale or held for investment under the fair value option should be reported in the appropriate line items in the “Loans Held for Sale and Loans Accounted for Under the Fair Value Option” section. MDRM codes are provided within the ‘Notes’ column for many of the line items. When applicable, the definition of the bank’s projections should correlate to the definitions outlined by the corresponding MDRM code within the Call Report. Domestic refers to portfolios in the domestic US offices (as defined in the Call Report), and International refers to portfolios outside of the domestic US offices.

Explain any M&A and divestitures included and how they are funded (liabilities, asset sales, etc.)

9.3. *__Capital Worksheet__***:**

The Capital worksheet collects projections of the main drivers of equity capital and the key components of the regulatory capital schedule. MRDM codes are provided in the ‘Notes’ column for many of the line items.

The schedule collects projections of components of equity capital and regulatory capital, components of assets and liabilities, and deferred tax asset items. The projections must follow the definitions currently used in the Call Report and found in the OCC's capital adequacy requirements (12 CFR Part 3) as applicable. All data collected in the Capital worksheet should be reported on a quarterly basis.

Banks are required to provide projections of Tier 1 common capital, which is defined as Tier 1 capital less non-common elements, including perpetual preferred stock and related surplus, minority interest in subsidiaries, trust preferred securities, and mandatory convertible preferred securities.

The projections must clearly show any proposed capital distributions or other scenario-dependent actions that would affect the bank's regulatory capital, including any assumptions based on OCC's regulations that would tend to, or otherwise restrict, such capital distributions.

Projections of risk-weighted assets – RWA (line item 33) must be based on the OCC's capital rules applicable in a given quarter. For example, for the first quarter of the planning horizon associated with the DFAST-14A with the September 30, 2012 as-of date, a bank subject to the OCC's market risk rule must report market RWAs in a manner consistent with the market risk capital rule in effect on December 31, 2012. Similarly, for the second through ninth quarters of the planning horizon associated with the DFAST-14A with the September 30, 2012 as-of date, a bank subject to the OCC's market risk rule must report market RWAs in a manner consistent with the final market risk capital rule that becomes effective on January 1, 2013.

Banks are required to provide an additional Capital worksheet for the adverse, baseline, and severely adverse scenarios.

9.4. *Supporting Documentation*:

9.4.1. *Income Statement, Balance Sheet, and Capital Worksheets*: Banks must submit supporting documentation that clearly describes the methodologies used to make the loss, reserve change, and revenue projections that underlie the pro forma projections of equity capital. The supporting document should be titled **RSSD_BANKMNEMONIC_CAPITAL_METHODOLOGY_YYMMDD**. Each bank should include in its supporting documentation a clear description of how the various balance sheet and income statement line items were reported.

Provide information on the specific assumptions used to calculate regulatory capital, including a discussion of any proposed capital distributions. When appropriate, clearly state assumptions related to the corporate tax rate and the evolution of the deferred tax assets. In situations where the bank chooses not to project components of the balance sheet, those components should be held constant at the last current level and the bank should explain why the zero delta assumption is appropriate in the given scenario.

Banks must submit any other information and documentation necessary to support or understand its capital calculations. For example, a bank could show the calculations related to the projections of the deferred tax asset or servicing assets that may be disallowed for regulatory capital purposes. Where applicable, banks should link the additional supporting documentation to the Summary Memo of Capital Methodology and Assumptions and the Capital worksheet.

10. **Retail**

Throughout the retail-related worksheets, Domestic refers to portfolios in the domestic US offices (as defined in the Call Report), and International refers to portfolios outside of the domestic US offices.

10.1. *Retail Balance & Loss Projection Worksheet*:

The Retail Balance and Loss Projections worksheet collects projections of business-line level loan balances and losses on banks' accrual loans only (i.e., held for investment).

- Balances: According to Call Report definition (end of quarter levels). Where requested, please segment the total balances reported by vintage. Balances should be classified according to the origination vintage of the account with which the balance is associated.
- New Originations: Total dollar amount of new originations net of sales to Agencies. Only include originations you expect to hold in portfolio.
- Paydowns: Total dollar of repayments received in the given quarter.
- Asset Purchases: Total dollar of assets purchased in the given quarter.
- Asset Sales: Total dollar of assets sold in the given quarter.
- Loan Losses: Total dollar of loan losses recognized in the given quarter.
- Cumulative Interim Loan Losses – Non-PCI: The total unpaid principal balance that has been charged-off on loans in the segment through Q3 of the reporting period on non-PCI loans. Interim charge-offs include all cumulative partial chargeoffs/write-downs for loan that have not been fully charged-off or otherwise liquidated.
- Cumulative Interim Loan Losses – PCI: The total unpaid principal balance that has been determined to be uncollectible through Q3 of the reporting period and for which the non-accretable difference or ALLL has been used to absorb the uncollectible amount. The amounts reported in this line should be consistent with the Non-Accretable Difference Remaining and other information reported on the ASC 310-30 worksheet. As above, this measure should not include liquidated loans.
- Reporting of projections for credit cards must be based on all open accounts (active + inactive), but not charged-off accounts.

10.2. *Retail Repurchase Worksheet:*

The Retail Repurchase worksheet collects data on loans sold by the bank that may be subject to repurchase risk due to breaches of representations and warranties made during the sale of the loans. It also collects data on loans insured by the US Government for which the insurance coverage could be denied if loan defects are identified. Information about loans sold between first quarter 2004 and third quarter 2012 must be aggregated and reported in the following categories on Tables A-F:

- Tables A—Loans Sold to Fannie Mae;
- Tables B—Loans Sold to Freddie Mac;
- Tables C—Loans Insured by the US Government (e.g. FHA, VA): loans (whether on balance sheet or in a GNMA security) insured by the US government and subject to a denial of insurance payment if certain defects are discovered;
- Tables D—Loans Securitized with Monoline Insurance: loans packaged into a securitization and wrapped with monoline insurance. If it cannot be identified whether a given loan is monoline insured, include the loan in this category;
- Tables E—Loans Securitized without Monoline Insurance: loans packaged into a securitization but not wrapped with monoline insurance;
- Tables F—Whole Loans Sold: loans sold as whole loans to parties other than Fannie Mae or Freddie Mac, even if the whole loans were subsequently sold to Fannie Mae or Freddie Mac.

Please report information aggregated by vintage for each of the data fields below. In cases where the data may not be available by vintage, report the data in the Unallocated column. It is expected that use of the Unallocated column will be very limited. Any data reported in the Unallocated column will be treated with conservative assumptions by the OCC. Loans that have been sold, repurchased and then sold again must be reported in the most recent year of sale.

For row variables described below with the note *Excluding Exempt Population*, the data submitted must exclude any loans for which the bank has no risk of repurchase liability because of settlement or previous repurchase. Only exclude finalized settlements; any loans subject to a pending settlement should be included on this worksheet. Also exclude loans for which a repurchase request has been made and subsequently rescinded. Loans paid in full are not part of the exempt population unless they satisfy the exemption criteria defined above.

For each set of tables A-F, please complete Table X.1 for all loans for which the outstanding UPB and delinquency information requested in Table X.1 is available. If the requested outstanding UPB or delinquency information is not available, please complete Table X.2 instead. Due to the missing data associated with loans reported in Table X.2, loans in this population will be treated with conservative assumptions. Tables X.1 and X.2 should be mutually exclusive.

The row variables for each table must be filled out as follows:

- Original UPB: The original unpaid principal balance (UPB) of all of the loans, including closed loans;
- Original UPB (Excluding Exempt Population): The original UPB of the loans, including closed loans but excluding the exempt population as defined above;
- Outstanding UPB (Excluding Exempt Population): The outstanding UPB as of September 30 of the reporting year, excluding the exempt population as defined above;
- Delinquency Status as of 3Q (Excluding Exempt Population): Report the data as of September 30 of the reporting year, excluding the exempt population as defined above. The sum of the four delinquency categories listed below should equal the outstanding UPB reported for that vintage.
    - Current: The UPB of loans less than 30 days past due;
    - Past due 30 to 89 days: The UPB of loans 30-89 days past due;
    - Past due 90 to 179 days: The UPB of loans 90-179 days past due;
    - Past due 180+ days: The UPB of all loans that are 180 days or more past due and have not yet been fully charged-off;
- Net Credit Loss Realized to-date (Excluding Exempt Population): Cumulative net credit losses realized by investors in the loans through September 30 of the reporting year, excluding the exempt population as defined above;
- Repurchase Requests Outstanding (Excluding Exempt Population): The UPB of loans for which a buyer has requested a repurchase but a resolution had not been reached as of September 30 of the reporting year. No loans that belong in this row will fit the definition of the exempt population, so this variable is by definition exclusive of the exempt population as defined above;
- Loss to-date Due to Denied Insurance (applicable to Table C only): Losses realized through September 30 of the reporting year due to insurance claims denied by the US Government due to an identified defect on the loan in question;
- Estimated Lifetime Net Credit Losses (Excluding Exempt Population): The firm's estimate of lifetime net credit losses by investors in the loans (inclusive of net credit losses realized-to-date) under the scenario in question, excluding from the estimate losses on the exempt population as defined above;
- Projected Future Losses to bank Charged to Repurchase Reserve (Excluding Exempt Population): Lifetime future losses related to sold or government-insured loans under the scenario in question that the bank expects to charge through its repurchase reserve.

In Table X.3, please distribute the projected future lifetime losses that would be charged-off through the repurchase reserve under each scenario, as defined above, over the quarters displayed in the column headers. For each Table A-F, the sum of the projected future losses in Table X.3 expected to be charged off to the repurchase reserve should equal the sum of the projected future losses expected to be charged off through the repurchase reserve in Tables X.1 and X.2. The Projection Validity Check cells will read "TRUE" when these projected losses are filled out correctly. Further, the sum of the projected future losses reported in Tables A.3-F.3 is calculated in table G.3. The sum of losses expected to be charged to the repurchase reserve is linked to the net charge-off lines in the Repurchase Reserve on the Income Statement to ensure consistency across the sheets of the Y-14A summary workbook.

10.3. *ASC 310-30 Worksheet*

Please see Accounting Standards Codification (ASC) Subtopic 310-10, Receivables—Loans and Debt Securities Acquired with Deteriorated Credit Quality (formerly AICPA Statement of Position 03-3, "Accounting for Certain Loans or Debt Securities Acquired in a Transfer"). The Retail ASC 310-30 worksheet collects information and projections on the banks' retail purchased credit impaired (PCI) portfolio. Provide actual information[1] for the third quarter of the reporting period and projected information for the future quarters.

Submit the information requested by product, as segregated on the worksheet. In the event that a firm has ASC 310-30 pools that include more than one of the products provided on the worksheet, please allocate the data between the products in question and provide documentation for the methodology you used for the allocation.

10.3.1. *Carrying Value*: The carrying value of the ASC 310-30 purchased impaired loans as reported on the balance sheet. Carrying value must not reflect any allowance for loan losses that may be in place for the PCI loans being reported

10.3.2. *Allowance*: The amount of any allowance for loan losses that has been established for the PCI loans.

10.3.3. *Net Carry Value*: Net Carry Value: The carry value less any allowance. This field is automatically calculated.

10.3.4. *Unpaid Principal Balance*: Total contractual Unpaid Principal Balance of ASC 310-30 (SOP 03-3) PCI loans as of quarter-end.

10.3.5. *Initial Day 1 Non-Accretable Difference to Absorb Cash Flow Shortfalls on PCI Loans*: The original Day 1 full non-accretable difference to absorb amounts determined to be uncollectible on PCI loans when the PCI portfolio was acquired. Please specify if this includes principal only or principal and interest. Provide only for the first quarter on the reporting schedule.

10.3.6. *Quarter Ending Non Accretable Difference (NAD):* The amount of the Day 1 NAD remaining, net of the amount allocated to offset 'Charge Offs to Date' (provided in Line 7) and any amounts reclassified to accretable yield.

10.3.7. *Cumulative "Charge-Offs" to Date*: Total cumulative contractual amounts due on PCI loans that would have been deemed charged-off under a non-PCI

[1] Required only in the baseline scenario.

charge-off policy (i.e. losses accumulated to date that will be offset against the non-accretable difference (NAD) and/or the PCI Allowance). Please split between amount planned to be applied against the NAD and the amount planned to be applied against the Allowance. Provide only for the first quarter on the reporting schedule.

10.3.8. *Provisions to Allowance*: The amount of provisions to the allowance recognized in the income statement in the quarter due to changed expectations of lifetime cash flows to be received for the PCI loans. Provide increases to the allowance as a positive number and reversals of the allowance as a negative number.

10.3.9. *Quarterly "Charge-Offs": The* total contractual amount of PCI loans that would be deemed charged off or identified as loss under a non-PCI charge-off policy in the quarter (i.e. losses in the quarter that will be offset at some point against the non-accretable difference (NAD) and/or the PCI Allowance). Please split between amount planned to be applied against the NAD and the amount planned to be applied against the Allowance.

10.3.10. *Accretable Yield Remaining*: The accretable yield remaining as of the quarter-end.

10.3.11. *Accretable Yield Accreted to Income*: The amount of accretable yield recognized as income in the quarter.

10.3.12. *Effective Yield (%):* The effective interest rate at which income is recognized in the quarter.

10.4. _Supporting Documentation_

Banks must submit documentation for their Retail-related projections. Documents should be titled **RSSD_BANKMNEMONIC_RETAIL_METHODOLOGY_YYMMDD**. You may submit separate documents for different models and/or methodologies. Please be clear in titles and file names. Model Type refers to the type of Retail model. Documentation should be submitted for all aspects of the retail portfolio, including purchased credit impaired loans and mortgage repurchase risk. Mortgage repurchase documentation should include descriptions of all important assumptions made in each scenario, including, but not limited to, assumptions about legal process outcomes and counterparty behavior. All retail documentation should include documentation of assumptions, governance, validation and independent review as outlined in the Supporting Documentation section of the Overview.

11. Wholesale

Banks must submit separate documentation for their Wholesale (Corporate and CRE) loan balances and loss projections. The supporting document should be titled **RSSD_BANKMNEMONIC_WHOLESALE_METHODOLOGY_YYMMDD**. You may submit separate documents for different models and/or methodologies. Please be clear in titling and file names. Model Type refers to the type of Wholesale model.

Banks must include supporting documentation that describes the key methodologies and assumptions for performing stress testing on each wholesale portfolio. Documentation should include an index of documents submitted, a general overview document providing a broad summary of the stress testing methodologies utilized, and detailed supporting documentation that clearly describe the model development process, the derivation of outcomes, and validation procedures as outlined below. The methodologies' formulaic specification, assumptions, numerical techniques, and approximations should be explained in detail with particular attention to both their merits and limitations. Specifically, documentation should include:

- Discussion of historical data set construction, including data sources, adjustments to the data set, and documentation validating the use of any external data.
- Time period of model calibration.
- Rationale for portfolio segmentation and a discussion on how a particular methodology and model captures the key characteristics and the unique risk drivers of each portfolio segment.
- A description of how the loss estimates appropriately capture the severity of the macroeconomic scenario, reflecting both industry and borrower characteristics. Documentation should include a justification for explanatory variables selected, including coefficients from statistical models, measures of their statistical significance, and qualitative assessments where appropriate. Where relevant, descriptive statistics, including their mean, median, minimum, maximum, and standard deviation should be outlined.
- Step-by-step examples of loss calculation, including a transparent breakdown of all components of forecasted loss (i.e., probability of default, severity of loss, exposure at default) and how each component is adjusted for the given macroeconomic scenario.
- Discussion of how losses were distributed to each quarter in the forecasted period as it relates to changes in the macroeconomic factors within the modeled scenario.
- Qualitative or quantitative adjustment to main model output. Firms should perform pre-adjustment / post adjustment loss analysis and supply that analysis for material disparity.

Where the current total balances in the wholesale line items do not tie directly to the corresponding category on the Call Report, banks should provide a reconciliation which accounts for all wholesale balances. To the extent that loss projection line items include the consolidation of various loan portfolios which have different risk characteristics, supporting documentation should break out the relevant sub-portfolio losses. Furthermore, banks should provide supporting documentation and forecasts for any wholesale loan portfolios acquired after the beginning quarter of the stress scenario and/or for loans covered by loss sharing agreements with the FDIC.

12. **Loans Held for Sale / Loans Accounted for FVO**

Banks must submit separate documentation for their Fair Value Option and Held for Sale retail and wholesale loans. The supporting document should be titled **RSSD_BANKMNEMONIC_FVOHFS_METHODOLOGY_YYMMDD**. You may submit separate documents for different models and/or methodologies. In this case, please be clear in the titling and file names. The documentation must include:

- Total loss and outstanding fair market value balances segmented by Commercial/Wholesale, Commercial Real Estate and Retail along with explanation as to the main drivers of loss for each category noted above.
- Please document the amount of funded and non-funded commitments for wholesale loans and for retail loans please include the average amount of loans that had been rejected or were in not in conformance with agency standards.
- An attestation to completeness: describe the process and governance and oversight for ensuring the full set of positions were accounted for and included,
- Documentation should clearly make note of instances where different methodologies were used across different business lines with like assets,
- Documentation should make note where judgment was used in defining and allocating exposure,
- Document approach and asset coverage under these approaches,
- Describe any additional broadening or simplification of the scenario done to get the requisite amount of granularity needed to run to scenario,

13. **AFS/HTM Securities**

13.1. *Projected OTTI for AFS Securities and HTM Securities by CUSIP*

For each position that incurred a loss in profits and losses (P/L), please state the identifier value (CUSIP or ISIN) and the amount of loss projected (over the entire forecast horizon). Create a separate line item for each position. Total projected losses should reconcile to the total sum of projected losses (across all quarters) provided in the Securities OTTI by Portfolio tab of this schedule. Responses should be provided in USD millions.

13.2. *Projected OTTI for AFS and HTM Securities by Portfolio*

Please provide the credit loss portion and non-credit loss portion of projected OTTI (for relevant portfolios) for the quarters detailed in the tables provided in the Securities OTTI by Portfolio tab. Responses must be provided in USD millions. Values should be quarterly, not cumulative.

OTTI related to the security's credit loss is recognized in earnings, whereas the OTTI related to other factors (defined as the non-credit loss portion) is included as part of a separate component of other comprehensive income (OCI). For only those securities determined to be other-than-temporarily impaired, banks should provide both projected losses that would be recognized in earnings and any projected losses that would be captured in OCI.

Only securities projected to experience an other-than-temporary impairment loss in the P&L should be reported in the tables provided in the Securities OTTI by Portfolio tab. Securities not projected to be other-than-temporarily impaired (for example, any securities implicitly or explicitly guaranteed by the U.S. government or any other securities in which no OTTI is projected) should not be reported in this tab.

13.3. *High-Level OTTI Methodology & Assumptions*

Please complete the unshaded cells in the table provided.

13.4. *Post-Trading Shock Market Values for AFS Securities*

Banks must estimate and provide fair market values of AFS securities based on a re-pricing of 09/30/2012 positions under the trading shock scenario.

13.5. *Actual AFS / HTM Fair Market Value Sources*

Provide information on the sources of actual fair market values as of September 30 of the reporting year.

13.6. *Supporting Documentation*

Document should be titled **RSSD_BANKMNEMONIC_SECURITIES_METHODOLOGY_YYMMDD**. You may submit separate documents for different models and/or methodologies. In this case, please be clear in titling and file names. The documentation should clearly addresses the OTTI methodologies used by banks to complete the DFAST-14A Summary schedule. The documentation should, at a minimum, address the questions outlined below by major product/portfolio type (e.g., non-agency residential mortgage-backed securities (RMBS), commercial mortgage-backed securities (CMBS), auto asset-backed securities (ABS), corporate bonds, etc.).

13.6.1. *OTTI Methodology*

- Describe the model/methodology used to develop stressed OTTI losses. Please state whether a vendor or proprietary model was used.
- If a vendor model was used, please provide the name of the vendor model. If a vendor model was used, has the bank performed an independent review of the vendor model?
- What data source(s) was used to estimate the model?

- What were the key inputs/variables and how were these determined? (E.g., how were default, severity, and other elements determined? What were the key inputs in determining default, severity, and other elements? What were the key assumptions and how were these assumptions determined?)
- If using a cash flow model, was a vendor or proprietary model used? If using a vendor model, please provide the name of the vendor and model.
- How did the model/methodology (whether vendor or proprietary) incorporate macroeconomic assumptions?
- If relevant, how were macroeconomic assumptions (as prescribed under the DFAST stress scenarios – i.e., adverse and severely adverse) used to determine projected collateral default and severity?
- Were all securities reviewed for impairment? If not, describe the rationale, decision rule, or filtering process.
- If the threshold for determining OTTI on structured products was based on a loss coverage multiple, describe the multiple used.
- If OTTI was estimated for multiple quarters, describe the process for determining OTTI in each period of the forecast time horizon.
- Is the bank using shortcuts or rules of thumb to recognize the OTTI charges for this analysis or going through the bank's normal process for recognizing OTTI charges? If using shortcuts or rules of thumb, state how this process differs from the normal process for recognizing OTTI charges.

13.6.2. *Validation and Independent Review*

- Has the model undergone model validation, with results reviewed independently of the business line?
- Has any performance testing been conducted on the model? If so, what type of performance testing has been conducted?

13.6.3. *Fair Market Value Determination*

- If more than one third-party vendor is used as the principal pricing source for a given security, what are the criteria for determining the final price? (e.g., is a mean, median, weighting scheme or high/low price taken?) Is there a hierarchy of sources? If appropriate, describe responses by major product or portfolio type (e.g., non-agency RMBS, CMBS, Consumer ABS).

- If an internal model is used as the principal pricing source for a given security, are prices (from an internally created model) compared with third party vendor prices? If so, which vendors are used? If prices are not compared with third party vendors, state the reason. If appropriate, describe responses by major product/portfolio type (e.g., non-agency RMBS, CMBS, Consumer ABS.).

- Describe any additional adjustments made to prices determined by internal model(s) and/or third parties. How is the ultimate price determined?
- If an internal model is used as the principal pricing source for a given security, what are the primary market pricing variables used for fair value estimation?
- Describe briefly the bank's price validation and verification process. Provide readily available documentation related to the bank's price validation and verification process.

13.6.4. *Post-Trading Shock Market Values for AFS Securities*

- Banks should provide documentation on how trading shocks were applied to 09/30 positions. Banks should make every effort to use the shocks specified; however, there may be cases where a bank may require a shock that differs from those provided. For these cases, supplemental documentation must be submitted with the bank's trading shock estimates. Supplemental documentation should include, at a minimum, the following information:

  - For each type of security, the rationale for using a shock other than those provided.
  - The methodology and assumptions used to determine the shocked market value.
  - The shocks used by the bank by type of security.
  - The data source(s) used by the bank to determine the shock.

14. **Trading**

14.1. *Trading Worksheet*

The Trading worksheet collects firm-wide trading profit and loss (P/L) results decomposed into the various categories listed (Equities, FX, Rates) as of a date specified by the OCC. These categories are not meant to denote lines of business or desks, but rather bank-wide totals by risk. The decomposition of losses into risk areas should sum to equal the total trading mark-to-market (MTM) loss reported on the income statement. On the trading tab, report total P/L for the entire scenario horizon, not quarterly decomposition.

14.2. *Supporting Documentation:* The document should be titled **RSSD_BANKMNEMONIC_TRADING_METHODOLOGY_YYMMDD**. You may submit separate documents for different models and/or methodologies. In this case, please be clear in the titling and file name.

- Documentation should include supporting details explaining the main drivers and attribution of loss for the overall trading and MTM loss estimate, and for each respective primary risk/business unit area details on the loss attribution by the primary risk factors.
- Documentation should provide a complete and technical definition of second and risk factors (cross gamma, vanna, etc.) and describe the methods undertaken by the firm to estimate the cross gamma and higher order effects.
    - Estimate the contribution to total losses from higher-order risks.
- Describe the evolution of risk per each risk area two weeks before and after the submission date, i.e. make note of positions that may expire or terminate within this time frame that significantly alters a risk profile.
- Describe the process and governance and oversight for ensuring the full set of positions were accounted for and included.
- A detailed and technical description of modeling methods (including pricing models) used,
    - Documentation should clearly make note of instances where different methodologies were used across different business lines with like assets.
    - Document approach (e.g., full revaluation vs. grid based approach) and asset coverage under these approaches,
    - Please identify those products or exposures where the firm used models or systems that were outside of the normal routine and indicate if they were reviewed or validated by an independent Model Review function.
- The decision-making used for allocating exposures according to risk area. Documentation should make note where judgment was used in defining and allocating exposure per each risk area.
- Where shocks were used that differed from prescribed shocks.
- Describe any additional broadening or simplification of the scenario done to get the requisite amount of granularity needed to run to scenario,

15. **Counterparty Credit Risk (CCR)**

15.1. *Counterparty Worksheet*

The OCC may require banks with significant trading activities, as determined by the OCC, to include trading and counterparty components in its adverse and severely adverse scenarios. Such institutions with large trading, private equity or derivative activities may be subject to a hypothetical global financial market shock on those positions. In such instances, the OCC will provide a set of risk factors relevant to the trading and counterparty positions, with the projected losses associated with the global market shock collected in the trading and counterparty risk worksheets. The CCR worksheet collects projected counterparty credit losses as of a date specified by the OCC. Use the following definitions for the fields in the worksheet.

15.1.1. *Trading IDR Losses:* Capture incremental default risk (IDR) of credit sensitive assets in the trading book over the projection horizon. Trading IDR represents the additional losses incurred from default of underlying securities (obligors) in the trading book, beyond the MTM losses already captured by the MTM trading book shocks. To estimate Trading IDR, firms can leverage calculations under the Basel methodology as defined in Basel Committee on Banking Supervision (BCBS) Guidelines for Computing Capital for Incremental Risk in the Trading Book.[2] Default risk should be consistent with the macroeconomic scenario. Where separate methodologies are used to calculate CCR IDR and Trading IDR, provide separate results and supporting details.

- *Trading IDR losses from securitized products*: Trading IDR losses from securitized products, including RMBS, CMBS, and other securitized products.

- *Trading IDR losses from other credit sensitive instruments*: Trading IDR losses from all other credit sensitive instruments (i.e., all products considered in Trading IDR losses other than securitized products), such as sovereigns, advanced economy corporate credits, and emerging market corporate credits.

15.1.2. *CVA Losses*: Total losses reported are equivalent to the bank's calculation of aggregate stressed CVA less unstressed CVA for each scenario. This figure should correspond to the difference between aggregate stressed CVA and aggregate unstressed CVA, as reported in the DFAST-14A_CCR schedule, Worksheet 1e, for both scenarios.

15.1.3. *CCR IDR Losses:* Capture incremental default risk (IDR) over the projection horizon of over-the-counter (OTC) derivative counterparties in the trading book, beyond the mark-to-market (MTM) losses already captured by stressing CVA. A methodology conceptually similar to the Trading IDR book can be applied, where instead of obligor defaults, the CCR IDR would account for counterparty defaults. Exposure at default (EAD) calculations should capture stressed counterparty exposures, and should deduct stressed asset-side, unilateral CVA. Stressed EAD should be based on the trading asset stress scenarios (adverse scenario provided by the OCC and adverse scenario developed by bank), while default risk should be consistent with the macroeconomic scenario. Where separate methodologies are used to calculate CCR IDR and Trading IDR, provide separate results and supporting details. Only single name credit default swap (CDS) hedges of the defaulting counterparty may be used to offset counterparty defaults in CCR IDR losses.

Impact of hedges: The decrease in CCR IDR losses due to the gains from single name CDS hedges of defaulting counterparties.

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[2] Available at http://www.bis.org/publ/bcbs159.pdf.

15.1.4. *Other CCR Losses*: Other CCR losses not associated with Trading IDR, CVA, or CCR IDR.

15.2. <u>*Supporting Documentation*</u>

The document should be titled **RSSD_BANKMNEMONIC_CCR_METHODOLOGY_YYMMDD**. You may submit separate documents for different models and/or methodologies. In this case, please be clear in titling and file names. Model Type refers to CVA, CCR IDR, Trading IDR, and Other CCR Losses.

The documentation should include a detailed description of the methodologies used to estimate Trading IDR, CVA, and CCR IDR losses under the stress scenario as well as methodologies used to produce the data in the DFAST-14A_CCR schedule. All information relevant for supervisors to understand the approach should be included.

As part of the detailed methodology document, banks should provide an Executive Summary that gives an overview of each model and answers each of the questions below. If one of the questions below is not fully addressed in the Executive Summary, cite the page number(s) of the methodology document that fully addresses the question.

In addition to the Executive Summary, there should be a section of the methodology document devoted to any divergence from the instructions to the Counterparty Risk Worksheet or the DFAST-14A Schedule. Use this section to explain any data that is missing or not provided as requested. This section should also be used to describe where and how judgment was used to interpret an instruction.

15.2.1. *Trading IDR*

If different models were used for different product types (e.g., corporate credit and securitized products), provide a response for each model type where appropriate.

1. Data and systems
    a. What product types are included and excluded? Specifically, comment on whether equities are excluded and what types of securitized products, if any, are excluded. Comment on the materiality of any exclusions.
    b. Are there any issuer type exclusions? Comment on the materiality of any exclusions.
    c. Are there any exposure measurement or trade capture limitations impacting the Trading IDR loss estimate in Item 1 on the Counterparty Risk Worksheet in the SUMMARY_SCHEDULE or the data provided in Worksheets Corporate Credit-Advanced, Corporate Credit-EM,

Sovereign Credit, Credit Correlation, IDR-Corporate Credit,? If so, make sure to elaborate in the documentation, particularly where these limitations understate losses.

   d. Are there any discrepancies in position capture between the MV and Notionals reported in Worksheets Corporate Credit-Advanced, Corporate Credit-EM, Sovereign Credit, Credit Correlation? If so, elaborate on the discrepancies in the documentation.
   e. Are any index or structured exposures decomposed/unbundled into single name exposures on the IDR Corp Credit? If so, provide a description of the exposures that are decomposed and the methodology used.
2. PD methodology
   a. How is the severity of default risk treated? Is a stressed expected PD used, or is it an outcome in the tail of the default distribution? If an outcome in the tail is used, what is the tail percentile?
   b. How is default risk represented over the horizon of the stress test? Is a cumulative two-year PD or a one-year PD used as a model input? How is migration risk captured?
   c. What data sources and related time periods are used to generate the assumptions on stressed expected PD or the default distribution? In the documentation, provide a breakdown of PDs (e.g., by rating, asset category). Provide stressed PDs if a stressed PD is used, or provide PD inputs if an outcome in the tail is used.
3. Correlation assumptions
   a. What correlation assumptions are used in the Trading IDR models?
4. LGD methodology
   a. Do the models assume a static LGD or a stochastic LGD with a non-zero recovery rate volatility?
      i. If a static LGD is used, were the mean LGDs stressed? What data sources and related time periods were used to determine the LGDs? In the methodology documentation, provide the relevant breakdown of LGDs used in the model (e.g., by ratings, asset category).
      ii. If a stochastic LGD is used, elaborate on the assumptions generating the stochastic LGD in the documentation, including assumptions on the LGD mean and volatility and rationale for modeling choices.
5. Liquidity horizon
   a. What liquidity horizon assumptions are used?
6. Exposure at default (EAD)
   a. What Exposure at Default (EAD) is used for Trading IDR? For example, is the calculation based on actual issuer exposures, stressed exposures, a mix of both, or something else? If exposures are stressed, please explain how the exposures were stressed.
7. Treatment of gains
   a. Are any gains being reflected in the Trading IDR calculations? If so, elaborate in the documentation how gains are treated.
8. Model validation and documentation
   a. For any models used to report numbers in the SUMMARY_SCHEDULE

or the DFAST-14A_Trading that are also used in Business as Usual (BAU) production, have those models been validated as used in BAU? If so, attach model validation documents. If not, elaborate in the documentation on any review process.

b. For any ad-hoc models used for DFAST that would not have been previously validated, what review if any has occurred? Elaborate in the documentation where appropriate.

15.2.2. *CVA*

1. Divergence from instructions
   a. In the DFAST-14A_CCR or Summary Schedules, is liability-side CVA (i.e., DVA) included in any element of the submission? If so, elaborate in the documentation.
   b. In the DFAST-14A_CCR or Summary Schedules, is bilateral CVA included in any element of the submission (i.e., CVA where the counterparty default probabilities are conditional on the survival of the bank)? If so, elaborate in the documentation.
   c. Is there any place where CVA data is reported net of hedges on the DFAST-14A_CCR Schedule or Item 2 on the Counterparty Risk Worksheet in the SUMMARY_SCHEDULE?
   d. In calculating Stressed Net CE in Worksheets 1a, 1b, 1c, 1d, and 1e in DFAST-14A_CCR, are there any occasions where it is assumed additional collateral has been collected after the shock? If so, elaborate in the documentation.
   e. Are there any counterparties for which your firm did not fully implement the FR specification for the expected exposure (EE) profiles on Worksheets 2a and 2b in the DFAST-14A_CCR? If so, elaborate in the documentation.
2. Data and systems: In the documentation, clearly identify, describe, and comment on the materiality of any exclusions that prevent 100% capture of counterparties or trades. At a minimum, address the questions below and elaborate in the documentation where appropriate.
   a. Are any counterparties on Worksheet 1a of DFAST-14A_CCR excluded from Worksheet 2a? Where specific counterparties are reported as top 200 counterparties on one Worksheet of the Schedule, but are not listed on other top 200 Worksheets, list these counterparties in the documentation by name and provide a reason for their exclusion.
   b. Are any counterparties excluded from the unstressed or stressed aggregate data reported in Worksheets 1e, 2b, or 3b of DFAST-14A_CCR or the losses reported in the SUMMARY_SCHEDULE SUMMARY_SCHEDULE (Item 2 in the Counterparty Risk Worksheet)? In the documentation, elaborate on the nature, materiality, and rationale for these exclusions.
   c. Do the EE profiles, CDS spreads, PDs, LGDs, discount factors, as provided on DFAST-14A_CCR Schedule (Worksheets 2a and 2b), come from the same systems as that used for the calculation of CVA losses as provided in the SUMMARY_SCHEDULE (Item 2 in the Counterparty Risk

Worksheet)? If not, elaborate in the documentation.

d. For unstressed and stressed CVA reported in the DFAST-14A_CCR Schedule, which counterparties, counterparty types, or trade types are calculated offline or using separate methodologies? Why are they calculated offline or with a different methodology? Elaborate in the documentation.
e. Are any add-ons used to calculate stressed CVA in the DFAST-14A_CCR Schedule? Elaborate regarding the nature and rationale for each type of add-on in the documentation.
f. Are there any additional/ offline CVA reserves are reported in Worksheet 1e in the DFAST-14A_CCR Schedule? If so, elaborate about the nature of these reserves in the documentation. Explain what counterparties, counterparty types, or trade types are included, why are they calculated as reserves, and how they are stressed.
g. Are there any exposure measurement or product capture limitations impacting the loss estimate in Item 2 on the Counterparty Risk Worksheet in the SUMMARY_SCHEDULE? If so, make sure to elaborate in the documentation, particularly where these limitations understate losses.
h. Are all sensitivities/ slides provided as requested? If slides are not provided as requested in the DFAST-14A_CCR Schedule, elaborate in the documentation why they are missing or not provided correctly.
i. Are the sensitivities/ slides provided in Worksheet 4 of DFAST-14A_CCR sourced from the same calculation engine and systems as used for the firm's loss estimates (Item 2 in the Counterparty Risk Worksheet in the SUMMARY_SCHEDULE)? If not, elaborate in the documentation.
j. Elaborate on how sensitivities/ slides in Worksheet 4 of DFAST-14A_CCR were determined to be material. What qualifies a risk factor as immaterial?

3. LGD methodology
   a. For the LGD used to calculate PD, are market implied recovery rates used? If not, elaborate on the source of the LGD assumption in the methodology documentation.
   b. Is the same recovery/LGD used in the CVA calculation as is used to calculate PDs from the CDS spread? If not, in the documentation provide a detailed rationale and backup data to support the use of a different LGD, and provide the source of the LGD used to calculate CVA.
4. Exposure at default (EAD)
   a. What Margin Period of Risk (MPOR) assumptions are used for unstressed and stressed CVA?
   b. Are collateral values stressed in the numbers reported in the DFAST-14A_CCR Schedule or Items 2 or 3 on the Counterparty Risk Worksheet in the SUMMARY_SCHEDULE? If so, elaborate on the stress assumptions applied.
   c. In the DFAST-14A_CCR on Worksheets 2a and 2b, for the bank specification, are downgrade triggers modeled in the exposure

profiles?

5. Application of shocks
    a. Are the shocks applied to CVA (for calculating Item 2 in the Counterparty Risk Worksheet in the SUMMARY_SCHEDULE as well as the Stressed figures reported in DFAST-14A_CCR) the same as those applied to the Trading Book (Item 10 in the Trading Worksheet in the SUMMARY_SCHEDULE)?
    b. Have the models for CVA been validated? If not, elaborate on the review process, if any.
6. Model validation and documentation
    a. For any models used to report numbers in the SUMMARY_SCHEDULE or the DFAST-14A_CCR that are also used in Business as Usual (BAU) production, have those models been validated as used in BAU? If so, attach model validation documents. If not, elaborate in the documentation on any review process.
    b. For any ad-hoc models used for DFAST that would not have been previously validated, what review if any has occurred? Elaborate in the documentation where appropriate.

15.2.3. *CCR IDR*

1. Data and systems
    a. Are there any exposure measurement or product capture limitations impacting the loss estimate in Item 3 on the Counterparty Risk Worksheet in the SUMMARY_SCHEDULE? If so, make sure to elaborate in the documentation, particularly where these limitations understate losses.
    b. What types of CVA hedges are included in CCR IDR? Confirm that hedges modeled in CCR IDR were excluded from Trading IDR.
2. PD methodology
    a. How is the severity of default risk treated? Is a stressed expected PD used, or is it an outcome in the tail of the default distribution? If an outcome in the tail is used, what is the tail percentile?
    b. How is default risk represented over the horizon of the stress test? Is a cumulative two-year PD or a one-year PD used as a model input? How is migration risk captured?
    c. What data sources and related time periods are used to generate the assumptions on stressed expected PD or the default distribution? In the documentation, provide a breakdown of PDs (e.g., by rating, counterparty type). Provide stressed PDs if a stressed PD is used, or provide PD inputs if an outcome in the tail is used.
3. Correlation assumptions
    a. What correlation assumptions are used in the CCR IDR models?
4. LGD methodology
    a. Do the models assume a static LGD or a stochastic LGD with a non-zero recovery rate volatility?
    b. If a static LGD is used, are the mean LGDs stressed? What data sources

and related time periods are used to determine the LGDs? In the methodology documentation, provide the relevant breakdown of LGDs used in the model (e.g., by ratings, counterparty type).
    c. If a stochastic LGD is used, elaborate on the assumptions generating the stochastic LGD in the documentation, including assumptions on the LGD mean and volatility and rationale for modeling choices.
5. Liquidity horizon
    a. What liquidity horizon assumptions are used?
6. Exposure at default (EAD)
    a. Provide an overview of how EAD is modeled for CCR IDR.
    b. Are any downgrade triggers assumed in the CCR IDR model? If so, elaborate in the documentation.
    c. What Margin Period of Risk (MPOR) assumptions are modeled in CCR IDR?
7. Treatment of gains
    a. Are any gains being reflected in the CCR IDR calculations? If so, elaborate in the documentation how gains are treated.
8. Model validation and documentation
    a. For any models used to report numbers in the SUMMARY_SCHEDULE or the DFAST-14A_CCR that are also used in Business as Usual (BAU) production, have those models been validated as used in BAU? If so, attach model validation documents. If not, elaborate in the documentation on any review process.
    b. For any ad-hoc models used for DFAST that would not have been previously validated, what review if any has occurred? Elaborate in the documentation where appropriate.

15.2.4. *Other CCR Losses*

1. Data and systems
    a. What types of CCR losses are included in the "Other CCR Losses" Counterparty Risk Worksheet of the SUMMARY_SCHEDULE? What are the loss amounts for each major category of "Other CCR Losses"? For any material losses, discuss the methodology and rationale in the documentation.

16. **Operational Risk**

OCC's part 3, Appendix C , Advanced Approaches Capital Regulation (Basel II) defines operational risk as the risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events (including legal risk but excluding strategic and reputational risk). Basel II defines operational loss as a loss (excluding insurance or tax effects) resulting from an operational loss event; the loss includes all expenses associated with an operational loss event except for opportunity costs, forgone revenue, and costs related to risk management and control enhancements implemented to prevent future operational losses. Operational losses exclude all boundary events involving credit losses; however, retail credit card losses arising from non-contractual, third-party initiated fraud are operational losses. Boundary losses involving operational and market risk are treated as operational losses. Operational loss events are those that result in a loss and are associated with any one of the seven Basel II operational loss event categories: 1) internal fraud; 2) external fraud; 3) employment practices and workplace safety; 4) clients, products, and business practices; 5) damage to physical assets; 6) business disruption and system failures; and 7) execution, delivery, and process management. Operational loss projections should be included in the PPNR Projections worksheet in line 29, Operational Risk Expense, and should not be included as reserves. The following should be considered when completing each operational risk schedule in the DFAST-14A:

16.1. *Support for Sponsored Funds*

Stress on asset markets can jeopardize the unit value of certain sponsored funds and asset management products, particularly those intended to maintain a constant or stable value. Firms that offer these vehicles should anticipate this kind of duress and factor it into their forecasts and capital planning. In doing so, firms should consider possible outcomes such as:

a. A decision against providing support for products which have traditionally carried constant or stable unit asset values may initiate client flight, and force the liquidation of assets into falling and illiquid markets. Client flight may not be confined to the product in question but may also involve withdrawal from other profitable relationships within the bank. In addition, firms may be exposed to client litigation based on the represented risk of these products.

b. A decision in favor of supporting the product – which could mitigate reputational and operational/legal risk – will involve a direct cost to offset the decline of the fund's asset values. In addition, this choice may trigger the consolidation of the product with the bank's core balance sheet under generally accepted accounting principles, which would increase risk-weighted assets and subsequently increase regulatory capital requirements.

In either event, the impact on the bank could be substantial. When assessing capital adequacy under stress, management should estimate the impact conservatively, model the exposure, and include the results in the loss projections. Recently, large banks have provided a notable amount of non-contractual support to affiliated funds. Consideration should be given to the number and size of these funds, as well as how the macroeconomic scenarios would impact the value of these funds and the firm's propensity to support a particular fund or set of funds. Although cash amounts paid to support funds and/or asset management products do not clearly fit into one of the seven Basel II operational loss event categories, such events can significantly and directly impact the capital of the sponsoring bank and should be considered as an operational loss event in a capital planning context.

16.2. *Legal Reserves and Provisions*

Banks must report operational risk loss projections that include significant amounts paid as customer accommodations or to prevent or preclude future legal action or litigation. Each of the Operational Risk loss projections in each of the required scenarios should include all preventative make-whole payments, an increased level of legal and professional expense associated with elevated levels of litigation or regulatory actions, projected settlements, payouts associated with adverse legal rulings if they are not covered on the PPNR Projections Worksheet under lines 14N and 30 (Provisions to Repurchase Reserve / Liability for Residential Mortgage Representations and Warranties). If specifically linked to operational risk, please also include all legal consultation fees, retainer fees, and provisions to the legal reserve within the Operational Risk loss projections.

16.3. *Unrelated professional Services*

The cost of outside consulting, routine "business as usual" legal expenses, external audit, and other professional services unrelated to operational risk must be included in line 31 (Professional and Outside Services Expenses) on the PPNR Projections Worksheet.

16.4. *Definitions*

Refer to the following definitions when completing the Op Risk worksheets:

1. *Event Types***:** The event type is one of seven industry standard categories that reflect the nature of the underlying operational loss. The seven categories are:
   - **Internal Fraud:** Losses due to an act, involving at least one internal party, of a type intended to defraud, misappropriate property, or circumvent regulations, the law, or company policy, excluding diversity- and discrimination-type events.
   - **External Fraud:** Losses resulting from an act by a third party of a type intended to defraud, misappropriate property or circumvent the law (including retail credit card losses arising from non-contractual third-party initiated fraud; however, all other third-party initiated credit losses are treated as credit losses and not operational losses).
   - **Employment Practices and Workplace Safety:** Losses arising from an act inconsistent with employment, health or safety laws or agreements, from payment of personal injury claims, or payments arising from diversity- and discrimination-type events.
   - **Clients, Products and Business Practices:** Losses arising from the nature or design of a product or from an unintentional or negligent failure to meet a professional obligation to specific clients (including fiduciary and suitability requirements).
   - **Damage to Physical Assets:** Losses arising from loss of, or damage to, physical assets from natural disaster or other events.
   - **Business Disruption and System Failure:** Losses arising from disruption of business or system failures.

- **Execution, Delivery and Process Management:** Losses from failed transaction processing or process management, or relations with trade counterparties and vendors.

2. *Type of Data*:
    - **External data:** Historical operational losses occurring at other organizations.
    - **Internal data:** Historical operational losses occurring in the bank.
    - **Operational Risk Scenario Analysis:** A systematic process of obtaining expert opinions from business managers and risk management experts to derive reasoned assessments of the likelihood and loss impact of plausible high severity operational losses. Scenario analysis may include the well-reasoned evaluation and use of external operational loss event data, adjusted as appropriate to ensure relevance to the bank's operational risk profile and control structure.
    - **Model Output**: Output generated by an internal or external model.
3. *Brief Description*: Description of operational loss event or other factor considered.
4. *Unit of Measure*: The level at which the bank's quantification model generates a separate distribution for estimating potential operational losses (e.g., organizational unit, operational loss event type or risk category).
5. *Dollar Contribution to Operational Loss Estimate: For each row of operational risk data* considered in the operational loss projections, indicate the dollar amount that was used in the operational loss projection included in PPNR in millions of dollars.

16.5. *Operational Risk Scenario Inputs Worksheet*

The Op Risk Scenario Inputs worksheet collects information about the composition of the operational risk loss projections. Each covered institution should gather data using a number of tools, including external data, internal data, scenario analysis, business environment and internal control factors, and risk assessment. Each data tool produces an input to the overall loss projection. The Unit of Measure ("UOM") is used to capture the data from these tools in a uniform manner. Although a covered institution can develop idiosyncratic UOMs, in general covered institutions utilize the Basel II Event Types and Business Lines (or combinations of these) to categorize the data into specific inputs to the loss projection models. Covered institutions, therefore, are expected to provide the type of data, a brief description of the loss event, how it was categorized (UOM), and the contribution the data made to the loss projection. The sum of the OpRisk Scenario Inputs Worksheet should equal the total of the losses projected on the OpRisk Projected Losses worksheet.

16.6. *Operational Risk Projected Losses Worksheet*

The sum of the quarterly data provided should equal the total of the scenarios listed in the OpRisk Scenario Inputs worksheet.

16.7. *Operational Risk Template*

The DFAST-14A Operational Risk Template contains two worksheets: (i) Operational Risk Historical Capital Worksheet; and (ii) Legal Reserves Reporting Worksheet. Item "a" on the Legal Reserves Reporting worksheet must be completed by all banks, while item "b" (Legal Reserves Pertaining to Repurchase Litigation) is completed on a ***voluntary*** basis. Reserves for repurchase litigation refer to reserves for legal costs associated with mortgage-related issues, including those legal costs related to the repurchasing of mortgages, as of the end of the third quarter. Additionally, *only* banks subject to the advanced-approaches risk-based capital rules (mandatory and "opt in") must complete Operational Risk Historical Capital worksheet under the baseline scenario*.*

16.8. *Supporting Documentation and Independent Review*

Document should be titled **RSSD_BANKMNEMONIC_OP_METHODOLOGY_YYMMDD**. Banks may submit separate documents for different models and/or methodologies. In this case, please provide for clear titling and file names.

16.8.1. *Documentation*

A bank must adequately document all material aspects of its Basel II advanced systems. Generally, a bank should have robust internal controls governing its operational loss projection methodology and process components, including sufficient documentation, model validation and independent review. Supporting documentation should cover all models, and loss and resource forecasting methodologies and processes. Documentation should include comprehensive and clear policies and procedures. For models, documentation should include clear description of all key assumptions for projecting operational losses under each scenario, a description of the underlying operational risk data used to determine projected losses and the approach for transforming the data into loss projections. If a budgeting based process was used, the bank should describe the budgeting process and provide specific detail on how operational losses are estimated. Documentation should include an articulation of the models' vulnerability to error, and estimates of an error's impact should parameter specifications prove inaccurate. Documentation of all models should clearly identify the exact statistical process employed by the bank including:

1. How the current set of explanatory factors was chosen, what variables were tested and then discarded, and how often the set of possible explanatory factors is reviewed and, if appropriate, revised;
2. Description of work the bank has done to assess relationships between macroeconomic factors and operational losses, including relationships that were found to have the highest level of dependency, a summary of statistical results, and how these results were incorporated in the estimates;

3. Discussion of how pending litigation and reserves for litigation were incorporated into operational loss projections for all requested scenarios;
4. Narrative describing the methodology and process for assessing and forecasting losses associated with supporting – or not supporting – sponsored funds;
5. Description of the methodology for allocating an operational loss amount to a particular quarter;
6. Explanation summarizing the reasonableness of results (e.g., comparison to benchmarks) and the bank's policy or procedure for determining reasonableness;
7. Description of internal controls that ensure the integrity of reported results and that all material changes to the process and its components are appropriately reviewed and approved;
8. Assessment of how effective or accurate the model is (e.g., based on out-of-sample testing or sensitivity analysis); and
9. Identification of possible drawbacks and limitations of the selected approach.

16.8.2. *Model Validation*

Models employed by banks should be independently validated or otherwise reviewed in accordance with the model risk management expectations presented in OCC Bulletin 2011-12. Specifically, management should provide supporting documentation demonstrating that an independently executed verification of DFAST models, whether purchased or developed in-house, has been implemented and that the models perform as expected and align with design and business use. Model validation must be independent of a model's development, implementation, and operation, or the validation process must be subjected to an independent review of its adequacy and effectiveness. Validators should comprehensively evaluate inputs, processing, outputs, and reports to ensure that models are conceptually sound and that potential limitations have been identified and conveyed to senior management. Management should also implement ongoing monitoring processes to track known model limitations and to identify new ones. Furthermore, validation must include (1) an evaluation of the conceptual soundness of a model (including developmental evidence); (2) an ongoing monitoring process that includes verification of processes and benchmarking; and (3) an outcomes analysis process that includes back-testing (e.g., back-testing outcomes between model forecasts and actual results. Validation should be governed by robust policies, effective procedures, proper allocation of resources for execution, and accurate documentation of results.

16.8.3. *Independent Review*

The bank must have an internal audit function independent of business-line management that at least annually assesses the effectiveness of the controls supporting the bank's Basel II advanced systems and reports its findings to the bank's board of directors (or committee thereof). Internal audit should periodically assess and document whether the DFAST process is functioning as intended. Beyond the detailed analysis of the performance of forecasting models, this includes an end to end review of the entire capital planning and forecasting process.

17. Pre-Provision Net Revenue (PPNR)

17.1. *General Technical Details*

This provides general guidance and data definitions for the three PPNR worksheets included in the Summary Schedule: PPNR Projections worksheet, PPNR Net Interest Income (NII) worksheet, and PPNR Metrics worksheet. The three worksheets are described in detail below.

Certain commonly used terms and abbreviations, including PPNR, are defined at the end of this section. Other definitions are embedded in the Schedule. Undefined terms should be assumed to follow Call Report definitions. In cases where Call Report guidance is unavailable, banks should use internal definitions and include information about the definitions used in the supporting documentation for DFAST-14A projections.

Where specific DFAST-14A PPNR and/or Call Report guidance exists for business line and/or other items, provide both historical and projections data consistently throughout time in accordance with the instructions. If a bank is unable to consistently adhere to definitions, it can rely on internal definitions at the present time. Note in such cases which DFAST-14A PPNR items were affected, which quarters were affected, describe the reasons, and note how the situation may be remedied over time (including estimate of time required). Where banks were instructed or allowed to rely on internal definitions in mapping internal data to DFAST-14A PPNR schedules (historical and/or projections), they do not need to provide consistency across different quarters at the present time. However, identify all quarters where major shifts in mapping have occurred historically or are expected to occur during the projection period, describe such shifts, and provide pertinent information in the memo supporting the DFAST-14A submission. Such information may include, but is not limited, to the internal business line relationships to a) major client segments (and how those are defined e.g. sales thresholds, asset size thresholds, etc.), b) major product categories, and c) key types of revenues (e.g. equity investment income, brokerage commissions, etc.), as well as the motivations behind the shifts.

All quarterly figures should be reported on a quarterly basis (not on a year-to-date).

Provide data for all non-shaded cells, except where the data requested is optional. The bank is not required to populate cells shaded gray.

If there are no data for certain fields, then populate the fields with a zero (0). If the fields are optional and a bank chooses not to report data, leave the fields blank.

17.2. *Materiality Thresholds*

Banks should complete all three worksheets, including the Net Interest Income worksheet and the Net Interest Income worksheet section of the PPNR Metrics worksheet.

Report data for all quarters for a given business segment in the PPNR Projections and PPNR Metrics worksheets if the total revenue of that business segment (calculated as the sum of net interest income and non-interest income for that segment), relative to total revenue of the bank exceeded 5 percent. Banks have the option to report less material business segment revenue in separate line items "Optional Immaterial Business Segments". The reported total optional immaterial business segment revenue relative to total revenue cannot exceed 10 percent. If the total immaterial business segment revenue relative to total revenue would be greater than 10 percent, report data for the largest business segment among the immaterial business segments for all quarters in the PPNR Projections and PPNR Metrics worksheets such that the amount reported in the Optional Immaterial Business segments line items does not exceed 10 percent.

If international revenue exceeded 5 percent of total revenue, provide regional breakouts (PPNR Metrics worksheet, line items 46A-46D) for all quarters in the PPNR Metrics worksheet.

If International Retail and Small Business revenues exceeded 5 percent of Total Retail and Small Business Segment revenue and Total Retail and Small Business Segment revenues were material based on an applicable 5 percent threshold, provide related metrics data for all quarters (PPNR Metrics worksheet, line item 10).

17.3. *NII: Primary & Supplementary Designation*

Banks are expected to report all line items for all worksheets subject to applicable thresholds as detailed in the instructions. In addition, for all banks that are required to complete the *PPNR Net Interest Income* worksheet, the *PPNR Net Interest Income* worksheet should be designated as "Primary Net Interest Income." The PPNR Submission worksheet for such banks will be "Supplementary Net Interest Income" by default. For banks that are not required to complete the *PPNR Net Interest Income* worksheet the *PPNR Submission/Projections* worksheet should be designated as "Primary Net Interest Income." PPNR Net Interest Income Worksheet will be "Supplementary Net Interest Income" for such banks by default, but is optional. Note that this designation would refer only to the net interest income portion of the worksheets.

17.4. *PPNR Projection Worksheet*

The PPNR Projections worksheet is based on standardized reporting of each component of PPNR, using business segment/line views as discussed below. Data reflecting a bank view of PPNR revenues and expenses should be provided separately, accompanying the memo required with the DFAST-14A Projections.

17.4.1. *Revenue Components*

Revenue items are divided into net interest income and non-interest income, with totals expected to reconcile with what would be reported in the Call Report when adjusted for Valuation Adjustment for firm's own debt under fair value option (FVO), loss resulting from trading shock exercise (if applicable), and operational risk expense adjustments required for PPNR purposes. For related items, reference PPNR Projections worksheet and related instructions for the line items 29, 40, and 42. In the documentation supporting the DFAST-14A PPNR submission, banks are encouraged to discuss operational risk losses reported as contra-revenues for Call Report purposes and their reallocation to Operational Risk expense in accordance with the PPNR instructions. Do not report gains and losses on AFS and HTM securities, including other than temporary impairments (OTTI) estimates, as a component of PPNR.

Report all items either in the segments that generated them and/or segments that they were allocated to through funds transfer pricing (FTP). Net interest income allocation to the defined segments should be based on the cost of funds applicable to those segments as determined by the bank. Supporting documentation regarding methodology used should be provided in the memo required with the DFAST-14A Projections. Business segments and related sub-components do not have to correspond to but may include certain line items on the Call Report. The Business segment structure of the worksheet is defined by product/service (e.g. credit cards, investment banking) and client type (e.g. retail, medium size businesses); it is not defined by client relationship.

Banks are encouraged to note which line items contain Debit Valuation Adjustments (DVA) and/or Credit Valuation Adjustments (CVA) (note: these are different from fair value adjustment on the bank's own debt under the Fair Value Option (FVO) which is excluded from PPNR by definition), including amounts if available, and whether these are generated with the purpose to generate profit.

All revenue and expenses related to mortgage servicing rights (MSRs) and the associated non-interest income and non-interest expense line items should be evolved over the nine quarter projection horizons, and reported in the pre provision net revenue (PPNR) schedules.

17.4.2. *Business Segment Definitions*

Subject to applicable thresholds, reporting of net interest income and non-interest income items is requested based on a business segment/line view, with business segments/lines defined as follows:

- Retail and Small Business Banking and Lending Services: Report in the appropriate sub-item all revenues related to retail and small business banking and lending, including both ongoing as well as run-off and liquidating businesses.[3] Exclude any revenues related to Wealth Management/Private Banking (WM/PB) clients. Banks may include such revenues in WM/PB line items instead. In case of WM/PB mortgage repurchase contra-revenues, if any, report them as outlined in the PPNR Submission worksheet.

  As general guidance, small business clients are those with annual sales of less than $10 million. Business, government, not-for-profit, and other institutional entities of medium size are those with annual sales between $10 million and $2 billion. Large business and institutional entities are those with annual sales of more than $2 billion. If a bank's internal reporting for these client segments deviates from this general guidance, continue to report according to internal definitions and describe how the bank defined these or similar client segments and the scope of related business segments/lines in the memo supporting the DFAST-14A submission.

  Business lines are defined as follows:

  Domestic:

  - Credit Cards: Domestic credit and charge cards offered to retail customers. Exclude other unsecured borrowing and debit cards. May include revenue that is generated on domestic accounts due to foreign exchange transactions.
  - Mortgages: Domestic residential mortgage loans offered to retail customers.
  - Home Equity: Domestic Home Equity Loans and Lines of Credit (HELOANs/HELOCs) provided to retail customers.
  - Retail and Small Business Deposits: Domestic branch banking and deposit-related products and services provided to retail and small business customers. Include debit card revenues in this line. May include revenue that is generated on domestic accounts due to foreign exchange transactions.
  - Other Retail and Small Business Lending: Other Domestic Retail and Small Business lending products and services. These include but are not limited to small business loans, auto loans, student loans, or personal unsecured credit.

  International Retail and Small Business:

[3] See **"**Commonly Used Terms and Abbreviations**"** for the definition.

Includes, but is not limited to, all revenues from credit/charge/debit cards, mortgages, home equity, branch and deposit services, auto, student, and small business loans generated outside of the US and Puerto Rico.

- Commercial Lending: Report revenues from lending products and services provided to business, government, not-for-profit, and other institutional entities of medium size, as well as to commercial real estate investors and owners. Exclude treasury, deposit, and investment banking services provided to commercial lending clients.

- Investment Banking: Report in the appropriate sub-item all revenues generated from investment banking services provided to business and institutional entities of both medium and large size. Include revenues from new issue securitizations for third parties. Business lines are defined as follows:

    - Advisory: Corporate strategy and financial advisory, such as services provided for mergers and acquisitions (M&A), restructuring, financial risk management, among others.
    - Equity Capital Markets: Equity investment banking services (e.g. IPOs or secondary offerings).
    - Debt Capital Markets: Generally non-loan debt investment banking services.
    - Syndicated/Corporate Lending: Lending commitments to larger corporate clients, including event or transaction-driven lending (e.g. to finance M&A, leveraged buyouts, bridge loans). Generally, all syndicated lending origination activity should be included here (not in Commercial Lending).

- Merchant Banking/Private Equity: Report revenues from private equity (PE), real estate, infrastructure, and principal investments in hedge funds. May include principal investment related to merchant banking activities.

- Sales and Trading: Report in the appropriate sub-item all revenues generated from sales and trading activities. Any interest income from carry must be included in Sales & Trading net interest income. May include short-term trading made for positioning or profit generation related to the Sales & Trading activities in this line item. Business lines are defined as follows:

    - Equities: Commissions, fees, dividends, and trading gains and losses on equity products. Exclude prime brokerage services.

    - Fixed Income: Commissions, fees, and trading gains and losses on rates, credit, and other fixed income products. Exclude prime brokerage services.

        - Rates: Generally U.S. Treasury, investment grade sovereign, U.S. agency bonds, and interest rate swaps. Rates revenues related to trading activities outside of the Sales & Trading division need not be included into the Rates trading in this section, but describe where they are allocated in the bank's documentation supporting the DFAST-14A submission.
        - Credit: Generally corporate bonds, loans, ABS, muni, emerging markets, CDS. If a bank classifies some of the credit related trading (such as distressed debt) in segments other than "Sales & Trading," it can continue to report it as in its internal financial reports but indicate where they are reported in the documentation supporting DFAST-14A submission.
        - Other: e.g. FX/Currencies if not included above.
    - Commodities: Commissions, fees, and trading gains and losses on commodity products. Exclude prime brokerage services.
    - Prime Brokerage: Securities financing, securities lending, custody, clearing, settlement, and other services for hedge funds and other prime brokerage clients. Include all prime brokerage revenues in this line and not in any other business segments/lines.
- Investment Management: Report in the appropriate sub-item all revenues generated from investment management activities. Business lines are defined as follows:
    - Asset Management: Professional management of mutual funds and institutional accounts. Institutional clients may include endowments, not-for-profit entities, governments, and others.
    - Wealth Management/Private Banking (WM/PB): Professional portfolio management and advisory services for individuals. Individual clients may be defined as mass market, affluent, and high net worth. Activities may also include tax planning, savings, inheritance, and wealth planning, among others. May include deposit and lending services to WM/PB clients here. Also include retail brokerage services. May report retail brokerage revenues for both WM/PB and non WM/PB clients. here
- Investment Services: Report in the appropriate sub-item all revenues generated from investment servicing. Exclude prime brokerage revenues. Business lines are defined as follows:
    - Asset Servicing: Custody, fund services, securities lending, liquidity services, collateral management; and other asset servicing. Include record keeping services for 401K and

employee benefit plans, but exclude funding or guarantee products offered to such clients.

  - Issuer Services: Corporate trust, shareowner services, depository receipts, and other issuer services.
  - Other Investment Services: Clearing and other investment services.

- Treasury Services: Report cash management, global payments, working capital solutions, deposit services, and trade finance from business and institutional entities of both medium and large size. Include wholesale and commercial cards.
- Insurance Services: Report revenues from insurance activities including, but not limited to, individual (e.g. life, health), auto and home (property and casualty), title insurance and surety insurance, and employee benefits insurance.
- Retirement/Corporate Benefit Products: Report premiums, fees, and other revenues generated from retirement and corporate benefit funding products, such as annuities, guaranteed interest products, and separate account contracts. The fees/revenues that may be recorded here are generally generated as a result of the bank accepting risks related to actuarial assumptions or the estimation of market returns where guarantees of future income streams have been made to clients.
- Corporate/Other: Report revenues associated with:
  - Capital and asset-liability management (ALM) activities. Among other items, may include investment securities portfolios (but not gains and losses on AFS and HTM securities, including OTTI, as these are excluded from PPNR by definition). Also may include principal investment supporting the corporate treasury function to manage firm-wide capital, liquidity, or structural risks.
  - Run-off or liquidating businesses[4] (but exclude retail and small business run-off/liquidating businesses, per Retail and Small Business segment definition)
  - Non-financial businesses (e.g. publishing, travel services)
  - Corporate support functions (e.g. Human Resources, IT)
  - Other non-core revenues not included in other segments (e.g. intersegment eliminations).

A Bank may include public funds in the segment reporting based on the type of the relationship that exists between the public funds and the bank. For example,

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[4] See “Commonly Used Terms and Abbreviations” for the definition.

if the bank acts in a custodial or administrative capacity, the bank may report public funds in Investor Services. If a bank is involved in the management of funds, the bank may report the public funds in "Investment Management."

17.4.3. *Non-Interest Expense Components*

Non-Interest Expense figures are to be broken out as detailed on the worksheet. The total is expected to reconcile with what would be reported in the Call Report when adjusted for certain items. As presented on the PPNR worksheets, the adjustments include exclusions of goodwill impairment and adjustments related to operational risk expense required for PPNR purposes. For the related items, reference PPNR Projections worksheet and related instructions for the line items 29 and 41.

Expense data on the PPNR Submission worksheet are only intended to be reported as firm-wide bank expenses, with exception of line item 34A, i.e. Marketing Expense for Domestic Credit Cards. This line item is for Domestic Credit Cards business line only. See the description of the Domestic Credit Card business line in the Business Segment Definitions section of the document.

17.5. *PPNR NII Worksheet*

Banks for which deposits comprise 25 percent or more of total liabilities are required to submit the Net Interest Income worksheet. This worksheet requires banks to provide average asset and liability balances and average yields to calculate net interest income. The total net interest income calculated should equal the total net interest income reported using a business segment/line view in the PPNR Projections worksheet.

The average balances and rates are meant to reflect the average over each quarter as best as possible. The OCC understands that because of changes in balances over the period, the simple multiplication of average loan rates and balances may not yield the actual interest income. In these cases, banks may report the average loan rate so that it equals a weighted average rate over the period and the interest income total for each quarter reflects historical results or the bank's projection, as applicable. If the average rates are materially impacted by large shifts in balances over the period, highlight this in documentation supporting the DFAST-14A submission.

17.5.1. *Average Interest-Bearing Assets*

Banks should reference Call Report and other definitions provided in the PPNR Net Interest Income worksheet when completing this section. Align the asset categories definitions, where no Call Reportcode is provided, with those on the Balance Sheet worksheet of the DFAST-14A Summary Schedule. In the case of loans, align definitions with the "total loans" section of the Balance Sheet worksheet. Note that the definitions for Large Commercial Credits and Small Business (Graded) are too aligned with Balance Sheet definitions. However, on the Net Interest Income worksheet, exclude from the balances reported loans that are classified as nonaccrual. The aggregate total of all nonaccrual loans should be reported on the PPNR Metrics worksheet instead (line item 55). Although the metric aggregates all nonaccruals for reporting purposes, banks are encouraged to provide details on the nonaccrual loans by Balance Sheet worksheet definition, if available, in the documentation supporting their DFAST-14A submission.

17.5.2. *Average Interest-Bearing Liabilities*

For the classification of liabilities, banks should report based on internal definitions (those deemed to best represent the behavior characteristics of deposits).

17.6. *PPNR Metrics Worksheet*

The PPNR Metrics worksheet requests information on certain metrics relevant for the assessment of various components of PPNR. Elements in Section C of the PPNR Metrics worksheet (line items 55-85B) are required only for bank's that must complete the Net Interest Income worksheet. All other metrics are required of all banks, subject to applicable thresholds.

Metrics in Section A, "Metrics by Business Segment/Line," correspond to Business Segments/Lines on PPNR Submission worksheet. This means that each metric is reflective of revenues reported on the PPNR Submission worksheet for a given business segment/line, unless explicitly stated otherwise (e.g. line item 2). In contrast, Sections B and C are both for firm-wide metrics.

In providing industry market size information, banks can use third party data and are not required to independently derive these metrics. Any supporting information should be described in detail, including the data source, and corresponding data should be provided in the worksheet.

Banks should use internal definitions of proprietary trading and clearly describe the covered activities and transactions in methodology narratives.
If a bank is unable to provide a metric on PPNR Metrics worksheet, it should offer a data series for alternative metrics that are considered by the bank in projecting the relevant component(s) of PPNR .

17.7. *Commonly Used Terms*

- Domestic Revenues: Revenues from the US and Puerto Rico only.
- International Revenues: Revenues from regions outside the US and Puerto Rico.

- Pre-provision Net Revenue (PPNR): Sum of net interest income and non-interest income net of non-interest expense, with components expected to reconcile with those reported in the Call Report when adjusted for certain items. As presented on the PPNR schedules, the adjustments include exclusions of Valuation Adjustment for bank's debt under fair value option (FVO), goodwill impairment, loss resulting from trading shock exercise (if applicable), as well as adjustments related to operational risk expense required for PPNR purposes. For the related items, reference the PPNR Projections worksheet and related instructions for the line items 29, 40-42. Gains and losses on AFS and HTM securities, including other than temporary impairments (OTTI) estimates, are not a component of PPNR. All revenue and expenses related to mortgage servicing rights (MSRs) are components of PPNR to be reported in the associated noninterest income and non-interest expense line items on the PPNR schedules.
- Run-Off or Liquidating Businesses: operations that do not meet an accounting definition of "discontinued operations" but which the bank intends to exit.
- Revenues: Sum of net interest income and non-interest income adjusted for selected exclusions, as reported on line item 27 of the PPNR Projections worksheet.

17.8. *Supporting Documentation*

17.8.1. *PPNR Document Title:*

RSSD_BANKMNEMONIC_PPNR_METHODOLOGY_YYMMDD. Separate documents may be submitted for different models and/or methodologies. In this case, please ensure clear titles and file names. Methodological memos should describe how a bank approached the PPNR projection process and translated macro-economic factors into the reported projections.

17.8.2. *Projected Outcomes*

1. Provide an explanation summarizing the reasonableness of projected outcomes relative to the stated macroeconomic scenario, business profile, as well as regulatory and competitive environment. Especially in the more adverse scenario(s), include substantial supporting evidence for PPNR estimates materially exceeding recently realized values.
2. Banks should discuss linkages between PPNR projections and the balance sheet as well as other exposure assumptions used for related loss projections.
3. Include discussion of PPNR outcomes by component (i.e. Net Interest Income, Non Interest Income, and Non Interest Expense) and by major source of each component (e.g. by major balance/rate category, type of revenue/expense, and/or business activity).

4. Consideration should be given to how changes in regulation will impact the bank's revenues and expenses over the projection period. The memo should include a section that addresses how recent or pending regulatory changes have impacted projected figures and business strategies and in which line items these adjustments are reflected.

17.8.3. *Models & Methodology*

1. The documentation should include a full list of all models and parameters used to generate projections of PPNR components and whether these models are also used as part of other existing processes (e.g. the business-as-usual budgeting and forecasting process). Where existing processes are leveraged, discuss how these are deemed appropriate for stress testing purposes, including any modifications that were necessary to fit a stressful scenario. Also discuss those items that are particularly challenging to project and identify limitations and weaknesses in the process.
2. Thorough discussion of use of management/expert judgment, including information about rationale and process involved in translation of macroeconomic scenario variables into projections of various PPNR components should be provided. Where a combination of a modeled approach and management judgment was used to project an item, quantify the impact of qualitative adjustments to modeled output.
3. Provide support for all key assumptions used to derive PPNR estimates, with a focus on the link of these assumptions to projected outcomes and whether the assumptions are consistent with the stated macroeconomic scenario, regulatory and competitive environment as well as business strategies for each of major business activities. Document the impact of assumptions concerning new growth, divestitures or other substantial changes in business profile on PPNR estimates. In cases where there is a high degree of uncertainty surrounding assumptions, discuss and reference sensitivity of projections to these assumptions. Also ensure that all relevant macro-economic factors used for PPNR projections are also reported on the firm submitted Scenario Schedule.
4. In addition to broad macro-economic assumptions that will guide the exercise, it is expected that more specific assumptions will be used by banks in projections of PPNR, including macro-economic factors other than those provided by the OCC as well as bank-specific assumptions. Such assumptions and their link to reported figures, standardized and/or bank business segments and lines should be discussed in the methodology memo.
5. Where historical relationships are relied upon (e.g. ratios of compensation expense to total revenues), banks are expected to document the historical data used and describe why these relationships are expected to hold true in each scenario, particularly under adverse conditions.

6. Projecting future business outcomes inevitably relies on the identification of key relationships between business metrics and other explanatory variables. Key limitations and difficulties encountered by the bank in the process to model these relationships should be identified and discussed in the memo.

17.8.4. *Projections Governance & Data*

1. Banks are asked to describe governance aspects for the PPNR projections development. This includes but is not limited to a description of:
    a. The roles of various business lines and management teams involved in the process
    b. How the projections are generated. Particular attention should be given to how the bank ensures that assumptions are consistent across different business line projections, how assumptions are translated into projections of revenue and expenses, and the process of aggregating and reporting the results.
    c. Senior management's involvement of the process and the process in which the assumptions are vetted and challenged.
        i. Also note whether established policies and procedures are in place related to this process.
2. Also include a separate section devoted to any divergence from the instructions in completing the PPNR worksheets in the DFAST-14A Schedules. Use this section to explain any data that is missing or not provided as requested. Use this section to discuss major instances where judgment was used to interpret PPNR instructions.
3. Discuss general data validation and reconciliation practices. Banks are encouraged to include information allowing confirmation that the data were reported per the PPNR definition. Documentation should discuss consistency of a given schedule with the bank's external reporting and internal reporting and forecasting. Provide a description of broadly-defined types of business models currently used (e.g. Asset/Liability, Relationship, Business Product/Services/Activity). Provide reconciliation between bank reporting used to manage and forecast operations and a standardized business segment/line view required for DFAST-14A reporting.

17.8.5. *Other*

1. Other sections of the DFAST-14A Instructions request additional information and supporting documentation. Please ensure that these items are also referenced and described in this memo.

2. Banks are encouraged to submit any other information and documentation (including data series) that would support of the bank's PPNR projections.

17.8.6. *MSR Projections:* Document should be titled **RSSD_BANKMNEMONIC_MSR_METHODOLOGY_YYMMDD**. Separate documents may be submitted for different models and/or methodologies. In this case, please ensure clear titles and file names.

1. <u>Models and Methodologies</u>
    - Describe the models and related sub-models that were used to complete the submission, and please state whether the model is a third-party vendor or proprietary model.
    - If a vendor model was used, please provide the name of the vendor model. If a vendor model was used, has the bank performed an independent review of the vendor model?
    - Has the model undergone rigorous model validation, with results reviewed independently of the business line?
    - Has any performance testing been conducted on the model? If so, what type of performance testing has been conducted?
    - What data sources were used to calibrate each model?
    - What were the key inputs/variables and how were these determined?
    - How did the model (whether vendor or proprietary) incorporate macroeconomic assumptions?

2. <u>Assumptions</u>
    - For each quarter, what new loan capitalizations and amortizations are assumed in the stress scenarios?
        - How were the new loan capitalization forecast assumptions developed?
        - What excess spread assumptions were made with respect to new loan capitalizations in each scenario and how was this assumption derived (e.g., historical buy-up/buy-down grids, etc.)?
        - How were HARP assumptions, if any, estimated?
        - What market share is assumed, and does this change within the stress scenario?
        - Does the submission include any MSR sales or purchases under the DFAST adverse or severely adverse scenarios? If yes, please provide detail.
    - What is the composition of the underlying portfolio of loans serviced for others with respect to the following, and how does this composition change (if at all) during the DFAST stress scenarios (i.e., adverse and severely adverse)?
        i. Loan type
        ii. Geographical region
        iii. FICO score
    - How were macroeconomic assumptions as prescribed under the baseline, adverse, and severely adverse scenarios used to determine the

respective projected loan prepayment, delinquency, and default experience for each quarter?

- How were macroeconomic assumptions that were not prescribed under the supervisory baseline and stress scenarios (for example, interest rate volatility, option adjusted spreads, primary to secondary spreads) used to determine the respective projected loan prepayment, delinquency, and default experience for each quarter?
- What are the *voluntary* prepayment speeds (e.g., conditional prepayment rates (CPRs) associated with refinancing) assumed for each quarter in the respective baseline, adverse and severely adverse scenarios? Do not include constant default rates (CDRs).
- What are the factors that drive or explain the level and trend in prepayment speeds through the nine quarters over the baseline, adverse and severely scenarios?
- What are the default rates assumed for each quarter in the respective baseline, adverse and severely adverse scenarios?
- What are the factors that drive or explain the level and trend in default rates through the nine quarters?
- How were the assumptions regarding cost of service with respect to all the scenarios derived?
- Was inflation incorporated into the projection?
- What is the servicing cost structure on a per loan basis on a base and incremental basis for each level of delinquency? What are the foreclosure costs per loan?
- Does the cost structure per loan stay the same throughout the nine quarters with the number of delinquent loans changing, or do both change?
- What foreclosure time frames are used in the baseline scenario? Do these lengthen or contract in the adverse or severely adverse scenario?
- Is late fee income included in the submission?
    - If so, what is the bank's actual late fee income structure, as well as waiver policy if applicable?
    - What is the late fee income assumed in the baseline and stress scenarios?
    - Is it assumed that late fees are 100% collectable in the stress scenario?
- Are earnings on escrow and other balances included in the submission?
    - If yes, how are the balances forecasted, and what is the crediting rate?
- Is cost to finance advances to investors relating to delinquent loans incorporated in the submission?
    - If yes, how is the borrowing rate determined?

3. <u>Hedging and Rebalancing</u>
    - Are MSR hedges assumed to be rebalanced or rolled-over at any time during the nine quarter horizon? How often are hedges assumed to be rebalanced or rolled-over? What is the timing of such rebalancing or roll-over trades?

- What are the hedge rebalancing and/or roll-over rules applied during the baseline and stress scenarios?
- Are the hedge rebalancing and/or roll-over rules applied in the baseline and stress scenarios consistent with the firm's risk appetite statement and Board/management approved limit structure?
- To what degree does hedge effectiveness decline in the stress scenarios? How was this estimated?
- How is the impact of hedging instrument bid-ask spreads captured in the submission? To what degree does the bid-ask spread widen in the stress scenario? How was this estimated?
- How does the firm account for the liquidity risk from concentrated hedge positions?
- What are the current risk tolerance limits with respect to MSR hedging?

18. **Regulatory Capital**

The Regulatory Capital Instruments annual DFAST-14A schedules collect historical data and projections of bank balances of the funded instruments that are included in regulatory capital. The DFAST-14A schedule collects data on the historical balances and projected balances of funded regulatory capital instruments by instrument type, in addition to projections for issuances and redemptions that contribute to changes in balances under the DFAST baseline scenario.

18.1. *Projected Capital Actions & Balances*

This worksheet collects information on the current and projected balances of regulatory capital instruments aggregated by instrument type over the nine quarter horizon. Banks are to report information on both a notional basis and on the basis of the dollar amount included in regulatory capital.

18.1.1. Quarterly Redemption / Repurchase Activity

Report the actual and projected aggregate dollar amount ($Millions) of redemptions/repurchases to be conducted in each quarter for each type of capital instrument. All redemptions/repurchases should be reported as negative values. For any instrument type that the bank does not include in its reported regulatory capital or for which there is no actual/planned redemption/repurchase activity during a particular quarter, please enter "0" (zero).

18.1.2. Quarterly Issuance Activity

Report the actual and projected aggregate dollar amount ($Millions) of issuances to be conducted in each quarter for each type of capital instrument. For any instrument type that the bank does not include in its reported regulatory capital or for which there is no planned issuance activity during a particular quarter, please enter “0” (zero).

18.1.3. Capital Balances

Input the actual and projected aggregate balances ($Millions) of each type of capital instrument for the relevant quarter. For any instrument type the bank does not include in its reported regulatory capital, please enter “0” (zero). For Common Stock, please report this value as the sum of “Common Stock (par value)” plus “Surplus” LESS “Treasury Stock in the form of Common Stock” and LESS “Issuances associated with the U.S. Department of Treasury Capital Purchase Program: Warrants to Purchase Common Stock”.

18.2. <u>*Capital Position Reconciliation*</u>

This worksheet combines information reported on the *Projected Capital Actions & Balances* worksheet with additional data in order to reconcile the actual and projected balances of funded capital instruments with the balances of regulatory Tier 1, Tier 2, and Total Capital as reported on Call Report and on the DFAST-14A Summary schedule. Please ensure that the balances of Tier 1 Capital, Tier 2 Capital and Total Capital as calculated on this worksheet are the same as those reported on the DFAST-14A Summary Schedule.

19. **BASEL III**

19.1. *General Guidance*

The DFAST-14A schedule collects projection data**.** All projections in the DFAST-14A should be based on the baseline scenario through the end of 2017. For years beyond 2015, banks should adopt assumptions necessary to make reasonable projections of capital ratios, including forecasts of macroeconomic factors and potential earnings through 2017. All forecasts must be well-developed and well-documented, consistent with the relevant baseline scenario, and internally consistent with the bank’s planned capital actions.

Banks should provide projections of capital composition, exceptions bucket calculation, risk-weighted assets, and leverage exposures through 2017 even if the bank anticipates complying with the proposed fully phased-in 7% Common Equity Tier 1, 8.5% Tier 1 capital, 4% Tier 1 leverage, and 3% supplementary leverage target ratios (inclusive the capital conservation buffer, where applicable) plus any applicable surcharge for systemically important financial institutions (SIFI surcharge) by an earlier date.

In November 2011, the Basel Committee on Banking Supervision (BCBS) published its methodology for assessing an additional loss absorbency requirement for global systemically important banks (SIFI surcharge) that effectively serves as an extension of the capital conservation buffer. Each bank should include within its capital plan management's best estimate of the likely SIFI surcharge that would be assessed under this methodology, along with an explanation for the determination of the estimate. In the process of assessing a bank's transition path toward Basel III compliance, supervisors will evaluate the methodology and assumptions used by bank's in determining the SIFI surcharge, and may adjust such estimates as necessary when evaluating the transition path. Any bank not currently designated as a global systemically important financial institution (G-SIFI) should include a SIFI surcharge assessment as part of its capital plan if management expects changes to its business model that would potentially lead to the bank's designation as a G-SIFI.

In June 2012, the U.S. banking agencies finalized the market risk capital rule and released the three notices of proposed rulemaking (NPRs) to propose revisions to risk-based and leverage capital requirements consistent with agreements reached by the BCBS. For purposes of completing the Basel III and Dodd-Frank schedule, banks are required to complete the schedule based on the methodologies outlined in the Basel III NPR, Advanced Approaches NPR, and final market risk capital rule. However, for exposures to central counterparties, banks should complete the Basel III and Dodd-Frank schedule based on the methodologies outlined in the document "Capitalization of bank exposures to central counterparties" that was released by BCBS in July 2012. Banks should reflect the Basel III framework on a fully phased-in basis (e.g., banks should apply 100% of all capital deductions, not assuming the transitional arrangements for implementation of changes to the capital composition as proposed in the Basel III NPR).

Advanced approaches banks, including the banks that are considered mandatory Basel II institutions or that have opted-in voluntarily as a Basel II institution, are required to complete the "RWA_Advanced" worksheet. All banks, including advanced approaches banks and non-advanced approaches banks must complete the "RWA_General" worksheet. For the purpose of completing the "RWA_General" worksheet, banks are required to report credit risk-weighted assets using the methodologies in the current general risk-based capital rules (Basel I). For DFAST 2013, banks are not required to complete "RWA_General" worksheet using the methodologies in the proposed Standardized Approach NPR.

19.2. *Relevant Reference*

For purposes of completing the Basel III and Dodd-Frank schedules, banks should consult the relevant NPRs (Basel III NPR and Advanced Approaches NPR) and the final market risk capital rule released by the U.S. banking agencies, as well as relevant guidance by BCBS for areas where the U.S. banking agencies have not yet released proposals:

- Basel global systemically important banks: assessment methodology and the additional loss absorbency requirement (November 2011): http://www.bis.org/publ/bcbs227.pdf

- Capitalization of bank exposures to central counterparties (July 2012):
  http://www.bis.org/publ/bcbs227.pdf

- Basel III NPR:
  77 FR 52792 (August 30, 2012), available at http://www.occ.treas.gov/news-issuances/news-releases/2012/nr-ia-2012-88.html

- Advanced Approaches Risk-Based Capital Rule NPR; Market Risk Capital Rule NPR:
  77 FR 52978 (August 30, 2012), available at http://www.occ.treas.gov/news-issuances/news-releases/2012/nr-ia-2012-88.html

- Final Market Risk Rule:
  77 FR 53060 (August 30, 2012), available at http://www.occ.treas.gov/news-issuances/news-releases/2012/nr-ia-2012-88.html

19.3. *Completing the Schedule*

All data should be provided in the non-shaded cells in all worksheets; grey shaded cells include embedded formulas and will be automatically populated.
If a bank does not have an exposure relevant to any particular line item in the worksheets (except for the Planned Action worksheet); it should enter zero (0) in those cells. In order for the embedded formulas to automatically populate the shaded cells in the schedule with calculated numbers, banks must complete all unshaded cells in the schedule with a value. In addition, banks should ensure that the version of Microsoft Excel they use to complete the schedule is set to automatically calculate formulas. This is achieved by setting "Calculation Options" (under the Formulas function) to "Automatic" within Microsoft Excel.

19.4. *Capital Composition Worksheet*

The "Capital Composition" worksheet and the "Exceptions Bucket Calculator" worksheet collect the data necessary to calculate the composition of capital under the guidelines set forth by the recently released Basel III NPR. Please provide all data on a fully phased-in basis (i.e., not assuming any transitional or phase-out arrangements included in the Basel III NPR).

With regard to regulatory adjustments, please note that line 20, "Excess Expected Credit Loss (ECL)," applies to advanced approaches banks only.

19.5. *Line Headings & Descriptions*

Line	Heading	Description
Basel III Common Equity Tier 1		
1	Common Stock and Related Surplus (Net of Treasury Stock)	Common shares and the related surplus issued by banks that meet the criteria of the Basel III NPR. This should be net of treasury stock and other investments in own shares to the extent that these are already not recognized on the balance sheet under the relevant accounting standards. This line item should reflect the impact of share repurchases or issuances projected in the DFAST forecast horizon.
2	Retained Earnings	Retained earnings reported by banks. This should reflect the impact of dividend pay-outs projected in the DFAST forecast horizon.
3-11	Accumulated Other Comprehensive Income	Accumulated other comprehensive income reported by banks. In the non-shaded cells, please fill out the amount of unrealized gains and losses on a fully phased-in basis (i.e., without the transitional arrangements included in the Basel III NPR). If gain, please report as positive, and if loss, please report as negative.
12	Other Equity Capital Components (Including Unearned Employee Stock Ownership Program Shares)	All other equity capital components which fall under the definition of Common Equity Tier 1.
13	Total Common Equity Tier 1 Attributable to Parent Company Common Shareholders	Formula embedded in the schedule; no input required.
14	Minority Interest Included in Common Equity Tier 1	Total minority interest given recognition in Common Equity Tier 1 per the Basel III NPR. Includes common shares issued by subsidiaries (which includes all consolidated subsidiaries of the group, regardless of whether they are fully owned or partially owned) of the consolidated group that are held by third parties.
15	Total Group Common Equity Tier 1 Prior to Regulatory Adjustments	Formula embedded in the schedule; no input required.
16	Deductions	Formula embedded in the schedule; no input required. Guidelines for regulatory deductions from Common Equity Tier 1 can be found in the Basel III NPR. For each subcomponent, reflect the full amount without the transitional arrangements included in the Basel III NPR.
17	Goodwill, Net of Related Deferred Tax Liability	Goodwill (including goodwill used in the valuation of significant investments in the capital of banking) to be deducted from Common Equity Tier 1.

Line	Heading	Description
18	Intangibles Other than Mortgage Servicing Assets, Net of Related Deferred Tax Liabilities	All other intangibles (with the exception of mortgage servicing assets) to be deducted from the calculation of Common Equity Tier 1. The full amount is to be deducted net of any associated deferred tax liabilities which would be extinguished if the intangible assets become impaired and/or no longer recognized under the applicable accounting rules. Please reflect the full amount without the transitional arrangements included in the Basel III NPR.
19	Deferred Tax Assets (Excluding Temporary Differences Only), Net of Related Deferred Tax Liabilities	Deferred Tax Assets (DTA) that rely on future profitability of the bank to be realized to be deducted from Common Equity Tier 1. Where these DTAs relate to temporary differences, the amount to be deducted is set out in the Exception Bucket Calculator schedule. DTAs may be netted with associated deferred tax liabilities only if offsetting is permitted by the relevant tax authority. Please reflect the full amount without the transitional arrangements included in the Basel III NPR.
20	Excess Expected Credit Loss (ECL)	The amount of expected credit loss that exceeds a bank's eligible credit reserves. **This deduction applies to advanced approaches banks only.** Please reflect the full amount without the transitional arrangements.
21	Cash Flow Hedge (If Gain, Report as Positive; If Loss, Report as Negative)	The amount of the cash flow hedges that relates to the hedging of items which are not fair-valued on the balance sheet should be deducted from Common Equity Tier 1. Positive amounts should be deducted and negative amounts should be added back. Please reflect the full amount without the transitional arrangements included in the NPR.
22	Cumulative G/L Due to Changes in Own Credit Risk on Fair Valued Liabilities (If Gain, Report as Positive; If Loss, Report as Negative)	All unrealized gains and losses resulting from changes in the fair value of liabilities due to changes in the bank's own credit risk must be deducted from Common Equity Tier 1.
23	Defined Benefit Pension Fund Assets	For each defined benefit pension fund that is an asset on the balance sheet, the asset should be deducted in the calculation of Common Equity Tier 1, net of any associated deferred tax liabilities which would be extinguished if the asset should become impaired or no longer recognized under the applicable accounting standards. Please reflect the full amount without the transitional arrangements included in the Basel III NPR.

Line	Heading	Description
24	Securitization Gain on Sale	Any gain-on-sale associated with a securitization transaction must be deducted from Common Equity Tier 1. Please reflect the full amount without the transitional arrangements included in the Basel III NPR.
25	Investments in Own Shares	Bank's investments in its own common shares (held directly or indirectly), in addition to any stock the bank is contractually obliged to purchase in the future, to be deducted from Common Equity Tier 1. This treatment will apply irrespective of whether the exposure is held in the banking book or the trading book. Please reflect the full amount without the transitional arrangements included in the Basel III NPR.
26	Reciprocal Cross Holdings in Common Equity	Crossholdings of common stock that are part of a reciprocal cross holding arrangement of financial institutions. The Basel III NPR requires banks to deduct investments in the capital of other financial institutions it holds reciprocally. Please reflect the full amount without the transitional arrangements included in the Basel III NPR.
27	Other Common Equity Tier 1 Deductions	Please include in this line any additional deductions related to Common Equity Tier 1 that are not captured elsewhere. If no such requirements exist, 0 should be entered.
28	Regulatory Deductions Due to Insufficient Additional Tier 1	Formula embedded in the schedule; no input required.
29	Total Common Equity Tier 1 After Deductions Above	Formula embedded in the schedule; no input required.
30	Non-significant Investments in the Common Share of Unconsolidated Financial Entities That Exceed 10% of Common Equity Tier 1	Investments in financial entities that are outside the scope of regulatory consolidation and where the bank does not own more than 10% of the financial entity's Common Equity Tier 1 (using Line 29 as reference).
31	Total Common Equity Tier 1 After the Regulatory Adjustments Above	Formula embedded in the schedule; no input required.
32	Significant Investments in the Common Stock of Unconsolidated Financial Entities (Amount Above 10% Threshold)	Formula embedded in the schedule; no input required.
33	Mortgage Servicing Assets (Amount Above 10% Threshold)	Formula embedded in the schedule; no input required.

Line	Heading	Description
34	Deferred Tax Assets Arising from Temporary Differences (Amount Above 10% Threshold)	Formula embedded in the schedule; no input required.
35	Total Common Equity Tier 1 Capital After the Regulatory Adjustments Above	Formula embedded in the schedule; no input required.
36	Deduction of Outstanding Items Subject to 15% Threshold Due to 15% Limit	Formula embedded in the schedule; no input required.
37	Additional Mortgage Servicing Assets Deduction Due to Fair Value Limit	Formula embedded in the schedule, no input required.
38	Common Equity Tier 1	Formula embedded in the schedule, no input required.
Basel III Tier 1 Capital		
39	Non-common Equity Tier 1 Capital Instruments (Qualifying Instruments Only)	Additional Tier 1 instruments issued by parent company of group (and any related surplus) permitted per the Basel III NPR including regulatory capital instruments eligible for grandfathering treatment. **Banks should report all previously issued, non-qualifying capital instruments subject to phase-out (including perpetual preferred stock and trust preferred securities) instruments in Line 54.**
40	Minority Interest Included in Tier 1 Capital	Instruments that meet the Additional Tier 1 criteria issued by subsidiaries to third parties that are given recognition in group Additional Tier 1 capital. **Banks should report all previously issued, non-qualifying tier 1 minority interest in Line 55.**
41	Deductions	Formula embedded in the schedule; no input required.
42	Regulatory Adjustments to be Deducted from Additional Tier 1 Capital	Formula embedded in the schedule; no input required. This captures all other adjustments banks must make to additional Tier 1 capital.
43	Reciprocal Cross Holdings in the Form of Additional Tier 1 Capital	Cross holdings of Additional Tier 1 capital that are part of a reciprocal cross holding arrangement of financial institutions. The Basel III NPR requires banks to deduct investments in the capital of other financial institutions it holds reciprocally. Please reflect the full amount without the transitional arrangements included in the Basel III NPR.

Line	Heading	Description
44	Non-significant Investments in the Form of Additional Tier 1 Capital	Banks must deduct all non-significant investments, in the form of Additional Tier 1 capital, in the capital of unconsolidated financial institutions which exceeds 10% of the bank's Common Equity Tier 1 minus applicable deductions.
45	Investments in Own Additional Tier 1 Capital Instruments	Bank's investments in its own shares, in the form of Additional Tier 1 capital (held directly or indirectly), in addition to any stock the bank is contractually obliged to purchase in the future, must be deducted.
46	Significant Investments in the Form of Additional Tier 1 Capital	Significant investments in the capital of an unconsolidated financial institution, in the form of Additional Tier 1 capital, must be deducted in full.
47	Other Tier 1 Capital Regulatory Deductions	Please report any additional deductions related to Additional Tier 1 capital here that are not captured elsewhere. If no such requirements exist, 0 should be entered.
48	Regulatory Deductions Due to Insufficient Tier 2 Capital	If the total regulatory adjustments to be made to Tier 2 capital exceed the amount of Tier 2 capital available, the excess amount should is to be deducted from Tier 1 capital.
49	Tier 1 Capital	Formula embedded in the schedule; no input required.
Periodic Changes in Common Stock		
50	Common Stock and Related Surplus (Net of Treasury Stock)	Formula embedded in the schedule; no input required.
51	Issuance of Common Stock (Including Conversion of Common Stock)	Captures the total issuance of common stock and related surplus in the reporting period. This figure should equal the "Total issuance of common stock" reported in the DFAST-14A Summary Schedule for reporting periods through 2014.
52	Repurchases of Common Stock	Captures the total repurchases of common stock in the reporting period. This figure should equal the "Total share repurchases" outlined reported in the DFAST-14A Summary Schedule for reporting periods through 2014.
Periodic Changes in Retained Earnings		
53	Net Income (Loss) Attributable to Bank	Refer to Call Report instructions and DFAST-14A Summary Schedule for MDRM No. RIAD 4340. Report losses as a negative value.

Line	Heading	Description
54	Cash Dividends Declared on Preferred Stock	Refer to Call Report instructions and DFAST-14A Summary Schedule for MDRM No. RIAD 4470.
55	Cash Dividends Declared on Common Stock	Refer to Call Report instructions and DFAST-14A Summary Schedule for MDRM No. RIAD 4460.
56	Previously Issued Tier 1 Capital Instruments (Excluding Minority Interest) that Would No Longer Qualify (Please Report 100% value)	Report 100% of the value of previously issued Tier 1 capital instruments that will no longer qualify as Tier 1 capital as per the Basel III NPR (including perpetual preferred stock and trust preferred securities subject to phase-out arrangements). Please report balances in full, without reflecting any phase-out arrangements included in the NPR.
57	Previously Issued Tier 1 Minority Interest that Would No Longer Qualify (Please Report 100% Value)	Report 100% of the value of previously issued tier 1 minority interest that will no longer qualify as Tier 1 capital as per the Basel III NPR. Please report balances in full, without reflecting any phase-out arrangements included in the NPR.
Data Validation Check		
58	Does Line 50, “Common Stock and Related Surplus” = Line 1 for “Common Stock and Related Surplus”?	Validation check to ensure Line 50 equals the value in Line 1 within this worksheet. Formula embedded in the schedule; no input required. Please ensure that “Yes” appears across all cells.
Differences in Reporting		
59	Does Line 1, "Common Stock and Related Surplus" = "Common Stock (Par Value)" (MDRM No. RCFD 3230) + "Surplus (Exclude All Surplus Related to Preferred Stock)" (MDRM No. RCFD 38293240) of Balance Sheet Worksheet (DFAST-14A Summary Schedule)?	Validation check to ensure that the logic applies. If the values are identical, input “Yes”. If the values differ, please provide an explanation for the difference.
60	Does Line 2, "Retained Earnings" = "Retained Earnings" (MDRM No. RCFD 3632) of Balance Sheet Worksheet (DFAST-14A Summary Schedule)?	Validation check to ensure that the logic applies. If the values are identical, input “Yes”. If the values differ, please provide an explanation for the difference.

Line	Heading	Description
61	Does Line 12, “Other Equity Capital Components” = “Other Equity Capital Components” (MDRM No. RCFD A130) of Balance Sheet Worksheet (DFAST-14A Summary Schedule)?	Validation check to ensure that the logic applies. If the values are identical, input “Yes”. If the values differ, please provide an explanation for the difference.
62	Does Line 51, "Issuance of common stock" = "Total issuance of common stock" of Capital Worksheet (DFAST-14A Summary Schedule)?	Validation check to ensure that the logic applies. If the values are identical, input “Yes”. If the values differ, please provide an explanation for the difference.
63	Does Line 52, "Repurchases of common stock" = "Total share repurchases" of Capital Worksheet (DFAST-14A Summary Schedule)?	Validation check to ensure that the logic applies. If the values are identical, input “Yes”. If the values differ, please provide an explanation for the difference.
64	Does Line 53, "Net income (loss) attributable to bank " = "Net income (loss) attributable to bank " (MDRM No. RIAD 4340) of Capital Worksheet (DFAST-14A Summary Schedule)?	Validation check to ensure that the logic applies. If the values are identical, input “Yes”. If the values differ, please provide an explanation for the difference.
65	Does Line 54, "Cash dividends declared on preferred stock" = "Cash dividends declared on preferred stock" (MDRM No. RIAD 4470) of Capital Worksheet (DFAST-14A Summary Schedule)?	Validation check to ensure that the logic applies. If the values are identical, input “Yes”. If the values differ, please provide an explanation for the difference.
66	Does Line 55, "Cash dividends declared on common stock" = "Cash dividends declared on common stock" (MDRM No. RIAD 4460) of Capital Worksheet (DFAST-14A Summary Schedule)?	Validation check to ensure that the logic applies. If the values are identical, input “Yes”. If the values differ, please provide an explanation for the difference.
Data Completeness Check		
67	If "No", please complete all non-shaded cells until all cells to the right say "Yes." Do not leave cells blank; enter "0" if not applicable.	

<u>Exception Bucket Calculator Worksheet Instructions</u>

The “Exception Bucket Calculator” worksheet collects the data necessary to calculate the items that may receive limited recognition in Common Equity Tier 1 (i.e., significant investments in the common shares of unconsolidated financial institutions, mortgage servicing assets and deferred tax assets arising from temporary difference). These items may be recognized in Common Equity Tier 1 up to 10% of the bank’s common equity on an individual basis and 15% on an aggregated basis after application of all regulatory adjustments.

Line	Heading	Description
1	Gross Holdings of Common Stock	Aggregate holdings of capital instruments relevant to significant investments in the capital of unconsolidated financial entities, including direct, indirect and synthetic holdings in both the banking book and trading book.
2	Permitted Offsetting Short Positions in Relation to the Specific Gross Holdings Included Above	Offsetting positions in the same underlying exposure where the maturity of the short position either matches the maturity of the long position or has a residual maturity of at least one year.
3	Holdings of Common Stock Net of Short Positions	Formula embedded in the schedule; no input required.
4	Common Equity Tier 1 After All Regulatory Adjustments Except Significant Investments in Financial Institutions, Mortgage Servicing Assets and Deferred Tax Assets Arising from Temporary Differences	Formula embedded in the schedule; no input required.
5	Amount to be Deducted from Common Equity Tier 1 due to 10% Limit	Formula embedded in the schedule; no input required.
6	Total Mortgage Servicing Assets Classified as Intangible	Mortgage servicing assets may receive limited recognition when calculating Common Equity Tier 1, with recognition capped at 10% of the bank’s common equity (after the application of all regulatory adjustments).

Line	Heading	Description
7	Associated Deferred Tax Liabilities Which Would be Extinguished if the Intangible Becomes Impaired or Derecognized Under the Relevant Accounting Standards	The amount of mortgage servicing assets to be deducted from Common Equity Tier 1 is to be offset by any associated deferred tax liabilities, with recognition capped at 10% of the bank's Common Equity Tier 1(after the application of all regulatory adjustments). If the bank chooses to net its deferred tax liabilities associated with mortgage servicing assets against deferred tax assets (in Line 17 of the Capital Composition worksheet), those deferred tax liabilities should not be deducted again here.
8	Mortgage Servicing Assets Net of Related Tax Liabilities	Formula embedded in the schedule; no input required.
9	Common Equity Tier 1 after All Regulatory Adjustments Except Significant Investments in Financial Institutions, Mortgage Servicing Assets and Deferred Tax Assets Arising from Temporary Differences	Formula embedded in the schedule; no input required.
10	Amount to be Deducted from Common Equity Tier 1 due to 10% Limit	Formula embedded in the schedule; no input required.
11	Deferred Tax Assets Due to Temporary Differences, Net of Related Deferred Tax Liabilities	Net deferred tax assets arising from temporary differences may receive limited recognition in Common Equity Tier 1, with recognition capped at 10% of the bank's common equity (after the application of all regulatory adjustments).
12	Common Equity Tier 1 after All Regulatory Adjustments Except Significant Investments in Financial Institutions, Mortgage Servicing Assets and Deferred Tax Assets Arising from Temporary Differences	Formula embedded in the schedule; no input required.
13	Amount to be deducted from Common Equity Tier 1 Due to 10% Limit	Formula embedded in the schedule; no input required.
14	Outstanding Significant Investments in the Common Stock of Financial Entities Not Deducted Due to 10% Limit	Formula embedded in the schedule; no input required.

Line	Heading	Description
15	Outstanding Mortgage Servicing Assets Not Deducted Due to 10% Limit	Formula embedded in the schedule; no input required.
16	Outstanding Deferred Tax Assets Due to Temporary Differences Not Deducted Due to 10% Limit	Formula embedded in the schedule; no input required.
17	Sum of Outstanding Significant Investments in Financials, Mortgage Servicing Assets and Deferred Tax Assets Arising from Temporary Differences Not Deducted Due to 10% Limit	Formula embedded in the schedule; no input required.
18	15% Common Equity Tier 1 Limit (For Items Subject to 15% Threshold)	Formula embedded in the schedule; no input required.
19	Deduction of Outstanding Items Subject to 15% Threshold Due to 15% Limit	Formula embedded in the schedule; no input required.
20	Amount of 15% Limit Deduction Attributable to Mortgage Servicing Assets	Formula embedded in the schedule; no input required.
21	Estimated Fair Value of Mortgage Servicing Rights	Under section 475 of the Federal Deposit Insurance Corporation Improvement Act of 1991 (12 U.S.C. 1828 note), the amount of readily marketable mortgage servicing assets recognized by a bank cannot be more than 90% of their fair market value. Please include the fair market value of all mortgage servicing assets classified as intangibles.
22	Additional Deduction from Common Equity Tier 1 Due to Statutory 10% Fair Value Limit of Mortgage Servicing Assets	Formula embedded in the schedule; no input required.
23	Data Completeness Check	If "No", please complete all non-shaded cells until all cells to the right say "Yes." Do not leave cells blank; enter “0” if not applicable.

Risk-Weighted Assets – Advanced Worksheet Instructions

Advanced approaches banks, including the banks that are considered as mandatory Basel II institutions or that have opted-in voluntarily as a Basel II institution, are <u>required</u> to complete the "RWA_Advanced" worksheet. All banks, including advanced approaches banks and non-advanced approaches banks must complete the "RWA_General" worksheet.

In the "RWA_Advanced" worksheet, banks should provide risk-weighted asset estimates reflecting the final market risk capital rule released by the U.S. banking agencies (12 CFR 3) and the Advanced Approaches NPR. However, for exposures to central counterparties, banks should complete the "RWA_Advanced" worksheet based on the methodologies outlined in the document "Capitalization of bank exposures to central counterparties" that was released by BCBS in July 2012.

If a bank's trading activity is below $1 billion and less than 10% of its total assets at 3Q 2012, the bank does not need to complete the market risk-weighted asset section within the Risk-Weighted Assets worksheets. However, if the bank projects to meet the trading activity threshold during the forecast period, then the bank should complete the market risk-weighted asset section within the schedule, based on the final market risk capital rule released by the U.S. banking agencies (77 Federal Register 53060, August 30, 2012).

Line	Heading	Description
Credit Risk (including Counterparty Credit Risk (CCR) and non-trading credit risk) – Applicable to Advanced Approaches Banking Organizations Risk-weighted assets should reflect the 1.06 scaling factor to the Internal Rating-Based Approach (IRB) credit risk-weighted assets where relevant, unless noted otherwise.		
1	Corporate	Formula embedded in the schedule; no input required.
2	Corporate (not including receivables); Counterparty Credit Risk Exposures (not including credit value adjustment (CVA) charges or charges for exposures to central counterparties (CCPs))	Overall risk-weighted assets for corporate (not including receivables) counterparty credit risk exposures, not including credit value adjustment (CVA) capital charges or exposures to central counterparties (CCPs), after applying the 1.06 scaling factor to the Internal Rating-Based Approach (IRB) credit risk-weighted assets.
3	Corporate (not including receivables); Other Exposures	Overall risk-weighted assets for other corporate exposures (not including receivables), after applying the 1.06 scaling factor to the Internal Rating-Based Approach (IRB) credit risk-weighted assets.
4	Sovereign	Formula embedded in the schedule; no input required.

Line	Heading	Description
5	Sovereign; Counterparty Credit Risk Exposures (not including credit value adjustment (CVA) charges or charges for exposures to central counterparties (CCPs))	Overall risk-weighted assets for sovereign counterparty credit risk exposures, not including credit value adjustment (CVA) capital charges or exposures to central counterparties (CCPs), after applying the 1.06 scaling factor to the Internal Rating-Based Approach (IRB) credit risk-weighted assets.
6	Sovereign; Other Exposures	Overall risk-weighted assets for other sovereign exposures, after applying the 1.06 scaling factor to the Internal Rating-Based Approach (IRB) credit risk-weighted assets.
7	Bank	Formula embedded in the schedule; no input required.
8	Bank; Counterparty Credit Risk Exposures (not including credit value adjustment (CVA) charges or charges for exposures to central counterparties (CCPs))	Overall risk-weighted assets for bank counterparty credit risk exposures, not including credit value adjustment (CVA) capital charges or exposures to central counterparties (CCPs), after applying the 1.06 scaling factor to the Internal Rating-Based Approach (IRB) credit risk-weighted assets.
9	Bank; Other Exposures	Overall risk-weighted assets for other bank exposures, after applying the 1.06 scaling factor to the Internal Rating-Based Approach (IRB) credit risk-weighted assets.
10	Retail	Formula embedded in the schedule; no input required.
11	Retail; Counterparty credit risk exposures (not including credit value adjustment (CVA) charges or charges for exposures to Central counterparties (CCPs))	Overall risk-weighted assets for retail counterparty credit risk exposures, not including credit value adjustment (CVA) capital charges or exposures to Central counterparties (CCPs), after applying the 1.06 scaling factor to IRB credit risk-weighted assets.
12	Retail; Other Exposures	Overall risk-weighted assets for other retail exposures, after applying the 1.06 scaling factor to the Internal Rating-Based Approach (IRB) credit risk-weighted assets.
13	Equity	Overall risk-weighted assets for equity exposures, where relevant after applying the 1.06 scaling factor to the Internal Rating-Based Approach (IRB) credit risk-weighted assets.
14	Securitization	Overall risk-weighted assets for securitizations that are held in the held-to-maturity or available-for-sale portfolios, where relevant after applying the 1.06 scaling factor to the Internal Rating-Based Approach (IRB) credit risk-weighted assets.

Line	Heading	Description
15	Trading Book Counterparty Credit Risk Exposures (if not included in above)	Overall risk-weighted assets for counterparty credit risk exposures in the trading book if the bank is not able to include them in the portfolio of the counterparty as specified above.
16	Credit Valuation Adjustment (CVA) Capital Charge (Risk-Weighted Asset Equivalent)	Formula embedded in the schedule; no input required.
17	Advanced Credit Valuation Adjustment (CVA) Approach	Formula embedded in the schedule; no input required.
18	Credit Valuation Adjustment (CVA) capital charge (Risk-Weighted Asset Equivalent); Advanced CVA Approach; Unstressed Value at Risk (VaR) with Multipliers	Stand-alone 10-day value-at-risk (VaR) calculated on the set of credit valuation adjustments (CVAs) for all Over-the-counter (OTC) derivatives counterparties together with eligible credit valuation adjustment (CVA) hedges. The reported value-at-risk should consist of both general and specific credit spread risks and is restricted to changes in the counterparties credit spreads. The bank must multiply the reported value-at-risk by three times consistent with the approach used in calculating market risk capital charge (three-time multiplier). The 1.06 scaling factor does not apply. Bank should report 0 if it does not use the advanced credit value adjustment (CVA) approach.
19	Credit Valuation Adjustment (CVA) Capital Charge (Risk-Weighted Asset Equivalent); Advanced CVA Approach; Stressed Value at Risk (VaR) with multipliers	Stand-alone 10-day **stressed** value-at-risk (VaR) calculated on the set of credit valuation adjustments (CVAs) for all over-the-counter (OTC) derivatives counterparties together with eligible credit valuation adjustments (CVA) hedges. The reported value-at-risk should consist of both general and specific credit spread risks and is restricted to changes in the counterparties credit spreads. It should reflect three-times multiplier. The 1.06 scaling factor does not apply. Bank should report 0 if it does not use the advanced credit valuation adjustments (CVA) approach
20	Credit Valuation Adjustment (CVA) Capital Charge (Risk-Weighted Asset Equivalent); Simple CVA Approach	Risk-weighted asset (RWA) equivalent using the simple credit valuation adjustment (CVA) approach.
21	Other Credit Risk	If the Bank is unable to assign credit risk-weighted assets to one of the above categories even on a best-efforts basis, they should be reported in this line.

Line	Heading	Description
22	Total Credit Risk-Weighted Assets (RWA)	Formula embedded in the schedule; no input required.
Market Risk If a bank does not have a particular portfolio or no trading book at all, risk-weighted assets should be reported as 0.		
23	Standardized Specific Risk (excluding securitization and correlation)	Risk-weighted asset (RWA) equivalent for specific risk based on the standardized measurement method as applicable. This should not include the risk-weighted assets according to the standardized measurement method for exposures included in the correlation trading portfolio or the standardized approach for other non-correlation related traded securitization exposures.
24	Value at Risk (VaR) with Multipliers (general and specific risk)	Bank-wide 10-day value-at-risk (VaR) inclusive of all sources of risks that are included in the value-at-risk calculation. The reported value-at-risk should reflect actual multipliers as of the reporting date.
25	Stressed Value-at-Risk (VaR) with Multipliers (general and specific risk)	Bank-wide 10-day stressed value-at-risk inclusive of all sources of risk that are included in the stressed value-at-risk calculation. The reported stressed value-at-risk should reflect actual multipliers as of the reporting date.
26	Incremental Risk Capital Charge (IRC)	Risk-weighted asset (RWA) equivalent for incremental risk in the trading book.
27	Correlation Trading	Formula embedded in the schedule; no input required.
28	Correlation Trading; Comprehensive Risk Measurement (CRM), Before Application of the Surcharge	Risk-weighted asset (RWA) equivalent for exposures in the correlation trading portfolio which are subject to the comprehensive risk measurement, before the application of the 8% surcharge based on the standardized measurement method.
29	Correlation Trading; Standardized Measurement Method (100%) for Exposures Subject to Comprehensive Risk Measurement (CRM)	Formula embedded in the schedule; no input required.

Line	Heading	Description
30	Correlation Trading; Standardized Measurement Method (100%) for Exposures Subject to Comprehensive Risk Measurement (CRM); Net long	100% of the risk-weighted asset (RWA) equivalent according to the standardized measurement method for net long exposures in the correlation trading portfolio which are subject to the comprehensive risk measurement.
31	Correlation Trading; Standardized Measurement Method (100%) for Exposures Subject to Comprehensive Risk Measurement (CRM); Net Short	100% of the risk-weighted asset (RWA) equivalent according to the standardized measurement method for net short exposures in the correlation trading portfolio which are subject to the comprehensive risk measurement.
32	Non-modeled Securitization	Formula embedded in the schedule; no input required. The capital charge (or risk-weighted asset equivalent) for non-modeled traded securitization, including securitization positions that are not correlation trading positions and non-modeled correlation trading positions, is the larger of the net long and net short positions. For purposes of the DFAST submission, traded securitization exposures subject to a 1250% risk weight or the equivalent of a deduction should be captured here by including values in lines 33 and 34.
33	Non-modeled Securitization; Net Long	Risk-weighted asset equivalent according to the standardized measurement method for net long non-modeled securitization exposures including nth-to-default credit derivatives. For purposes of the DFAST submission, traded securitization exposures subject to a 1250% risk weight or the equivalent of a deduction should be included here.
34	Non-modeled Securitization; Net Short	Risk-weighted asset equivalent according to the standardized measurement method for net short non-modeled securitization exposures including nth-to-default credit derivatives. For purposes of the DFAST submission, traded securitization exposures subject to a 1250% risk weight or the equivalent of a deduction should be included here.

Line	Heading	Description
35	Other Market Risk	If the bank is unable to assign market risk-weighted assets to one of the above categories, they should be reported in this line. If no such requirements exist, 0 should be entered.
36	Total Market Risk-Weighted Assets (RWA)	Formula embedded in the schedule; no input required.
Other		
37	Other Capital Requirements	Risk-weighted assets (RWA) for settlement risk and other capital requirements. If no such requirements exist, 0 should be entered.
38	Operational Risk	Risk-weighted assets (RWA) for operational risk.
39	Change in Risk-Weighted Assets (RWA) Due to Impact of Basel III Definition of Capital	Impact on the risk-weighted assets (RWA) due to changes of Basel III definition of capital. For purposes of DFAST submission, other exposures (excluding traded securitization exposures) subject to a 1250% risk weight, including securitization exposures held in the banking book should be included here.
40	Total Risk-Weighted Assets	Formula embedded in the schedule, no input required.
Data Completeness Check		
41	If "No", please complete all non-shaded cells until all cells to the right say "Yes." Do not leave cells blank; enter "0" if not applicable.	Check to ensure worksheet is complete. Formula embedded in the schedule, no input required. Please ensure that “Yes” appears across all cells.

Risk-Weighted Assets – General Worksheet Instructions

All banks, including advanced approaches banks and non-advanced approaches banks must complete “RWA_General” worksheet. In addition to completing the "RWA_Advanced" worksheet, the advanced approaches banks are required to complete “RWA_General" worksheet due to the floor requirement per the Collins Amendment under Section 171 of the DFA.

For the purpose of completing the “RWA_General” worksheet, banks are required to report credit risk-weighted assets using the methodologies in the current general risk-based capital rules (Basel I). For DFAST 2013, banks are not required to complete “RWA_General” worksheet using the methodologies in the proposed Standardized Approach NPR. If a bank’s trading activity is below $1 billion and less than 10% of its total assets at 3Q 2012, the bank does not need to complete the market risk-weighted asset section within the schedule. However, if the bank projects to meet the trading activity threshold during the forecast period, then the bank should complete the market risk-weighted asset section within the schedule, based on the final market risk capital rule released by the U.S. banking agencies (77 Federal Register 53060, August 30, 2012).

Line	Heading	Description
Basel I Credit Risk (including Counterparty Credit Risk (CCR) and non-trading credit risk) – Applicable to All banks Risk-weighted assets should reflect the 1.06 scaling factor to the Internal Rating-Based Approach (IRB) credit risk-weighted assets where relevant, unless noted otherwise.		
1	Counterparty Credit RWA	Overall risk-weighted assets for counterparty credit exposures (not including receivables) including exposures to central counterparties (CCPs).
2	Credit RWAs excluding Counterparty Credit RWAs	If the bank is unable to assign credit risk-weighted assets to the above category even on a best-efforts basis, they should be reported in this line.
3	Total Credit (RWA)	Formula embedded in the schedule, no input required.
Market Risk If a bank does not have a particular portfolio or no trading book at all, risk-weighted assets should be reported as 0.		
4	Standardized Specific Risk (excluding securitization and correlation)	Risk-weighted asset (RWA) equivalent for specific risk based on the standardized measurement method as applicable. It should not include the risk-weighted assets according to the standardized measurement method for exposures included in the correlation trading portfolio or the standardized approach for other non-correlation related traded securitization exposures.
5	Value at Risk (VaR) with Multipliers (general and specific risk)	Bank-wide 10-day value-at-risk (VaR) inclusive of all sources of risks that are included in the value-at-risk calculation. The reported value-at-risk should reflect actual multipliers as of the reporting date.
6	Stressed Value-at-Risk (VaR)with Multipliers (general and specific risk)	Bank-wide 10-day stressed value-at-risk (VaR) inclusive of all sources of risk that are included in the stressed value-at-risk calculation. The reported stressed value-at-risk should reflect actual multipliers as of the reporting date.
7	Incremental Risk Capital Charge (IRC)	Risk-weighted asset (RWA) equivalent for incremental risk in the trading book.
8	Correlation Trading	Formula embedded in the schedule; no input required.

Line	Heading	Description
9	Correlation Trading; Comprehensive Risk Measurement (CRM), Before Application of the Surcharge	Risk-weighted asset (RWA) equivalent for exposures in the correlation trading portfolio which are subject to the comprehensive risk measurement, before the application of the 8% surcharge based on the standardized measurement method.
10	Correlation Trading; Standardized Measurement Method (100%) for Exposures Subject to Comprehensive Risk Measurement (CRM)	Formula embedded in the schedule; no input required.
11	Correlation Trading; Standardized Measurement Method (100%) for Exposures Subject to Comprehensive Risk Measurement (CRM); Net Long	100% of the risk-weighted asset (RWA) equivalent according to the standardized measurement method for net long exposures in the correlation trading portfolio which are subject to the comprehensive risk measurement.
12	Correlation Trading; Standardized Measurement Method (100%) for Exposures Subject to Comprehensive Risk Measurement (CRM); Net Short	100% of the risk-weighted asset (RWA) equivalent according to the standardized measurement method for net short exposures in the correlation trading portfolio which are subject to the comprehensive risk measurement.
13	Non-modeled Securitization	Formula embedded in the schedule; no input required. The capital charge (or risk-weighted asset equivalent) for non-modeled traded securitization, including securitization positions that are not correlation trading positions and non-modeled correlation trading positions, is the larger of the net long and net short positions. For purposes of the DFAST submission, traded securitization exposures subject to a 1250% risk weight or the equivalent of a deduction should be captured here by including in lines 14 and 15.
14	Non-modeled Securitization; Net Long	Risk-weighted asset equivalent according to the standardized measurement method for net long non-modeled securitization exposures including nth-to-default credit derivatives. For purposes of the DFAST submission, traded securitization exposures subject to a 1250% risk weight or the equivalent of a deduction should be included here.

Line	Heading	Description
15	Non-modeled Securitization; Net Short	Risk-weighted asset equivalent according to the standardized measurement method for net short non-modeled securitization exposures including nth-to-default credit derivatives. For purposes of the DFAST submission, traded securitization exposures subject to a 1250% risk weight or the equivalent of a deduction should be included here.
16	Other Market Risk	If the bank is unable to assign market risk-weighted assets to one of the above categories, they should be reported in this line. If no such requirements exist, 0 should be entered.
17	Total Market RWA	Formula embedded in the schedule, no input required.
Other		
18	Other Capital Requirements	Risk-weighted assets (RWA) for other capital requirements. If no such requirements exist, 0 should be entered.
19	Change in Risk-Weighted Assets (RWA) Due to Impact of Basel III Definition of Capital	Impact on the risk-weighted assets (RWA) due to changes of Basel III definition of capital. For purposes of DFAST 2013 submission, other exposures (excluding traded securitization exposures) subject to a 1250% risk weight, including securitization exposures held in the banking book should be included here.
20	Total Risk-Weighted Assets	Formula embedded in the schedule; no input required.
Data Completeness Check		
21	If "No", please complete all non-shaded cells until all cells to the right say "Yes." Do not leave cells blank; enter "0" if not applicable.	Check to ensure worksheet is complete. Formula embedded in the schedule, no input required. Please ensure that “Yes” appears across all cells.

Leverage Exposure Worksheet Instructions

All banks must complete the portion of the worksheet relevant to “Leverage Exposure for Tier 1 Leverage Ratio” (lines 1 - 3). Advanced approaches banks must also complete the portion of the worksheet relevant to “Leverage Exposure for Supplementary Leverage Ratio” (lines 4 - 12).

The exposure measures for both leverage ratios are based upon guidance provided in the Basel III NPR. Banks should report leverage ratio components as calculated using the average as of quarter end for the relevant period based upon the simple arithmetic mean of exposures calculated on a monthly basis. Banks that are unable to calculate monthly data may report exposures as of the quarter end.

Leverage Exposure for Tier 1 Leverage Ratio (applicable to all banks)		
Line	**Heading**	**Description**
1	Average Total Assets	Average total on-balance sheet assets as reported on the Bank's Call Report.
2	Amounts Deducted from Tier 1 Capital (Report as Negative)	Regulatory deductions from Tier 1 capital. Deductions from Tier 1 capital should be calculated as per the proposed methodologies in the Basel III NPR. Input value as a negative number.
3	Average Total Assets for Leverage Capital Purposes	Formula embedded in the schedule; no input required.

Leverage Exposure for Supplementary Leverage Ratio (applicable to advanced approaches banking organizations)		
Line	**Heading**	**Description**
4	On-Balance Sheet Derivatives	Total carrying value of derivatives reported on-balance sheet.
5	Derivatives, Potential Future Exposure	Potential future exposure amount for each derivative contract to which the bank is a counterparty (or each single-product netting set for such transactions).
6	On-Balance Sheet Repo-Style Transactions	Total carrying value of repo-style transactions (including repurchase agreements, securities lending and borrowing transactions, and reverse repos) reported on-balance sheet.
7	Other On-Balance Sheet Items, (Excluding Derivatives and Repo-Style Transactions)	Carrying value of all other on-balance sheet assets.
8	Off-Balance Sheet Items (Excluding Derivatives and Repo-Style Transactions)	Formula embedded in the schedule. No input required.

Leverage Exposure for Supplementary Leverage Ratio (applicable to advanced approaches banking organizations)		
Line	**Heading**	**Description**
9	Off-Balance Sheet Items - Unconditionally Cancellable Commitments eligible for 10% Credit Conversion Factor	Notional amount of unconditionally cancellable commitments made by the bank.
10	Off-Balance Sheet Items – All Other	Notional amount of all other off-balance sheet exposures of the bank (excluding derivatives and repo-style transactions including securities lending, securities borrowing and reverse repurchase transactions)
11	Amounts Deducted from Tier 1 Capital (Report as Negative)	Regulatory deductions from Tier 1 capital. Deductions from Tier 1 capital should be calculated as per the proposed rules in the Basel III NPR. Input value as a negative number.
12	Total Leverage Exposure for Supplementary Leverage Ratio	Formula embedded in the schedule. No input required.
Data Completeness Check		
13	Leverage Exposure for Tier 1 Leverage Ratio (applicable to all banks)	Check to ensure worksheet is complete. Please ensure that "Yes" appears across all cells.
14	Leverage Exposure for Supplementary Leverage Ratio (applicable to advanced approaches institutions only)	Check to ensure worksheet is complete. Please ensure that "Yes" appears across all cells.

Planned Actions Worksheet Instructions

For the purpose of completing the Planned Actions worksheets of the Basel III and Dodd-Frank schedule, banks should capture all material planned actions that management intends to pursue to address the reforms of Basel III and the Dodd-Frank Act. Such actions might include, but are not limited to, the roll-off or sale of an existing portfolio; development/implementation of risk-weighting models; data remediation to facilitate the use of lower risk weights for existing exposures; the issuance of regulatory capital instruments; or other strategic corporate actions. Planned actions should be attributable to a specific strategy or portfolio; banks are not expected to cite period-over-period changes in the balances of exposures as a planned action unless those changes are attributable to a specific and identifiable strategy (e.g., citing "reduction in credit risk-weighted assets" would not be considered a valid planned action, but citing sale or runoff of a particular portfolio (which would have the effect of reducing credit risk-weighted assets) would be a valid planned action).

For each planned action, banks should provide a brief description of the action in the relevant field of the schedule (Column B) <u>and a more detailed description of the action in a separate attachment</u>. In addition, for each reporting period, banks should report the incremental quantitative impact of each action on:

- Common equity tier 1 capital
- Tier 1 capital
- Risk-weighted assets (RWA)
- Average Total Assets for Leverage Capital Purposes (relevant to the tier 1 leverage ratio; to be completed by all banks)
- Total Leverage Exposure for the Supplementary Leverage Ratio (to be completed by advanced approaches banks only); and
- The bank's balance sheet.

The quantitative impact of planned actions submitted by banks should represent the stand-alone, incremental immediate impact of the action relevant to the time period in which it is planned to be executed. For example, if a planned action were forecasted to reduce the bank's risk-weighted assets by $200 million as of 4Q 2013 and an additional $100 million as of 4Q 2014 (for a total reduction of $300 million), the bank should report "(200)" for 4Q 2013, "(100)" for 4Q 2014, and "0" for subsequent periods. Banks are required to factor the combined quantitative impact of all planned actions into the projections reported on all other relevant worksheets of the Basel III submission.

Banks are required to provide a detailed description of each planned action in a separate attachment(s). The description of each planned action should include:

- Discussion of how each planned action aligns with the bank's long term business strategy and risk appetite on a going concerns basis;
- Assessment of each planned action's impact on the bank's capital and funding needs, earnings, and overall risk profile;

- Assessment of market conditions and market capacity around each planned action (e.g., planned sale size and the availability and appetite of buyers and other potential sellers);
- Assessment of any potential execution risks to each planned action (e.g., contractual, accounting or structural limitations);
- Discussion of any recent transactions conducted either by the bank or by other institutions that would demonstrate or support the bank's ability to execute each planned action at the level of impact projected.

Included below are examples of other supporting documentation which should be included along with the description of each planned action:

- Detailed information on planned sales such as risk profile and size of the positions, indicative term sheets and contracts; potential buyer information; current marked to market (MTM), support for the execution price; potential associated loans, financing, or liquidity credit support arrangements; potential buy back commitments; and impact on any offsetting positions. If similar recent transactions have taken place, banks should provide information as a point of reference. Banks should also describe any challenges that may be encountered in executing the sale.
- Detailed information on planned unwinds, such as risk profile and size of the positions, profit and loss (P&L) impact at execution or in the future; funding implications; impact on any offsetting positions; and trigger of consolidation or on-boarding of the underlying assets.
- Detailed information on planned run-offs, such as risk profile and size of the positions, impact on any offsetting positions; details on trades; and maturity dates.
- Detailed information on planned hedging, such as indicative term sheets and contracts; P&L impact at execution or during life of the hedges; and impact on counterparty credit RWA.
- Detailed information on changes to risk-weighted assets calculation methodologies, such as which data or parameters would be changed, whether the firm has submitted model application to its supervisors, and remaining work to be completed and expected completion date.
- Detailed information on expanded use of clearing houses, such as types of products to be cleared and central counterparties to be used.

Banks should also provide detailed information on any alternative Basel III and Dodd-Frank action plans in the event the firm falls short of the targets outlined in the Capital Plan, and trigger events that would result in a need to pursue any alternative action plans.

DFAST-14A

The DFAST-14A Planned Action worksheet collects information on all material planned actions that management intends to pursue to address the reforms of Basel III and the Dodd-Frank Act. Banks are required to factor the combined quantitative impact of all planned actions into the projections reported on all other relevant worksheets of the Basel III submission.

Column	Heading	Description
B	Description	Brief description of the planned action.
C	Action Type	Selection from a list of available actions provided in the schedule. Banks should select the type of action that best describes the planned action.
D	Exposure Type	Selection from a list of available exposure types provided in the schedule. Banks should select the type of exposure that is most impacted by the planned action.
E	RWA Type	Selection from a list of available RWA exposure types provided in the schedule. For planned actions that have an impact on RWAs, the bank should report the type of RWA (i.e., Counterparty Credit, Other Credit, Market, or Operational) that is most impacted by the planned action.
F-BA	Projected impact (for periods Q4 2012-2017Q42017) on: Common Equity Tier 1, Tier 1, Risk-Weighted Assets (RWA), Average Total Assets for Leverage Capital Purposes, Total Leverage Exposure for Supplementary Leverage Ratio, and Balance Sheet	Projected incremental impact year-over-year on the bank's common equity tier 1 capital, Tier 1 capital, risk-weighted assets, leverage exposures and balance sheet in $Millions as of year-end. For Q4 2012 only, report the incremental impact projected quarter-over-quarter between Q3 and Q4 2012.
BB	Total Impact: Common Equity Tier 1	Formula embedded in the schedule; no input required.
BC	Total Impact: Tier 1	Formula embedded in the schedule; no input required.
BD	Total Impact: Risk-Weighted Assets (RWA)	Formula embedded in the schedule; no input required.
BE	Total Impact: Average Total Assets for Leverage Capital Purposes	Formula embedded in the schedule; no input required.
BF	Total Impact: Total Leverage Exposure for Supplementary Leverage Ratio	Formula embedded in the schedule; no input required.
BG	Total Impact: Balance Sheet	Formula embedded in the schedule; no input required.
BH	Confirm detailed description of action provided in separate attachment	Select "Yes" to confirm that your bank has provided supporting documentation to describe the nature of the planned action and key assumptions factored into the action's projected impact.