DRAFT INSTRUCTIONS FOR MARCH 2011
Reporting Instructions for Schedules A through S

# INSTRUCTIONS FOR PREPARATION OF <br> FFIEC 101 - Risk-Based Capital Reporting for Institutions <br> Subject to the Advanced Capital Adequacy Framework 

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## GENERAL INSTRUCTIONS

## Who Must Report

## A. Scope and Reporting Criteria

For purposes of this report, each bank, BHC, and savings association that applies the Advanced Capital Adequacy Framework must submit a report. For purposes of this report, the Advanced Capital Adequacy Framework ${ }^{1}$ is referred to as the "advanced approaches rules" throughout these instructions.

## B. Shifts in Reporting Status

The institutions specified above in section A must begin reporting FFIEC 101 data at the end of the first quarter in which they have begun their parallel run period. During its parallel run and the three year transitional floor periods, the institution will continue to file the regulatory capital schedule in its Call Report, FR Y-9C, or TFR, as well as the FFIEC 101.

If an opt-in institution decides that it will no longer use the advanced approaches for regulatory capital purposes, it should consult with its primary Federal supervisor before adopting another approach.
Reporting of FFIEC 101 data should continue until the primary Federal supervisor agrees that reporting is no longer necessary.

## What Must Be Reported

## C. Reporting Schedules and Instructions

The information contained in the attached reporting schedules must be completed in accordance with the instructions accompanying these schedules. The schedules and instructions are collectively referred to as FFIEC Form 101.

## D. Organization of the Instructions

These instructions cover the FFIEC 101 report schedules. They are divided into the following sections:
(1) The General Instructions that describe overall reporting requirements.
(2) Line item instructions for each schedule of the FFIEC 101.

The instructions and definitions in (1) and (2) are not necessarily self-contained; reference to the advanced approaches rules may be needed for more detailed definitions and regulatory capital treatments under the advanced approaches.

## Where to Submit the Reports

## E. Electronic Submission

[^0]All reporting institutions must submit their completed reports electronically. Reporting institutions should contact their primary Federal supervisor for procedures for electronic submission. Each bank is responsible for ensuring that the data reported each quarter reflects fully and accurately the item reporting requirements for that report date, including any changes that may be made from time to time. This responsibility cannot be transferred or delegated to software vendors, servicers, or others outside the reporting entity.

## F. Frequency of Reporting

Each reporting institution must submit a report as of the end of each quarter on a calendar year basis. The "as-of" date for each reporting period is March 31, June 30, September 30 and December 31 of each calendar year.

## G. When to Submit the Reports

During an institution's parallel run (as defined in the advanced approaches rules), the information contained in this report must be submitted to the primary Federal supervisor 60 days after the as-of date. That is, the March 31 report must be submitted by May 30, the June 30 report is due by August 29, the September 30 report is due by November 29, and the December 31 report is due by March 1 (or February 29 if a leap year) of the subsequent year. During parallel run, if the submission deadline falls on a weekend or holiday, the report must be received on the first business day after the Saturday, Sunday, or holiday. After completion of the parallel run, the submission date for each report will be the same date as required by the Call Report, FR Y-9C and TFR for each bank, BHC, and savings association, respectively.

The reports are due by the end of the reporting day on the submission date (5:00 P.M.).

## H. Preparation of the Reports

Each reporting institution must prepare and file the FFIEC 101 report in accordance with the instructions provided. All reports must be prepared in a consistent manner.

Questions and requests for interpretations of matters appearing in any part of the instructions should be addressed to the reporting entity's primary Federal supervisor. Regardless of whether a reporting entity requests an interpretation of a matter appearing in these instructions, when the reporting entity's primary Federal supervisor's interpretation of the instructions differs from that of the reporting entity, the Federal supervisor may require the reporting entity to prepare its FFIEC 101 report in accordance with its interpretation and may require amended filings for previously submitted reports.

## I. Rounding

For banking organizations with total assets of less than $\$ 10$ billion, all dollar amounts must be reported in thousands, with the figures rounded to the nearest thousand. Items less than $\$ 500$ will be reported as zero. For banking organizations with total assets of $\$ 10$ billion or more, all dollar amounts may be reported in thousands, but each banking organization, at its option, may round the figures reported to the nearest million, with zeroes reported in the thousands column. For banking organizations exercising this option, amounts less than $\$ 500,000$ will be reported as zero.

Report to two decimal places any "weighted averages" required to be reported in this report, except as otherwise noted.

## J. Negative Entries

Except as indicated in the reporting instructions for specific reporting items, negative entries are generally not appropriate in this report.

## K. Confidentiality

Every reporting item on the report will be granted confidential treatment during an institution's parallel run period. For reports that an institution files after its parallel run period, all items reported on Schedules A and B (and items 1 and 2 only of the operational risk schedule) will be available to the public. All other items will be confidential. However, a reporting institution may request confidential treatment for all or some of the portions of this report that will be made available to the public after an institution's parallel run period if the institution is of the opinion that disclosure of specific commercial or financial information in the report would likely result in substantial harm to its competitive position, or that disclosure of the submitted information would result in unwarranted invasion of personal privacy. In certain limited circumstances the primary Federal supervisor may approve confidential treatment of some or all of the items requested if the institution has clearly provided a compelling justification for the request. A request for confidential treatment must be submitted in writing prior to the electronic submission of the report. The request must discuss in writing the justification for which confidentiality is requested and must demonstrate the specific nature of the harm that would result from public release of the information. Merely stating that competitive harm would result or that information is personal is not sufficient. Information for which confidential treatment is requested may subsequently be released by the primary Federal supervisors if it determines that the disclosure of such information is in the public interest.

## L. Verification and Signatures

Verification. All additions and subtractions should be double-checked before reports are submitted. Totals and subtotals in supporting materials should be cross-checked to any applicable corresponding items elsewhere in the reports.

Signatures. The report must be signed by a senior officer of the reporting entity who can attest that the risk estimates and other information submitted in this report meet the requirements set forth in the advanced approaches rules and the reporting instructions of this report. The senior officer may be the chief financial officer, the chief risk officer, or equivalent senior officer. The cover page of this report form should be used to fulfill the signature and attestation requirement and should be attached to the printout placed in the reporting institution's files.

## M. Amended Reports

The agencies may require the filing of amended reports if reports as previously submitted contain significant errors. In addition, a reporting institution must file an amended report when it 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.

## N. Retention of Reports

In general, a reporting entity should maintain in its files a signed and attested record of its completed FFIEC 101 report, including any amended reports, and the related work papers and supporting documentation for five years after the report date, unless there are applicable state requirements that mandate a longer retention time.

## O. Consolidation

Exposure amounts and risk weighted asset amounts should be reported on a consolidated basis using the same consolidation rules applied to the bank's Call Report, FR Y-9C, or TFR.

## Schedule A - ADVANCED RISK-BASED CAPITAL

## General Instructions

Definitions. Apply the definitions provided in the advanced approaches rules for the following terms: (1) eligible credit reserves; (2) expected credit losses (ECL); (3) gain-on-sale; (4) credit risk weighted assets; (5) tier 1 capital; (6) tier 2 capital; (7) total risk-weighted assets; and (8) total qualifying capital.

Tier 2 carryover is any amount deductible from tier 2 capital that exceeds the banking organization’s actual tier 2 capital.

## Item Instructions

## Item No. Caption and Instructions

## Tier 1 Capital

1

6b Qualifying restricted core capital elements (other than cumulative perpetual preferred stock). NOTE: Item 6b is only to be reported by bank holding companies (BHCs). Report in this item the amount reported on Schedule HC-R of the FR Y-9C. BHCs should include in this item the total amounts reported in item 6.b of Schedule HC-R of the FR Y-9C.

6c Qualifying mandatory convertible preferred securities of internationally active bank holding companies. NOTE: Item 6c is only to be reported by bank holding companies (BHCs). Report in this item the amount reported on Schedule HC-R of the FR Y-9C. BHCs should include in this item the total amounts reported in item 6.c of Schedule HC-R of the FR Y-9C.

7a LESS: Disallowed goodwill and other disallowed intangible assets. Report in this item the amount reported on Schedule RC-R of the Call Report (FFIEC 031 or 041), Schedule CCR of the Thrift Financial Report, or Schedule HC-R of the BHC FR Y-9C.

7b LESS: Cumulative change in fair value of all financial liabilities accounted for under a fair value option that is included in retained earnings and is attributable to changes in the bank's own creditworthiness. Report in this item the amount reported on Schedule RC-R of the Call Report (FFIEC 031 or 041), Schedule CCR of the Thrift Financial Report, or Schedule HC-R of the BHC FR Y-9C.

LESS: Other securitization deductions. Report in this item 50\% of all non-gain-on-sale securitization exposures required to be deducted from capital under the advanced approaches rules.

A banking organization may calculate any deductions from regulatory capital with respect to a securitization exposure (including after-tax gain-on-sale) net of any deferred tax liabilities associated with the exposure.

10a LESS: Insurance underwriting subsidiaries’ minimum regulatory capital (for BHCs only). For BHCs with consolidated insurance underwriting subsidiaries that are functionally regulated by a state insurance regulator (or subject to comparable supervision and regulatory capital requirements in a non-U.S. jurisdiction), report in this item 50\% of the insurance underwriting subsidiary's minimum regulatory capital requirement as determined by its functional (or equivalent) regulator, plus any tier 2 carryover. For U.S. regulated insurance subsidiaries, this amount is generally 200 percent of the subsidiary's Authorized Control Level as established by the appropriate state insurance regulator.

10b Other additions to (deductions from) Tier 1 capital. Report the amount of any additions to or deductions from tier 1 capital based on the capital guidelines of the banking organization's primary Federal supervisor that are not included in items 1 through 10a above. If the amount to be reported in this item is a net deduction, enclose the amount in parentheses.

BHCs should include in this item any "excess core capital elements" that would have otherwise been excluded from Tier 1 capital under the new limits put in place by the Federal Reserve effective on March 31, 2011 (but still includable in Tier I capital under the existing limits). See the instructions for reporting "qualifying restricted core capital elements in Tier 1 capital" on Schedule HC-R of the FR Y-9C.

Savings associations should include all deductions from Tier 1 Capital for Investments in and Advances to Nonincludable Subsidiaries on Schedule CCR of the Thrift Financial Report.

Banks with financial subsidiaries should exclude from this item adjustments to tier 1 capital for the deconsolidation of such subsidiaries. Adjustments to tier 1 capital for financial subsidiaries should be reported in item 23a below.

Tier 1 capital. Report the sum of items 8 and 10b, less items 9a through 10a. If a bank has no financial subsidiaries, the amount reported in this item is the numerator of the bank's tier 1 risk-based capital ratio.

## Tier 2 Capital

12 Qualifying subordinated debt and redeemable preferred stock. Report in this item the amount reported on Schedule RC-R of the bank Call Report (FFIEC 031 or 041) or Schedule CCR of the Thrift Financial Report. For BHCs, report in this item using the instructions for Schedule HC-R, item 12, of the FR Y-9C.

Qualifying cumulative perpetual preferred stock includible in Tier 2 capital. Report in this item the amount reported on Schedule RC-R of the bank Call Report (FFIEC 031 or 041) or Schedule CCR of the Thrift Financial Report. For BHCs, report in this item using the instructions for Schedule HC-R, item 13, of the FR Y-9C.

14 Excess of eligible credit reserves over total expected credit losses (up to $0.60 \%$ of credit risk-weighted assets). If eligible credit reserves exceed total ECL, then report in this item the amount by which eligible credit reserves exceed ECL, up to a maximum amount of 0.60 percent of credit-risk-weighted assets.

15 Unrealized gains on available-for-sale equity securities includible in Tier 2 capital. Report in this item the amount reported on Schedule RC-R of the bank Call Report (FFIEC 031 or 041), Schedule CCR of the Thrift Financial Report, or Schedule HC-R of the BHC FR Y-9C.

16a LESS: Insurance underwriting subsidiaries’ minimum regulatory capital (for BHCs only). Report in this item $50 \%$ of the insurance underwriting subsidiary's minimum regulatory capital requirement as described in item 10a above. If the amount deductible from tier 2 capital exceeds the BHC's actual tier 2 capital, the BHC must report the excess in item 10a above.

16b Other additions to (deductions from) Tier 2 capital. Report the amount of any items that qualify for inclusion in tier 2 capital based on the capital guidelines of the banking organization's primary Federal supervisor that are not included in items 12 through 16a, above.

## Adjustments to Tier 2 capital

17a LESS: Shortfall of eligible credit reserves below total expected credit losses (up to the lower of 50 percent of the shortfall or amount of tier 2 capital). Report in the item 50 percent of any shortfall of eligible credit reserves below total expected credit losses as described in item 9c above. If the amount exceeds the banking organization's actual tier 2 capital, the banking organization must report the excess in item 9c above.

17b LESS: Certain failed capital markets transactions (up to the lower of $50 \%$ of deductions from such failed transactions or amount of tier 2 capital). Report in this item $50 \%$ of certain failed capital markets transactions as described in item 9e above. If the amount exceeds the banking organization's actual tier 2 capital, the banking organization must report the excess in item 9e above.

17c LESS: Other securitization deductions (up to the lower of $50 \%$ of deductions or amount of tier 2 capital). Report in this item 50\% of all non-gain-on-sale securitization exposures required to be deducted from capital under the advanced approaches rules.

18 Tier 2 capital. Report the sum of items 12 through 15 and 16b, less items 16a and items 17a through 17c.

19

Allowable Tier 2 capital. Report the amount of the banking organization's allowable tier 2 capital. The maximum amount of tier 2 capital that is allowable in the banking organization's qualifying total capital is 100 percent of tier 1 capital. The amount reported in this item must be the lesser of item 11and item 18 if item 11 is a positive number. If item 11 is a negative number, report a zero in this item.

Tier 3 capital allocated for market risk. Report in this item the amount reported on Schedule RC-R of the bank Call Report (FFIEC 031 or 041) or Schedule HC-R of the BHC FR Y-9C.

LESS: Deductions for total risk-based capital. Report in this item the amount reported on Schedule RC-R of the bank Call Report (FFIEC 031 or 041), Schedule CCR of the Thrift Financial Report, or Schedule HC-R of the BHC FR Y-9C.

Total risk-based capital. Report the sum of items 11, 19, and 20, less item 21. The amount reported in this item is the numerator of the banking organization's total riskbased capital ratio.

## Adjustments for financial subsidiaries

Items 23a through 24 and column A of items 25 and 26 are only to be completed by banks with "financial subsidiaries" as defined by the Gramm-Leach-Bliley Act of 1999.

23a $\quad$ Adjustment to Tier 1 capital. Report in this item the amount reported on Schedule RC-R of the bank Call Report (FFIEC 031 or 041).

23b Adjustment to total risk-based capital. Report in this item the amount reported on Schedule RC-R of the bank Call Report (FFIEC 031 or 041).

Adjustment to risk-weighted assets. Report in this item the amount reported on Schedule RC-R of the bank Call Report (FFIEC 031 or 041).

Tier 1 risk-based capital ratio. Report the banking organization's tier 1 risk-based capital ratio as a percentage. Column $B$ is to be completed by all banking organizations. The ratio for column $B$ is determined by dividing item 11 by total risk weighted assets (from Schedule B, item 33).

Only banks with financial subsidiaries must also complete column A. The ratio for column A is determined by dividing item 11 (minus item 23a) by adjusted total risk weighted assets (Schedule B, item 33 minus item 24 of this schedule).

Total risk-based capital ratio. Report the banking organization's total risk-based capital ratio as a percentage. Column $B$ is to be completed by all banking organizations. The ratio for column $B$ is determined by dividing item 22 by total risk weighted assets (from Schedule B, item 33).

Only banks with financial subsidiaries must also complete column A. The ratio for column A is determined by dividing item 22 (minus item 23b) by adjusted total risk weighted assets (Schedule B, item 33 minus item 24 of this schedule).

Eligible credit reserves. Report the amount of eligible credit reserves as defined in the advanced approaches rules.

Total expected credit losses. Report the amount of total expected credit losses (ECL). This amount should equal the sum of items 1 through 16 in column H of Schedule B.

Schedule B - Summary Risk-Weighted Asset Information for Banks Approved to Use Advanced Internal Ratings-Based and Advanced Measurement Approaches for Regulatory Capital Purposes

## General Instructions

Report the information required for Schedule B using the definitions provided in the advanced approaches rules.

## Item Instructions

## Item No. Caption and Instructions

Wholesale Exposures

Corporate
In column A, the weighted average probability of default is derived from cell A-13 of Schedule C -Wholesale Exposure - Corporate.

In column B, the total balance sheet amount is derived from cell C-13 of Schedule C Wholesale Exposure - Corporate.

In column C , the total dollar volume of undrawn exposures is derived from cell $\mathrm{D}-13$ of Schedule C -Wholesale Exposure - Corporate.

In column D , the total dollar volume of exposure at default is derived from cell E -13 of Schedule C- Wholesale Exposure - Corporate.

In column E, the weighted average effective maturity in years is derived from cell F-13 of Schedule C - Wholesale Exposure - Corporate.

In column F, the weighted average loss given default is derived from cell $\mathrm{H}-13$ of Schedule C -Wholesale Exposures - Corporate.

In column G, the total amount of risk weighted assets is derived from cell K-13 of Schedule C - Wholesale Exposure - Corporate.

In column H , the total dollar volume of expected credit loss is derived from cell L-13 of Schedule C - Wholesale Exposure - Corporate.

- Bank

In column A, the weighted average probability of default is derived from cell A-13 of Schedule D - Wholesale Exposure - Bank.

In column B, the total balance sheet amount is derived from cell C-13 of Schedule D Wholesale Exposure - Bank.

In column C, the total dollar volume of undrawn exposures is derived from cell D-13 of Schedule D-Wholesale Exposure - Bank.

In column D , the total dollar volume of exposure at default is derived from cell E-13 of Schedule D -Wholesale Exposure - Bank.

In column E, the weighted average effective maturity in years is derived from cell F-13 of Schedule D-Wholesale Exposure - Bank.

In column F, the weighted average loss given default is derived from cell $\mathrm{H}-13$ of Schedule D-Wholesale Exposures - Bank.

In column G, the total amount of risk weighted assets is derived from cell J -13 of Schedule D - Wholesale Exposure - Bank.

In column H , the total dollar volume of expected credit loss is derived from cell $\mathrm{K}-13$ of Schedule D - Wholesale Exposure - Bank.

Sovereign
In column A, the weighted average probability of default is derived from cell A-13 of Schedule E - Wholesale Exposure - Sovereign.

In column B, the total balance sheet amount is derived from cell C-13 of Schedule EWholesale Exposure - Sovereign.

In column C, the total dollar volume of undrawn exposures is derived from cell D-13 of Schedule E - Wholesale Exposure - Sovereign.

In column D , the total dollar volume of exposure at default is derived from cell $\mathrm{E}-13$ of Schedule E - Wholesale Exposure - Sovereign.

In column E, the weighted average effective maturity in years is derived from cell F-13 of Schedule E -Wholesale Exposure - Sovereign.

In column F, the weighted average loss given default is derived from cell $\mathrm{H}-13$ of Schedule E - Wholesale Exposures - Sovereign.

In column G, the total amount of risk weighted assets is derived from cell J-13 of Schedule E - Wholesale Exposure - Sovereign.

In column H , the total dollar volume of expected credit loss is derived from cell $\mathrm{K}-13$ of Schedule E- Wholesale Exposure - Sovereign.

Income-Producing Real Estate (IPRE)
In column A, the weighted average probability of default is derived from cell A-13 of Schedule F - Wholesale Exposure - IPRE.

In column B, the total balance sheet amount is derived from cell C-13 of Schedule F Wholesale Exposure - IPRE.

In column C, the total dollar volume of undrawn exposures is derived from cell D-13 of Schedule F - Wholesale Exposure - IPRE.

In column D, the total dollar volume of exposure at default is derived from cell E-13 of Schedule F - Wholesale Exposure - Construction IPRE.

In column E, the weighted average effective maturity in years is derived from cell F-13 of Schedule F - Wholesale Exposure - IPRE.

In column F, the weighted average loss given default is derived from cell $\mathrm{H}-13$ of Schedule F -Wholesale Exposures - IPRE.

In column G , the total amount of risk weighted assets is derived from cell $\mathrm{K}-13$ of Schedule F - Wholesale Exposure - IPRE.

In column H , the total dollar volume of expected credit loss is derived from cell L-13 of Schedule F - Wholesale Exposure - IPRE.

## High-Volatility Commercial Real Estate (HVCRE)

In column A, the weighted average probability of default is derived from cell A-13 of Schedule G - Wholesale Exposure - HVCRE.

In column B, the total balance sheet amount is derived from cell C-13 of Schedule G Wholesale Exposure - HVCRE.

In column C, the total dollar volume of undrawn exposures is derived from cell D-13 of Schedule G - Wholesale Exposure - HVCRE.

In column D, the total dollar volume of exposure at default is derived from cell E-13 of Schedule G - Wholesale Exposure - HVCRE.

In column E, the weighted average effective maturity in years is derived from cell F-13 of Schedule G - Wholesale Exposure - HVCRE.

In column F, the weighted average loss given default is derived from cell $\mathrm{H}-13$ of Schedule G - Wholesale Exposures - HVCRE.

In column G , the total amount of risk weighted assets is derived from cell $\mathrm{K}-13$ of Schedule G - Wholesale Exposure - HVCRE.

In column H , the total dollar volume of expected credit loss is derived from cell L-13 of Schedule G - Wholesale Exposure - HVCRE.

Eligible Margin Loans, Repo-Style Transactions and OTC Derivatives With CrossProduct Netting - EAD Adjustment Method

In column A, the weighted average probability of default is derived from cell A-14 of Schedule H - Wholesale Exposure - Eligible margin loans, repo-style transactions and OTC Derivatives with Cross Product Netting.

In column D, the total dollar volume of exposure at default is derived from cell C-14 of Schedule H - Wholesale Exposure - Eligible margin loans, repo-style transactions and OTC Derivatives with Cross Product Netting.

In column E, the weighted average effective maturity in years is derived from cell B-14 of Schedule H - Wholesale Exposure - Eligible margin loans, repo-style transactions and OTC Derivatives with Cross Product Netting.

In column F, the weighted average loss given default is derived from cell D-14 of Schedule H - Wholesale Exposures - Eligible margin loans, repo-style transactions and OTC Derivatives with Cross Product Netting.

In column G, the total amount of risk weighted assets is derived from cell E-14 of Schedule H - Wholesale Exposure - Eligible margin loans, repo-style transactions and OTC Derivatives with Cross Product Netting.

In column H , the total dollar volume of expected credit loss is derived from cell F-14 of Schedule H - Wholesale Exposure - Eligible margin loans, repo-style transactions and OTC Derivatives with Cross Product Netting.

Eligible Margin Loans, Repo-Style Transactions and OTC Derivatives With CrossProduct Netting - Collateral Reflected in LGD

In column A, the weighted average probability of default is derived from cell G-14 of Schedule H - Wholesale Exposure - Eligible margin loans, repo-style transactions and OTC Derivatives with Cross Product Netting.

In column D, the total dollar volume of exposure at default is derived from cell I-14 of Schedule H - Wholesale Exposure - Eligible margin loans, repo-style transactions and OTC Derivatives with Cross Product Netting.

In column E, the weighted average effective maturity in years is derived from cell $\mathrm{H}-14$ of Schedule H - Wholesale Exposure - Eligible margin loans, repo-style transactions and OTC Derivatives with Cross Product Netting.

In column F, the weighted average loss given default is derived from cell J-14 of Schedule H - Wholesale Exposures - Eligible margin loans, repo-style transactions and OTC Derivatives with Cross Product Netting.

In column G, the total amount of risk weighted assets is derived from cell K-14 of Schedule H - Wholesale Exposure - Eligible margin loans, repo-style transactions and OTC Derivatives with Cross Product Netting.

In column H , the total dollar volume of expected credit loss is derived from cell L-14 of Schedule H - Wholesale Exposure - Eligible margin loans, repo-style transactions and OTC Derivatives with Cross Product Netting.

In column A, the weighted average probability of default is derived from cell A-14 of Schedule I - Wholesale Exposure - Eligible margin loans, repo-style transactions - No Cross Product Netting.

In column D, the total dollar volume of exposure at default is derived from cell C-14 of Schedule I - Wholesale Exposure - Eligible margin loans, repo-style transactions - No Cross Product Netting.

In column E, the weighted average effective maturity in years is derived from cell B-14 of Schedule I - Wholesale Exposure - Eligible margin loans, repo-style transactions - No Cross Product Netting.

In column F, the weighted average loss given default is derived from cell D-14 of Schedule I - Wholesale Exposures - Eligible margin loans, repo-style transactions - No Cross Product Netting.

In column G, the total amount of risk weighted assets is derived from cell E-14 of Schedule I - Wholesale Exposure - Eligible margin loans, repo-style transactions - No Cross Product Netting.

In column H , the total dollar volume of expected credit loss is derived from cell F-14 of Schedule I - Wholesale Exposure - Eligible margin loans, repo-style transactions - No Cross Product Netting.

Eligible Margin Loans, Repo-Style Transactions -- No Cross-Product Netting - Collateral Reflected in LGD

In column A, the weighted average probability of default is derived from cell G-14 of Schedule I - Wholesale Exposure - Eligible margin loans, repo-style transactions - No Cross Product Netting.

In column D, the total dollar volume of exposure at default is derived from cell I-14 of Schedule I - Wholesale Exposure - Eligible margin loans, repo-style transactions - No Cross Product Netting.

In column E, the weighted average effective maturity in years is derived from cell $\mathrm{H}-14$ of Schedule I - Wholesale Exposure - Eligible margin loans, repo-style transactions - No Cross Product Netting.

In column F, the weighted average loss given default is derived from cell J-14 of Schedule I - Wholesale Exposures - Eligible margin loans, repo-style transactions - No Cross Product Netting.

In column G, the total amount of risk weighted assets is derived from cell K-14 of Schedule I - Wholesale Exposure - Eligible margin loans, repo-style transactions - No Cross Product Netting.

In column H, the total dollar volume of expected credit loss is derived from cell L-14 of Schedule I - Wholesale Exposure - Eligible margin loans, repo-style transactions - No Cross Product Netting.

OTC Derivatives - No Cross-Product Netting - EAD Adjustment Method
In column A, the weighted average probability of default is derived from cell A-13 of Schedule J - Wholesale Exposure - OTC Derivatives - No Cross Product Netting.

In column D , the total dollar volume of exposure at default is derived from cell $\mathrm{C}-13$ of Schedule J - Wholesale Exposure - OTC Derivatives - No Cross Product Netting.

In column E, the weighted average effective maturity in years is derived from cell B-13 of Schedule J - Wholesale Exposure - OTC Derivatives - No Cross Product Netting.

In column F, the weighted average loss given default is derived from cell D-13 of Schedule J - Wholesale Exposures - OTC Derivatives - No Cross Product Netting.

In column G, the total amount of risk weighted assets is derived from cell E-13 of Schedule J - Wholesale Exposure - OTC Derivatives - No Cross Product Netting.

In column H , the total dollar volume of expected credit loss is derived from cell F -13 of Schedule J - Wholesale Exposure - OTC Derivatives - No Cross Product Netting.
$\underline{\text { OTC Derivatives - No Cross-Product Netting - Collateral Reflected in LGD }}$
In column A, the weighted average probability of default is derived from cell G-13 of Schedule J - Wholesale Exposure - OTC Derivatives - No Cross Product Netting.

In column D , the total dollar volume of exposure at default is derived from cell I-13 of Schedule J - Wholesale Exposure - OTC Derivatives - No Cross Product Netting.

In column E, the weighted average effective maturity in years is derived from cell $\mathrm{H}-13$ of Schedule J - Wholesale Exposure - OTC Derivatives - No Cross Product Netting.

In column F, the weighted average loss given default is derived from cell J-13 of Schedule J - Wholesale Exposures - OTC Derivatives - No Cross Product Netting.

In column $G$, the total amount of risk weighted assets is derived from cell $\mathrm{K}-13$ of Schedule J - Wholesale Exposure - OTC Derivatives - No Cross Product Netting.

In column H , the total dollar volume of expected credit loss is derived from cell L-13 of Schedule J - Wholesale Exposure - OTC Derivatives - No Cross Product Netting.

## Retail Exposures

12 Residential Mortgage - Closed-end First Lien Exposures
In column A, the weighted average probability of default is derived from cell A-16 of Schedule K - Retail Exposure - Residential Mortgage - Closed-end First Lien Exposures.

In column B , the total balance sheet amount is derived from cell $\mathrm{C}-16$ of Schedule K Retail Exposure - Residential Mortgage - Closed-end First Lien Exposures.

In column C, the total dollar volume of undrawn exposures is derived from cell D-16 of Schedule K - Retail Exposure - Residential Mortgage - Closed-end First Lien Exposures.

In column D , the total dollar volume of exposure at default is derived from cell E-16 of Schedule K - Retail Exposure - Residential Mortgage - Closed-end First Lien Exposures.

In column F, the weighted average loss given default is derived from cell G-16 of Schedule K - Retail Exposure - Residential Mortgage - Closed-end First Lien Exposures.

In column G , the total amount of risk weighted assets is derived from cell $\mathrm{H}-16$ of Schedule K - Retail Exposure - Residential Mortgage - Closed-end First Lien Exposures.

In column H , the total dollar volume of expected credit loss is derived from cell I-16 of Schedule K - Retail Exposure - Residential Mortgage - Closed-end First Lien Exposures.

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Residential Mortgage - Closed-end Junior Lien Exposures
In column A, the weighted average probability of default is derived from cell A-16 of Schedule L - Retail Exposure - Residential Mortgage - Closed-end Junior Lien Exposures.

In column B, the total balance sheet amount is derived from cell C-16 of Schedule L Retail Exposure - Residential Mortgage - Closed-end Junior Lien Exposures.

In column C, the total dollar volume of undrawn exposures is derived from cell D-16 of Schedule L - Retail Exposure - Residential Mortgage - Closed-end Junior Lien Exposures.

In column D , the total dollar volume of exposure at default is derived from cell E-16 of Schedule L - Retail Exposure - Residential Mortgage - Closed-end Junior Lien Exposures.

In column F, the weighted average loss given default is derived from cell G-16 of Schedule L - Retail Exposure - Residential Mortgage - Closed-end Junior Lien Exposures.

In column G, the total amount of risk weighted assets is derived from cell $\mathrm{H}-16$ of Schedule L - Retail Exposure - Residential Mortgage - Closed-end Junior Lien Exposures.

In column H , the total dollar volume of expected credit loss is derived from cell I-16 of Schedule L - Retail Exposure - Residential Mortgage - Closed-end Junior Lien Exposures.

Residential Mortgage - Revolving Exposures

In column A, the weighted average probability of default is derived from cell A-16 of Schedule M - Retail Exposure - Residential Mortgage - Revolving Exposures.

In column B, the total balance sheet amount is derived from cell C-16 of Schedule M Retail Exposure - Residential Mortgage - Revolving Exposures.

In column C, the total dollar volume of undrawn exposures is derived from cell D-16 of Schedule M - Retail Exposure - Residential Mortgage - Revolving Exposures.

In column D, the total dollar volume of exposure at default is derived from cell E-16 of Schedule M - Retail Exposure - Residential Mortgage - Revolving Exposures.

In column F, the weighted average loss given default is derived from cell G-16 of Schedule M - Retail Exposure - Residential Mortgage - Revolving Exposures.

In column G , the total amount of risk weighted assets is derived from cell $\mathrm{H}-16$ of Schedule M - Retail Exposure - Residential Mortgage - Revolving Exposures.

In column H , the total dollar volume of expected credit loss is derived from cell I-16 of Schedule M - Retail Exposure - Residential Mortgage - Revolving Exposures.

Qualifying Revolving Exposures
In column A, the weighted average probability of default is derived from cell A-16 of Schedule N - Retail Exposure - Qualifying Revolving Exposures.

In column B, the total balance sheet amount is derived from cell C-16 of Schedule N Retail Exposure - Qualifying Revolving Exposures.

In column C, the total dollar volume of undrawn exposures is derived from cell D-16 of Schedule N - Retail Exposure - Qualifying Revolving Exposures.

In column D, the total dollar volume of exposure at default is derived from cell E-16 of Schedule N - Retail Exposure - Qualifying Revolving Exposures.

In column F, the weighted average loss given default is derived from cell G-16 of Schedule N -Retail Exposure - Qualifying Revolving Exposures.

In column G , the total amount of risk weighted assets is derived from cell $\mathrm{H}-16$ of Schedule N - Retail Exposure - Qualifying Revolving Exposures.

In column H , the total dollar volume of expected credit loss is derived from cell I-16 of Schedule N - Retail Exposure - Qualifying Revolving Exposures.

Other Retail Exposures

In column A, the weighted average probability of default is derived from cell A-16 of Schedule O - Retail Exposure - Other Retail Exposures.

In column B, the total balance sheet amount is derived from cell C-16 of Schedule O Retail Exposure - Other Retail Exposures.

In column C, the total dollar volume of undrawn exposures is derived from cell D-16 of Schedule O - Retail Exposure - Other Retail Exposures.

In column D , the total dollar volume of exposure at default is derived from cell E-16 of Schedule O - Retail Exposure - Other Retail Exposures.

In column F, the weighted average loss given default is derived from cell G-16 of Schedule O - Retail Exposure - Other Retail Exposures.

In column G , the total amount of risk weighted assets is derived from cell $\mathrm{H}-16$ of Schedule O - Retail Exposure - Other Retail Exposures.

In column H , the total dollar volume of expected credit loss is derived from cell I-16 of Schedule O - Retail Exposure - Other Retail Exposures.

## Securitization Exposures

17 Subject to Ratings-based Approach
In column B, the total amount of securitization exposures subject to the Ratings-based Approach is derived from cell A-5 of Schedule P - Securitization Exposures Subject to the Ratings-based or Internal Assessment Approaches.

In column G, report the total amount of risk weighted assets of securitization exposures subject to the Ratings-based Approach.

Subject to Internal Assessment Approach
In column B , the total amount of securitization exposures subject to the Internal Assessment Approach is derived from cell B-5 of Schedule P - Securitization Exposures Subject to the Ratings-based or Internal Assessment Approaches.

In column $G$, report the total amount of risk weighted assets of securitization exposures subject to the Internal Assessment Approach. Note that the sum of G-17 and G-18 of this schedule should equal the amount reported in cell C-5 of Schedule P - Securitization Exposures Subject to the Ratings-based or Internal Assessment Approaches.

Subject to the Supervisory Formula Approach
In column B , the total amount of securitization exposures subject to the Supervisory Formula Approach is derived from cell A-3 of Schedule Q - Securitization Detail Schedule.

In column $G$, the total amount of risk weighted assets of securitization exposures outstanding subject to the Supervisory Formula Approach is derived from cell B-3 of Schedule Q - Securitization Detail Schedule.

Investors' Interest in Securitizations

In column G, the total amount of risk weighted assets for investors' interest in securitizations is derived. This amount should equal the sum of cells B-5 and B-6 of Schedule Q - Securitization Detail Schedule.

## Equity Exposures

21 Simple Risk Weight Method (SRWA): In column G, the total amount of risk weighted assets for equity exposures subject to the SRWA plus investment funds is derived from cell B-16 of Schedule R - Equity Exposures. Complete only if the SRWA is used.

29 Assets Subject to the General Risk-Based Capital Requirements: In column G, report risk-weighted assets subject to the merger and acquisition transitional arrangements as described in section 24 of the advanced approaches rules.

Excess Eligible Credit Reserves Not Included in Tier 2 Capital: In column G, report excess eligible credit reserves not included in tier 2 capital, consistent with paragraph (a)(2) of section 13 of the advanced approaches rules.

Market Risk Equivalent Assets: In column G, report total Market Risk Equivalent Assets.

Operational Risk: In column G, the amount of risk-weighted assets for operational risk is derived from the product of line 1 of Schedule S - Operational Risk and 12.5.

Total: In column G, report the sum of cells G-28, G-29, G-31, and G-32 minus cell G-30 above.

## Schedules C through G - Wholesale Exposures

## General Instructions

Definitions. Apply the definitions provided in the advanced approaches rules for the following terms: (1) probability of default (PD); (2) loss given default (LGD); (3) exposure at default (EAD); (4) effective maturity (M); (5) expected credit loss (ECL); (6) guarantee; (7) credit derivatives; (8) obligor; (9) credit risk mitigant; (10) eligible margin loan; (11) eligible purchased wholesale exposure; (12) high volatility commercial real estate (HVCRE); (13) multilateral development bank; (14) obligor; (15) repo-style transaction; (16) sovereign exposure; and (17) wholesale exposure.

The PD substitution approach and the LGD adjustment approach are described in section 33 of the advanced approaches rules. The double default treatment is described in section 34 of the advanced approaches rules.

Weighted Averages. Weighted average obligor PD as used in this section is calculated by: (1) determining the obligors and their exposures that fall within each of the PD ranges indicated, (2) multiplying each obligor's PD by its total EAD, (3) summing the products from step (2) for all exposures within each PD range, and (4) dividing the summed products from step (3) by the sum of the EADs of all exposures in the same PD range.

Weighted Average LGD without effects of guarantees and credit derivatives, but with effect of collateral as used in this section is calculated by: (1) determining the obligors and their exposures that fall within each of the PD ranges indicated, (2) multiplying each exposure's LGD before considering effects of guarantees and credit derivatives, but after considering collateral by its EAD, (3) summing the products from step (2) for all exposures within each PD range, and (4) dividing the summed products from step (3) by the sum of the EADs of all exposures in the same PD range.

Weighted average LGD with effects of guarantees, credit derivatives and collateral as used in this section is calculated by: (1) determining the obligors and their exposures that fall within each of the PD ranges indicated, (2) multiplying each exposure's LGD with effects of credit risk mitigants (guarantees, credit derivatives and collateral) by its EAD, (3) summing the products from step (2) for all exposures within each PD range, and (4) dividing the summed products from step (3) by the sum of the EADs of all exposures in the same PD range.

Weighted average M as used in this section is calculated by: (1) determining the obligors and their exposures that fall within each of the PD ranges indicated, (2) multiplying each exposure's estimated M by its EAD, (3) summing the products from step (2) for all exposures within each PD range, and (4) dividing the summed products from step (3) by the sum of the EADs of all exposures in the same PD range.

Exposure Categorization. The underlying obligor should be used as the basis for determining on which wholesale schedule to report an exposure. If the bank does not assign an obligor PD, then the bank should use the guarantor as the basis for determining on which schedule to report an exposure. The bank should also use the guarantor PD as the basis for assigning the exposure to the appropriate supervisory PD band.

Treatment of Eligible Purchased Wholesale Exposures. Consistent with paragraph (d)(4) of section 31 of the advanced approaches rules, reporting of eligible purchased wholesale exposures should be based on segment-level risk estimates for PD, LGD, EAD, M, and ECL.

## Schedule C - Wholesale Exposures - Corporate

Report all Wholesale Exposures - Corporate, which include all wholesale exposures as defined in the advanced approaches rules, except those which are to be specifically included in the Wholesale Exposures - Bank (Schedule D), Wholesale Exposures - Sovereign (Schedule E), Wholesale Exposures - Income Producing Real Estate (Schedule F), Wholesale Exposures - High Volatility Commercial Real Estate (Schedule G), or Wholesale Exposures - Eligible Margin Loans, Repo-Style Transactions, or OTC Derivatives schedules (Schedules H through I). Include in this schedule government-related entities whose exposures do not have the full faith and credit support of a sovereign such as the Federal Home Loan Bank or the Federal Agricultural Mortgage Corporation.

## Item No. Instructions

1-12 In column A, report the weighted average obligor PD of exposures categorized as wholesale corporate where the obligor PD falls within the indicated PD range. Cell A-12 equals 100 .

In column B, report the total number of obligors included in this row for column A.
In column C, report the total balance sheet amount of exposures included in this row for column A. Do not report any undrawn amounts in this column.

In column D, report the total dollar value of available but undrawn balance of exposures (for example, from loan commitments, lines of credit, trade-related letters of credit, or transaction-related contingencies) included in this row for column A.

In column E, report the total EAD of exposures included in this row for column A .
In column F , report the weighted average M in years of exposures included in this row for column A.

In column G, report the weighted average LGD of exposures included in this row for column A. In estimating LGD, include the effects of collateral but not the effects of guarantees or credit derivatives.

In column H , report the weighted average LGD of exposures included in this row for column A. In estimating LGD, include the effects of credit risk mitigants (guarantees, credit derivatives and collateral).

In column I, report the estimated benefit arising from the application of the PD substitution approach or the LGD adjustment approach to exposures included in this row, expressed in terms of a reduction in risk-weighted assets in dollars but only in cases where risk is mitigated through the use of eligible credit derivatives. The estimate can be derived by deducting the aggregated risk-weighted assets that would have resulted from the application of the IRB Wholesale risk-weight formula to all underlying obligations contained in this row if the PD Substitution approach and LGD Adjustment approach had not been applied from the amount in column K of this row (this resulting amount would normally be negative). No estimate is required in cases where risk is mitigated through the use of eligible guarantees.

In column J , report the estimated benefit arising from the application of the double default treatment to exposures included in this row, expressed in terms of a reduction in risk-weighted assets in dollars. The estimate can be derived by deducting the aggregated risk-weighted assets that would have resulted from the application of the IRB Wholesale risk-weight formula to all underlying obligations contained in this row as if double default treatment had not been applied from the amount in column K of this row (this resulting amount would normally be negative). The estimate should reflect only credit risk mitigation benefits derived from the application of the double default treatment.

In column K , report the total risk weighted assets associated with all exposures included in this row for column A - after any credit risk mitigation adjustments including application of double default treatment.

In column L, report the dollar amount of ECL for exposures included in this row for column A.

In column A, the EAD-weighted average PD (WAPD) in percentage terms is calculated as follows:
$W A P D(\%)=\frac{\left(\sum_{i=1}^{12} A_{i} \cdot E_{i}\right)}{\sum_{i=1}^{12} E_{i}}$
where $A_{i}$ and $E_{i}$ are the weighted average PD (\%) and EAD (\$) reported in columns A and $E$, respectively, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 12 of this schedule. Note that $\mathrm{A}_{12}$ equals 100 .

In column F, the EAD-weighted average effective maturity (WAEM) in years is calculated as follows:

$$
\operatorname{WAEM}(\text { Years })=\frac{\left(\sum_{i=1}^{12} F_{i} \cdot E_{i}\right)}{\sum_{i=1}^{12} E_{i}}
$$

where $F_{i}$ and $E_{i}$ are the weighted average effective maturity (years) and EAD (\$) reported in columns F and E , respectively, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 12 of this schedule.

In column G, the EAD-weighted average LGD before consideration of eligible guarantees and credit derivatives (WALGD_Pre) in percentage terms is calculated as follows:
$W A L G D_{-} \operatorname{Pr} e(\%)=\frac{\left(\sum_{i=1}^{12} G_{i} \cdot E_{i}\right)}{\sum_{i=1}^{12} E_{i}}$
where $G_{i}$ and $E_{i}$ are the weighted average LGD before consideration of eligible guarantees and credit derivatives (\%) and EAD (\$) reported in columns G and E, respectively, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 12 of this schedule.

In column H, the EAD-weighted average LGD after consideration of consideration of credit risk mitigants (WALGD_Post) in percentage terms is calculated as follows:
$W A L G D_{-} \operatorname{Post}(\%)=\frac{\left(\sum_{i=1}^{12} H_{i} \cdot E_{i}\right)}{\sum_{i=1}^{12} E_{i}}$
where $\mathrm{H}_{\mathrm{i}}$ and $\mathrm{E}_{\mathrm{i}}$ are the LGD after consideration of credit risk mitigants (\%) and EAD (\$) reported in columns H and E , respectively, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 12 of this schedule.

In columns B, C, D, E, I, J, K, and L, the sums are calculated as the total of amounts reported in item numbers 1 through 12 of this schedule for each of these respective columns.

Report the risk weighted assets of non-material portfolios reportable in this schedule, but not included in the cells above.

## Schedule D - Wholesale Exposures - Bank

Report all Wholesale Exposures - Bank. For this schedule, Bank includes the following entities: (1) banks and depository institutions as defined in the Glossary of the Reports of Condition and Income under the following headings: Banks, U.S. and Foreign; and Depository Institutions in the U.S.; (2) securities firms; and (3) multi-lateral development banks that do not have full faith and credit backing of sovereign entities.

## Item No. Instructions

1-12 In column A, report the weighted average obligor PD of exposures categorized as wholesale bank where the obligor PD falls within the indicated PD range. Cell A-12 equals 100 .

In column B, report the total number of obligors included in this row for column $A$.

In column C, report the total balance sheet amount of exposures included in this row for column A. Do not report any undrawn amounts in this column.

In column D , report the total dollar value of available but undrawn balance of exposures (for example, from loan commitments, lines of credit, trade-related letters of credit, or transaction-related contingencies) included in this row for column A.

In column E, report the total EAD of exposures included in this row for column $A$.

In column F , report the weighted average M in years of exposures included in this row for column A.

In column $G$, report the weighted average LGD of exposures included in this row for column A. In estimating LGD, include the effects of collateral but not the effects of guarantees or credit derivatives.

In column $H$, report the weighted average LGD of exposures included in this row for column A. In estimating LGD, include the effects of credit risk mitigants (guarantees, credit derivatives, and collateral).

In column I, report the estimated benefit arising from the application of the PD substitution approach or the LGD adjustment approach to exposures included in this row, expressed in terms of a reduction in risk-weighted assets in dollars but only in cases where risk is mitigated through the use of eligible credit derivatives. The estimate can be derived by deducting the aggregated risk-weighted assets that would have resulted from the application of the IRB Wholesale risk-weight formula to all underlying obligations contained in this row if the PD Substitution approach and LGD Adjustment approach had not been applied from the amount in column J of this row (this resulting amount would normally be negative). No estimate is required in cases where risk is mitigated through the use of eligible guarantees.

In column J , report the total risk weighted assets associated with all exposures included in this row for column A - after any credit risk mitigation adjustments.

In column K , report the dollar amount of ECL for exposures included in this row for column A.

In column A, the EAD-weighted average PD (WAPD) in percentage terms is calculated as follows:
$W A P D(\%)=\frac{\left(\sum_{i=1}^{12} A_{i} \cdot E_{i}\right)}{\sum_{i=1}^{12} E_{i}}$
where $A_{i}$ and $E_{i}$ are the weighted average PD (\%) and EAD (\$) reported in columns $A$ and $E$, respectively, for the $i^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 12 of this schedule. Note that $\mathrm{A}_{12}$ equals 100.

In column F, the EAD-weighted average effective maturity (WAEM) in years is calculated as follows:
$W A E M($ Years $)=\frac{\left(\sum_{i=1}^{12} F_{i} \cdot E_{i}\right)}{\sum_{i=1}^{12} E_{i}}$
where $F_{i}$ and $E_{i}$ are the weighted average effective maturity (years) and EAD (\$) reported in columns F and E , respectively, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 12 of this schedule.

In column G, the EAD-weighted average LGD before consideration of eligible guarantees and credit derivatives (WALGD_Pre) in percentage terms is calculated as follows:
$W A L G D_{-} \operatorname{Pr} e(\%)=\frac{\left(\sum_{i=1}^{12} G_{i} \cdot E_{i}\right)}{\sum_{i=1}^{12} E_{i}}$
where $G_{i}$ and $E_{i}$ are the weighted average LGD before consideration of eligible guarantees and credit derivatives (\%) and EAD (\$) reported in columns G and E, respectively, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 12 of this schedule.

In column H, the EAD-weighted average LGD after consideration of consideration of credit risk mitigants (WALGD_Post) in percentage terms is calculated as follows:
$W A L G D_{-} \operatorname{Post}(\%)=\frac{\left(\sum_{i=1}^{12} H_{i} \cdot E_{i}\right)}{\sum_{i=1}^{12} E_{i}}$
where $\mathrm{H}_{\mathrm{i}}$ and $\mathrm{E}_{\mathrm{i}}$ are the LGD after consideration of credit risk mitigants (\%) and EAD (\$) reported in columns H and E , respectively, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 12 of this schedule.

In columns B, C, D, E, I, J, and K, the sums are calculated as the total of amounts reported in item numbers 1 through 12 of this schedule for each of these respective columns.

Report the risk weighted assets of non-material portfolios reportable in this schedule, but not included in the cells above.

## Schedule E - Wholesale Exposures - Sovereign

Report all Wholesale Exposures - Sovereign (Sovereign exposures)

## Item No. Instructions

1-12 In column A, report the weighted average obligor PD of exposures categorized as wholesale sovereign where the obligor PD falls within the indicated PD range. Cell A-12 equals 100 .

In column B, report the total number of obligors included in this row for column A.

In column C, report the total balance sheet amount of exposures included in this row for column A. Do not report any undrawn amounts in this column.

In column D , report the total dollar value of available but undrawn balance of exposures (for example, from loan commitments, lines of credit, trade-related letters of credit, or transaction-related contingencies) included in this row for column A.

In column E, report the total EAD of exposures included in this row for column A .

In column F , report the weighted average M in years of exposures included in this row for column A.

In column $G$, report the weighted average LGD of exposures included in this row for column A. In estimating LGD, include the effects of collateral but not the effects of guarantees or credit derivatives.

In column $H$, report the weighted average LGD of exposures included in this row for column A. In estimating LGD, include the effects of credit risk mitigants (guarantees, credit derivatives, and collateral).

In column I, report the estimated benefit arising from the application of the PD substitution approach or the LGD adjustment approach to exposures included in this row, expressed in terms of a reduction in risk-weighted assets in dollars but only in cases where risk is mitigated through the use of eligible credit derivatives. The estimate can be derived by deducting the aggregated risk-weighted assets that would have resulted from the application of the IRB Wholesale risk-weight formula to all underlying obligations contained in this row if the PD Substitution approach and LGD Adjustment approach had not been applied from the amount in column J of this row (this resulting amount would normally be negative). No estimate is required in cases where risk is mitigated through the use of eligible guarantees.

In column J , report the total risk weighted assets associated with all exposures included in this row for column A - after any credit risk mitigation adjustments.

In column K, report the dollar amount of ECL for exposures included in this row for column A.

In column A, the EAD-weighted average PD (WAPD) in percentage terms is calculated as follows:
$W A P D(\%)=\frac{\left(\sum_{i=1}^{12} A_{i} \cdot E_{i}\right)}{\sum_{i=1}^{12} E_{i}}$
where $A_{i}$ and $E_{i}$ are the weighted average PD (\%) and EAD (\$) reported in columns A and E , respectively, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 12 of this schedule. Note that $\mathrm{A}_{12}$ equals 100.

In column F, the EAD-weighted average effective maturity (WAEM) in years is calculated as follows:

WAEM (Years $)=\frac{\left(\sum_{i=1}^{12} F_{i} \cdot E_{i}\right)}{\sum_{i=1}^{12} E_{i}}$
where $\mathrm{F}_{\mathrm{i}}$ and $\mathrm{E}_{\mathrm{i}}$ are the weighted average effective maturity (years) and EAD (\$) reported in columns $F$ and $E$, respectively, for the $i^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 12 of this schedule.

In column G, the EAD-weighted average LGD before consideration of eligible guarantees and credit derivatives (WALGD_Pre) in percentage terms is calculated as follows:
$W A L G D_{-} \operatorname{Pr} e(\%)=\frac{\left(\sum_{i=1}^{12} G_{i} \cdot E_{i}\right)}{\sum_{i=1}^{12} E_{i}}$
where $G_{i}$ and $E_{i}$ are the weighted average LGD before consideration of eligible guarantees and credit derivatives (\%) and EAD (\$) reported in columns G and E, respectively, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 12 of this schedule.

In column H , the EAD-weighted average LGD after consideration of consideration of credit risk mitigants (WALGD_Post) in percentage terms is calculated as follows:
$W A L G D \_\operatorname{Post}(\%)=\frac{\left(\sum_{i=1}^{12} H_{i} \cdot E_{i}\right)}{\sum_{i=1}^{12} E_{i}}$
where $\mathrm{H}_{\mathrm{i}}$ and $\mathrm{E}_{\mathrm{i}}$ are the LGD after consideration of credit risk mitigants (\%) and EAD (\$) reported in columns H and E , respectively, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 12 of this schedule.

In columns B, C, D, E, I, J, and K, the sums are calculated as the total of amounts reported in item numbers 1 through 12 of this schedule for each of these respective columns.

Report the risk weighted assets of non-material portfolios reportable in this schedule, but not included in the cells above.

## Schedule F - Wholesale Exposures - Income-Producing Real Estate (IPRE)

IPRE includes exposures that finance the acquisition, development, or construction (ADC) of one-to-four family residential properties, or commercial real estate projects that are not defined as HVCRE as well as permanent financing of commercial real estate and apartment buildings.

## Item No. Instructions

1-12 In column A, report the weighted average obligor PD of exposures categorized as wholesale IPRE where the obligor PD falls within the indicated PD range. Cell A-12 equals 100 .

In column B, report the total number of obligors included in this row for column A.
In column C, report the total balance sheet amount of exposures included in this row for column A. Do not report any undrawn amounts in this column.

In column D, report the total dollar value of available but undrawn balance of exposures (for example, from loan commitments, lines of credit, trade-related letters of credit, or transaction-related contingencies) included in this row for column A.

In column E, report the total EAD of exposures included in this row for column A.
In column F , report the weighted average M in years of exposures included in this row for column A.

In column G, report the weighted average LGD of exposures included in this row for column A. In estimating LGD, include the effects of collateral but not the effects of guarantees or credit derivatives.

In column H , report the weighted average LGD of exposures included in this row for column A. In estimating LGD, include the effects of credit risk mitigants (guarantees, credit derivatives and collateral).

In column I, report the estimated benefit arising from the application of the PD substitution approach or the LGD adjustment approach to exposures included in this row, expressed in terms of a reduction in risk-weighted assets in dollars but only in cases where risk is mitigated through the use of eligible credit derivatives. The estimate can be derived by deducting the aggregated risk-weighted assets that would have resulted from the application of the IRB Wholesale risk-weight formula to all underlying obligations contained in this row if the PD Substitution approach and LGD Adjustment approach had not been applied from the amount in column $K$ of this row (this resulting amount would normally be negative). No estimate is required in cases where risk is mitigated through the use of eligible guarantees.

In column J, report the estimated benefit arising from the application of the double default treatment to exposures included in this row, expressed in terms of a reduction in risk-weighted assets in dollars. The estimate can be derived by deducting the aggregated risk-weighted assets that would have resulted from the application of the IRB Wholesale risk-weight formula to all underlying obligations contained in this row as if double default treatment had not been applied from the amount in column K of this row (this resulting amount would normally be negative). The estimate should reflect only credit risk mitigation benefits derived from the application of the double default treatment.

In column K , report the total risk weighted assets associated with all exposures included in this row for column A - after any credit risk mitigation adjustments including application of double default treatment.

In column $L$, report the dollar amount of ECL for exposures included in this row for column A.

In column A, the EAD-weighted average PD (WAPD) in percentage terms is calculated as follows:
$W A P D(\%)=\frac{\left(\sum_{i=1}^{12} A_{i} \cdot E_{i}\right)}{\sum_{i=1}^{12} E_{i}}$
where $A_{i}$ and $E_{i}$ are the weighted average $P D$ (\%) and EAD (\$) reported in columns $A$ and $E$, respectively, for the $i^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 12 of this schedule. Note that $\mathrm{A}_{12}$ equals 100.

In column F, the EAD-weighted average effective maturity (WAEM) in years is calculated as follows:
$W A E M($ Years $)=\frac{\left(\sum_{i=1}^{12} F_{i} \cdot E_{i}\right)}{\sum_{i=1}^{12} E_{i}}$
where $F_{i}$ and $E_{i}$ are the weighted average effective maturity (years) and EAD (\$) reported in columns $F$ and $E$, respectively, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 12 of this schedule.

In column G, the EAD-weighted average LGD before consideration of eligible guarantees and credit derivatives (WALGD_Pre) in percentage terms calculated as follows:
$W A L G D_{-} \operatorname{Pr} e(\%)=\frac{\left(\sum_{i=1}^{12} G_{i} \cdot E_{i}\right)}{\sum_{i=1}^{12} E_{i}}$
where $G_{i}$ and $E_{i}$ are the weighted average LGD before consideration of eligible guarantees and credit derivatives (\%) and EAD (\$) reported in columns G and E, respectively, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 12 of this schedule.

In column H , the EAD-weighted average LGD after consideration of consideration of credit risk mitigants (WALGD_Post) in percentage terms is calculated as follows:

$$
W A L G D_{-} \operatorname{Post}(\%)=\frac{\left(\sum_{i=1}^{12} H_{i} \cdot E_{i}\right)}{\sum_{i=1}^{12} E_{i}}
$$

where $\mathrm{H}_{\mathrm{i}}$ and $\mathrm{E}_{\mathrm{i}}$ are the LGD after consideration of credit risk mitigants (\%) and EAD (\$) reported in columns H and E , respectively, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 12 of this schedule.

In columns B, C, D, E, I, J, K, and L, the sums are calculated as the total of amounts reported in item numbers 1 through 12 of this schedule for each of these respective columns.

Report the risk weighted assets of non-material portfolios reportable in this schedule, but not included in the cells above.

## Schedule G - Wholesale Exposures - High Volatility Commercial Real Estate (HVCRE)

## Report all Wholesale Exposures - High Volatility Commercial Real Estate (HVCRE)

## Item No. Instructions

1-12 In column A, report the weighted average obligor PD of exposures categorized as wholesale HVCRE where the obligor PD falls within the indicated PD range. Cell A-12 equals 100.

In column B, report the total number of obligors included in this row for column A.
In column C, report the total balance sheet amount of exposures included in this row for column A. Do not report any undrawn amounts in this column.

In column D, report the total dollar value of available but undrawn balance of exposures (for example, from loan commitments, lines of credit, trade-related letters of credit, or transaction-related contingencies) included in this row for column A.

In column E, report the total EAD of exposures included in this row for column A.
In column $F$, report the weighted average $M$ in years of exposures included in this row for column A.

In column G , report the weighted average LGD of exposures included in this row for column A. In estimating LGD, include the effects of collateral but not the effects of guarantees or credit derivatives.

In column H , report the weighted average LGD of exposures included in this row for column A. In estimating LGD, include the effects of credit risk mitigants (guarantees, credit derivatives and collateral).

In column I, report the estimated benefit arising from the application of the PD substitution approach or the LGD adjustment approach to exposures included in this row, expressed in terms of a reduction in risk-weighted assets in dollars but only in cases where risk is mitigated through the use of eligible credit derivatives. The estimate can be derived by deducting the aggregated risk-weighted assets that would have resulted from the application of the IRB Wholesale risk-weight formula to all underlying obligations contained in this row if the PD Substitution approach and LGD Adjustment approach had not been applied from the amount in column K of this row (this resulting amount would normally be negative). No estimate is required in cases where risk is mitigated through the use of eligible guarantees.

In column J , report the estimated benefit arising from the application of the double default treatment to exposures included in this row, expressed in terms of a reduction in risk-weighted assets in dollars. The estimate can be derived by deducting the aggregated risk-weighted assets that would have resulted from the application of the IRB Wholesale risk-weight formula to all underlying obligations contained in this row as if double default treatment had not been applied from the amount in column K of this row (this resulting amount would normally be negative). The estimate should reflect only credit risk mitigation benefits derived from the application of the double default treatment.

In column K , report the total risk weighted assets associated with all exposures included in this row for column A - after any credit risk mitigation adjustments including application of double default treatment.

In column L, report the dollar amount of ECL for exposures included in this row for column A.

In column A, the EAD-weighted average PD (WAPD) in percentage terms is calculated as follows:
$W \operatorname{APD}(\%)=\frac{\left(\sum_{i=1}^{12} A_{i} \cdot E_{i}\right)}{\sum_{i=1}^{12} E_{i}}$
where $\mathrm{A}_{\mathrm{i}}$ and $\mathrm{E}_{\mathrm{i}}$ are the weighted average PD (\%) and EAD (\$) reported in columns A and $E$, respectively, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 12 of this schedule. Note that $\mathrm{A}_{12}$ equals 100 .

In column F, the EAD-weighted average effective maturity (WAEM) in years is calculated as follows:

WAEM $($ Years $)=\frac{\left(\sum_{i=1}^{12} F_{i} \cdot E_{i}\right)}{\sum_{i=1}^{12} E_{i}}$
where $F_{i}$ and $E_{i}$ are the weighted average effective maturity (years) and EAD (\$) reported in columns $F$ and $E$, respectively, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 12 of this schedule.

In column G, the EAD-weighted average LGD before consideration of eligible guarantees and credit derivatives (WALGD_Pre) in percentage terms is calculated as follows:

WALGD_Pre $(\%)=\frac{\left(\sum_{i=1}^{12} G_{i} \cdot E_{i}\right)}{\sum_{i=1}^{12} E_{i}}$
where $G_{i}$ and $E_{i}$ are the weighted average LGD before consideration of eligible guarantees and credit derivatives (\%) and EAD (\$) reported in columns G and E, respectively, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 12 of this schedule.

In column H , the EAD-weighted average LGD after consideration of consideration of credit risk mitigants (WALGD_Post) in percentage terms is calculated as follows:
$W A L G D_{-} \operatorname{Post}(\%)=\frac{\left(\sum_{i=1}^{12} H_{i} \cdot E_{i}\right)}{\sum_{i=1}^{12} E_{i}}$
where $\mathrm{H}_{\mathrm{i}}$ and $\mathrm{E}_{\mathrm{i}}$ are the LGD after consideration of credit risk mitigants (\%) and EAD (\$) reported in columns H and E , respectively, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 12 of this schedule.

In columns $\mathrm{B}, \mathrm{C}, \mathrm{D}, \mathrm{E}, \mathrm{I}, \mathrm{J}, \mathrm{K}$, and L , the sums are calculated as the total of amounts reported in item numbers 1 through 12 of this schedule for each of these respective columns.

Report the risk weighted assets of non-material portfolios reportable in this schedule, but not included in the cells above.

# Schedules H through J - Wholesale Exposures - Eligible Margin Loans, RepoStyle Transactions, OTC Derivatives, and Combinations of these Instruments Subject to Qualifying Master Netting Agreements 

## General Instructions

Definitions. Apply the definitions provided in the advanced approaches rules for the following terms: (1) probability of default (PD); (2) loss given default (LGD); (3) exposure at default (EAD); (4) effective maturity (M); (5) expected credit loss (ECL); (6) qualifying cross-product master netting agreement; (7) eligible margin loan; (8) obligor; (9) OTC derivative contract; (10) qualifying master netting agreement; (11) repo-style transaction; (12) Value-at-Risk (VaR); (13) wholesale exposure; and (14) default.

The EAD adjustment approaches are described in section 32(b)(2), section 32(b)(3), and section 32(d) of the advanced approaches rules.

For these schedules, report all repo-style transactions, eligible margin loans, and OTC derivatives, including those that are covered positions under the market risk rule, except for credit derivatives and equity derivative contracts for which the bank does not compute a separate counterparty credit risk capital requirement in accordance with sections 32(c)(3) and (4) of the advanced approaches rules.

Weighted Averages. Weighted average obligor PD as used in this section is generally calculated by: (1) determining the obligors and their exposures that fall within each of the PD ranges indicated, (2) multiplying each obligor's PD by its total EAD, (3) summing the products from step (2) for all exposures within each PD range, and (4) dividing the summed products from step (3) by the sum of the EADs of all exposures in the same PD range. If the EAD for exposures within a given PD range sums to zero, a simple average (i.e., the sum of PDs within a PD range divided by the number of exposures) should be reported.

Weighted average LGD as used in this section is generally calculated by: (1) determining the obligors and their exposures that have estimated PDs that fall within each of the PD ranges indicated, (2) multiplying each exposure's LGD by its EAD, (3) summing the products from step (2) for all exposures within each PD range, and (4) dividing the summed products from step (3) by the sum of the EADs of all exposures in the same PD range. If the EAD for exposures within a given PD range sums to zero, a simple average (i.e., the sum of LGDs within a PD range divided by the number of exposures) should be reported.

Weighted average M as used in this section is generally calculated by: (1) determining the obligors and their exposures that have estimated PDs prior to considering the effects of credit risk mitigation that fall within each of the PD ranges indicated, (2) multiplying each exposure's estimated M by its EAD, (3) summing the products from step (2) for all exposures within each PD range, and (4) dividing the summed products from step (3) by the sum of the EADs of all exposures in the same PD range. If the EAD for exposures within a given PD range sums to zero, a simple average (i.e., the sum of Ms within a PD range divided by the number of exposures) should be reported.

## Schedule H - Wholesale Exposures - Eligible Margin Loans, Repo-style <br> Transactions, and OTC Derivatives with Cross-Product Netting

Report all eligible margin loans, repo-style transactions and OTC derivatives positions that are subject to a qualifying cross-product master netting agreement. Exposures that are not covered by qualifying crossproduct master netting agreements are reported separately in Schedules I and J.

## Exposures Where the EAD Adjustment Method is Used

## Item No. Instructions

1-12 In column A, report the weighted average obligor PD of all eligible margin loans, repostyle transactions, and OTC derivatives covered by qualified cross-product master netting agreements where the obligor PD falls within each PD range indicated. Cell A-12 equals 100.

In column B, report the weighted average M in years of exposures included in this row for column A.

In column C, report the total EAD of exposures included in this row for column A.
In column D, report the weighted average LGD of exposures included in this row for column A.

In column E, report the total risk weighted assets associated with all exposures included in this row for column A.

In column F , report the ECL associated with the exposures aggregated in this row for column A.

13 In column C, report the EAD of eligible margin loans where a 300 percent risk weight has been assigned.

In column E, report the risk weighted assets of eligible margin loans where a 300 percent risk weight has been assigned.

In column A, the EAD-weighted average PD (WAPD) in percentage terms is calculated as follows:
$W \operatorname{APD}(\%)=\frac{\left(\sum_{i=1}^{12} A_{i} \cdot C_{i}\right)}{\sum_{i=1}^{12} C_{i}}$
where $A_{i}$ and $C_{i}$ are the weighted average PD (\%) and EAD (\$) reported in columns A and C , respectively, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 12 of this schedule. Note that $\mathrm{A}_{12}$ equals 100.

In column B, the EAD-weighted average effective maturity (WAEM) in years is calculated as follows:

WAEM $($ Years $)=\frac{\left(\sum_{i=1}^{12} B_{i} \cdot C_{i}\right)}{\sum_{i=1}^{12} C_{i}}$
where $B_{i}$ and $C_{i}$ are the weighted average effective maturity (years) and EAD (\$) reported in columns $B$ and $C$, respectively, for the $i^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 12 of this schedule.

In column D, the percent EAD-weighted average LGD (WALGD) in percentage terms is calculated as follows:
$W A L G D(\%)=\frac{\left(\sum_{i=1}^{12} D_{i} \cdot C_{i}\right)}{\sum_{i=1}^{12} C_{i}}$
where $D_{i}$ and $C_{i}$ are the weighted average LGD (\%) and EAD (\$) reported in columns D and C , respectively, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 12 of this schedule.

In columns $C$ and $E$, the sums are calculated as the total of amounts reported in item numbers 1 through 13 of this schedule for each of these respective columns.

In column F , the sum is calculated as the total of amounts reported in item numbers 1 through 12 of this schedule for column F .

## Exposures Where Collateral is Reflected in LGD

1-12 In column G, report the weighted average obligor PD of all eligible margin loans, repostyle transactions, and OTC derivatives covered by qualified cross-product master netting agreements where the obligor PD falls within each PD range indicated. Cell G-12 equals 100.

In column $H$, report the weighted average M in years of exposures included in this row for column G.

In column I, report the total EAD of exposures included in this row for column $G$.
In column $J$, report the weighted average LGD of exposures included in this row for column G.

In column K , report the total risk weighted assets associated with all exposures included in this row for column $G$.

In column $L$, report the ECL associated with the exposures aggregated in this row for column G.

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In column G, the EAD-weighted average PD (WAPD) in percentage terms is calculated as follows:
$W A P D(\%)=\frac{\left(\sum_{i=1}^{12} G_{i} \cdot I_{i}\right)}{\sum_{i=1}^{12} I_{i}}$
where $\mathrm{G}_{\mathrm{i}}$ and $\mathrm{I}_{\mathrm{i}}$ are the weighted average PD (\%) and EAD (\$) reported in columns G and $I$, respectively, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 12 of this schedule. Note that $\mathrm{G}_{12}$ equals 100 .

In column $H$, the EAD-weighted average effective maturity (WAEM) in years is calculated as follows:

WAEM $($ Years $)=\frac{\left(\sum_{i=1}^{12} H_{i} \cdot I_{i}\right)}{\sum_{i=1}^{12} I_{i}}$
where $\mathrm{H}_{\mathrm{i}}$ and $\mathrm{I}_{\mathrm{i}}$ are the weighted average effective maturity (years) and EAD (\$) reported in columns H and I , respectively, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 12 of this schedule.

In column J, the EAD-weighted average LGD (WALGD) in percentage terms is calculated as follows:
$W A L G D(\%)=\frac{\left(\sum_{i=1}^{12} J_{i} \cdot I_{i}\right)}{\sum_{i=1}^{12} I_{i}}$
where $\mathrm{J}_{\mathrm{i}}$ and $\mathrm{I}_{\mathrm{i}}$ are the weighted average LGD (\%) and EAD (\$) reported in columns J and I, respectively, for the $\mathrm{i}^{\text {th }}$ PD range in item numbers 1 through 12 of this schedule.

In columns I, K, and L, the sums are calculated as the total of amounts reported in item numbers 1 through 12 of this schedule for each of these respective columns.

## Schedule I - Wholesale Exposures - Eligible Margin Loans and Repo-style Transactions with No Cross-Product Netting

Report all eligible margin loans and repo-style transactions that are NOT subject to a qualifying crossproduct master netting agreement.

## Exposures Where the EAD Adjustment Method is Used

## Item No. Instructions

1-12 In column A, report the weighted average obligor PD of all eligible margin loans and repo-style transactions not covered by qualified cross-product master netting agreements where the obligor PD falls within each PD range indicated. Cell A-12 equals 100.

In column B, report the weighted average M in years of exposures included in this row for column A.

In column C, report the total EAD of exposures included in this row for column A .

In column D , report the weighted average LGD of exposures included in this row for column A.

In column E, report the total risk weighted assets associated with all exposures included in this row for column A.

In column F, report the ECL associated with the exposures aggregated in this row for column A.

In column C, report the EAD of eligible margin loans where a 300 percent risk weight has been assigned.

In column E, report the risk weighted assets of eligible margin loans where a 300 percent risk weight has been assigned.

In column A, the EAD-weighted average PD (WAPD) in percentage terms is calculated as follows:
$W A P D(\%)=\frac{\left(\sum_{i=1}^{12} A_{i} \cdot C_{i}\right)}{\sum_{i=1}^{12} C_{i}}$
where $\mathrm{A}_{\mathrm{i}}$ and $\mathrm{C}_{\mathrm{i}}$ are the weighted average PD (\%) and EAD (\$) reported in columns A and C , respectively, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 12 of this schedule. Note that $\mathrm{A}_{12}$ equals 100.

In column B, the EAD-weighted average effective maturity (WAEM) in years is calculated as follows:
$W A E M($ Years $)=\frac{\left(\sum_{i=1}^{12} B_{i} \cdot C_{i}\right)}{\sum_{i=1}^{12} C_{i}}$
where $B_{i}$ and $C_{i}$ are the weighted average effective maturity (years) and EAD (\$) reported in columns B and C, respectively, for the $\mathrm{i}^{\text {th }}$ PD range in item numbers 1 through 12 of this schedule.

In column D , the EAD-weighted average LGD (WALGD) in percentage terms is calculated as follows:
$W \operatorname{ALGD}(\%)=\frac{\left(\sum_{i=1}^{12} D_{i} \cdot C_{i}\right)}{\sum_{i=1}^{12} C_{i}}$
where $D_{i}$ and $C_{i}$ are the weighted average LGD (\%) and EAD (\$) reported in columns D and C , respectively, for the $\mathrm{i}^{\text {th }}$ PD range in item numbers 1 through 12 of this schedule.

In columns C and E, the sums are calculated as the total of amounts reported in item numbers 1 through 13 of this schedule for each of these respective columns.

In column F , the sum is calculated as the total of amounts reported in item numbers 1 through 12 of this schedule for column F .

## Exposures Where Collateral is Reflected in LGD

1-12 In column G, report the weighted average obligor PD of all eligible margin loans and repo-style transactions not covered by qualified cross-product master netting agreements where the obligor PD falls within each PD range indicated. Cell G-12 equals 100.

In column H , report the weighted average M in years of exposures included in this row for column G.

In column I, report the total EAD of exposures included in this row for column G .
In column J, report the weighted average LGD of exposures included in this row for column G.

In column K , report the total risk weighted assets associated with all exposures included in this row for column $G$.

In column L, report the ECL associated with the exposures aggregated in this row for column G.

In column G, the EAD-weighted average PD (WAPD) in percentage terms is calculated as follows:
$W A P D(\%)=\frac{\left(\sum_{i=1}^{12} G_{i} \cdot I_{i}\right)}{\sum_{i=1}^{12} I_{i}}$
where $\mathrm{G}_{\mathrm{i}}$ and $\mathrm{I}_{\mathrm{i}}$ are the weighted average PD (\%) and EAD (\$) reported in columns G and I, respectively, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 12 of this schedule. Note that $\mathrm{G}_{12}$ equals 100 .

In column H , the EAD-weighted average effective maturity (WAEM) in years is calculated as follows:

WAEM $($ Years $)=\frac{\left(\sum_{i=1}^{12} H_{i} \cdot I_{i}\right)}{\sum_{i=1}^{12} I_{i}}$
where $H_{i}$ and $I_{i}$ are the weighted average effective maturity (years) and EAD (\$) reported in columns H and I , respectively, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 12 of this schedule.

In column J, the EAD-weighted average LGD (WALGD) in percentage terms is calculated as follows:
$W A L G D(\%)=\frac{\left(\sum_{i=1}^{12} J_{i} \cdot I_{i}\right)}{\sum_{i=1}^{12} I_{i}}$
where $\mathrm{J}_{\mathrm{i}}$ and $\mathrm{I}_{\mathrm{i}}$ are the weighted average LGD (\%) and EAD (\$) reported in columns J and I , respectively, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 12 of this schedule.

In columns I, K, and L, the sums are calculated as the total of amounts reported in item numbers 1 through 12 of this schedule for each of these respective columns.

## Memoranda Items

M1 Report the percentage, to one decimal place, of total EAD for this schedule (item 14, column C) calculated using collateral haircuts.

M2 Report the percentage, to one decimal place, of total EAD for this schedule (item 14, column C) calculated using simple VaR.

M3 Report the percentage, to one decimal place, of total EAD for this schedule (item 14, column C) calculated using internal models.

## Schedule J - Wholesale Exposures - OTC Derivatives with No Cross-Product Netting

Report all OTC derivative positions which are NOT subject to a qualifying cross-product master netting agreement.

## Exposures Where the EAD Adjustment Method is Used

## Item No. Instructions

1-12 In column A, report the weighted average obligor PD of all OTC derivatives transactions not covered by qualified cross-product master netting agreements where the obligor PD falls within each PD range indicated. Cell A-12 equals 100.

In column B, report the weighted average M in years of exposures included in this row for column A.

In column C, report the total EAD of exposures included in this row for column A.
In column D, report the weighted average LGD of exposures included in this row for column A.

In column E , report the total risk weighted assets associated with all exposures included in this row for column A.

In column F, report the ECL associated with the exposures aggregated in this row for column A.

In column A, the EAD-weighted average PD (WAPD) in percentage terms is calculated as follows:
$W A P D(\%)=\frac{\left(\sum_{i=1}^{12} A_{i} \cdot C_{i}\right)}{\sum_{i=1}^{12} C_{i}}$
where $\mathrm{A}_{\mathrm{i}}$ and $\mathrm{C}_{\mathrm{i}}$ are the weighted average PD (\%) and EAD (\$) reported in columns A and $C$, respectively, for the $i^{\text {th }}$ PD range in item numbers 1 through 12 of this schedule. Note that $\mathrm{A}_{12}$ equals 100.

In column B, the EAD-weighted average effective maturity (WAEM) in years is calculated as follows:

WAEM $($ Years $)=\frac{\left(\sum_{i=1}^{12} B_{i} \cdot C_{i}\right)}{\sum_{i=1}^{12} C_{i}}$
where $B_{i}$ and $C_{i}$ are the weighted average effective maturity (years) and EAD (\$) reported in columns B and C, respectively, for the $i^{\text {th }}$ PD range in item numbers 1 through 12 of this schedule.

In column D, the EAD-weighted average LGD (WALGD) in percentage terms is calculated as follows:
$W \operatorname{ALGD}(\%)=\frac{\left(\sum_{i=1}^{12} D_{i} \cdot C_{i}\right)}{\sum_{i=1}^{12} C_{i}}$
where $D_{i}$ and $C_{i}$ are the weighted average LGD (\%) and EAD (\$) reported in columns D and C , respectively, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 12 of this schedule.

In columns C, E, and F, the sums are calculated as the total of amounts reported in item numbers 1 through 12 of this schedule for each of these respective columns.

## Exposures For Which the Bank Uses the Current Exposure Methodology to Determine EAD and Reflects Collateral, if any, in LGD.

1-12 In column G, report the weighted average obligor PD of all OTC derivatives transactions not covered by qualified cross-product master netting agreements where the obligor PD falls within each PD range indicated. Cell G-12 equals 100.

In column H , report the weighted average M in years of exposures included in this row for column G.

In column I, report the total EAD of exposures included in this row for column $G$.
In column J, report the weighted average LGD of exposures included in this row for column G.

In column K , report the total risk weighted assets associated with all exposures included in this row for column $G$.

In column $L$, report the ECL associated with the exposures aggregated in this row for column G.

In column G, the EAD-weighted average PD (WAPD) in percentage terms is calculated as follows:
$W A P D(\%)=\frac{\left(\sum_{i=1}^{12} G_{i} \cdot I_{i}\right)}{\sum_{i=1}^{12} I_{i}}$
where $G_{i}$ and $I_{i}$ are the weighted average PD (\%) and EAD (\$) reported in columns $G$ and I , respectively, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 12 of this schedule. Note that $\mathrm{G}_{12}$ equals 100.

In column H , the EAD-weighted average effective maturity (WAEM) in years is calculated as follows:
$W A E M($ Years $)=\frac{\left(\sum_{i=1}^{12} H_{i} \cdot I_{i}\right)}{\sum_{i=1}^{12} I_{i}}$
where $\mathrm{H}_{\mathrm{i}}$ and $\mathrm{I}_{\mathrm{i}}$ are the weighted average effective maturity (years) and EAD (\$) reported in columns H and I , respectively, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 12 of this schedule.

In column J, the EAD-weighted average LGD (WALGD) in percentage terms is calculated as follows:
$W A L G D(\%)=\frac{\left(\sum_{i=1}^{12} J_{i} \cdot I_{i}\right)}{\sum_{i=1}^{12} I_{i}}$
where $\mathrm{J}_{\mathrm{i}}$ and $\mathrm{I}_{\mathrm{i}}$ are the weighted average LGD (\%) and EAD (\$) reported in columns J and I , respectively, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 12 of this schedule.

In columns $I, K$, and $L$, the sums are calculated as the total of amounts reported in item numbers 1 through 12 of this schedule for each of these respective columns.

## Memoranda Items

M1 Report the percentage, to one decimal place, of total EAD for this schedule (item 13, column C) calculated using collateral haircuts.

M2 Report the percentage, to one decimal place, of total EAD for this schedule (item 13, column C) calculated using internal models.

## Schedules K through O - Retail Exposures

## General Instructions

These schedules should reflect summary or aggregate information based on the bank's own segmentation system for risk-based capital purposes. For each retail category, banks should use the PDs calculated in its segmentation process as the basis for assigning exposures to rows that correspond to a specified supervisory PD band in each schedule.

Definitions. Apply the definitions provided in the advanced approaches rules for the following terms: (1) probability of default (PD); (2) loss given default (LGD); (3) exposure at default (EAD); (4) expected credit loss (ECL);.(5) other retail exposure; (6) residential mortgage exposure; (7) default; (8) retail exposure; (9) credit risk mitigant; and (10) qualifying revolving exposure (QRE). Account age is described below.

Loan-to-Value. Loan-to-Value (LTV): Where LTV information is requested, reporting of these cells is required only if LTVs are available. If LTVs are used in the segmentation process, report the LTV that is used in the segmentation process. If LTVs are not used in the segmentation process, report the most recent well-supported LTV for the exposures (original or well supported updated LTV).

For closed-end first lien exposures, LTV ratios should be calculated with respect to only the bank's first lien exposure amount. For closed-end junior liens and revolving mortgage exposures, LTV ratios should be calculated with respect to the bank's junior lien exposures combined with any prior liens.

Credit Risk Score. Credit Risk Score: Reporting of these cells is required only if the scores are available. Report scores only from credit scoring systems with a common mapping from scores to default probabilities and/or expected losses. Where two or more credit scoring systems with different mappings are used in the same portfolio, report scores only from the system used for the largest number of exposures in that portfolio.

Weighted Averages. Weighted average PD as used in this section is calculated by: (1) determining the exposures that are in segments whose PDs fall within each of the PD ranges indicated, (2) multiplying each segment's PD by its EAD, (3) summing the products from step (2) for all segments within each PD range, and (4) dividing the summed products from step (3) by the sum of the EADs of all segments in the same PD range.

Weighted average LGD as used in this section is calculated by: (1) determining the segments that have PDs that fall within each of the PD ranges indicated, (2) multiplying each segment's LGD by its EAD, (3) summing the products from step (2) for all segments within each PD range, and (4) dividing the summed products from step (3) by the sum of the EADs of all segments in the same PD range.

Weighted average age as used in this section is calculated by: (1) determining the segments that have PDs that fall within each of the PD ranges indicated, (2) determining an average (or weighted average) age for each segment using the account age definitions described below, (3) multiplying each segment's average age by its EAD, (4) summing the products from step (3) for all segments within each PD range, and (5) dividing the summed products from step (4) by the sum of EADs of all segments in the same PD range.

Weighted average credit scores are calculated in a similar manner as weighted average age. The difference is that the sum in the denominator only includes EADs of exposures in the exposure category
that have a credit risk score available. Report weighted average credit scores for each of the PD ranges indicated to one decimal place.

Account Age. The following definitions should be used to determine the age of accounts: (i) for mortgage exposures and other types of closed-end loans, account age is defined as the number of months since origination; (ii) for qualifying revolving exposures, account age is defined as the number of months on the bank's books; and (iii) for other retail exposures, account age should be determined using the number of months since whatever reference point the bank uses within its systems to identify the age of an account.

## Schedule K - Retail Exposures - Residential Mortgage - Closed-end First Lien Exposures

Report all residential mortgage exposures that (1) are secured by first liens, and (2) are not revolving.

## Item No. Instructions

1-15 In column A, report the weighted average PD of all segments of exposures applicable to this section as noted above, whose PD falls within each range indicated. Cell A-15 equals 100 .

In column B, report the total number of exposures in all segments included in this row for column A.

In column C, report the total balance sheet amount of exposures within the segments included in this row for column A.

In column D , report the dollar volume of available but undrawn balances of exposures within the segments included in this row for column A. Include undrawn commitments to lend, including available negative amortization and unfunded mortgage commitments.

In column E, report the total EAD of segments of exposures included in this row for column A.

In column F , report the weighted average age in months of exposures in the segments included in this row for column A .

In column G, report the weighted average LGD of exposures in the segments included in this row for column A .

In column $H$, report total risk-weighted assets associated with all segments of exposures included in this row for column A.

In column I, report the dollar volume of ECL, after consideration of credit risk mitigation, for segments of exposures included in this row for column A .

In column J , report the EAD of exposures included in this row for column A that have less than a 70\% LTV.

In column K , report the EAD of exposures included in this row for column A that have at least a 70\% but less than 80\% LTV.

In column L , report the EAD of exposures included in this row for column A that have at least an $80 \%$ but less than $90 \%$ LTV.

In column M, report the EAD of exposures included in this row for column A that have at least a $90 \%$ but less than $100 \%$ LTV.

In column N , report the EAD of exposures included in this row for column A that have an LTV greater than or equal to $100 \%$.

In column O, report the weighted average credit risk score of exposures in the segments included in this row for column A.

In column P, report the EAD of accounts that are included in the segments reported in this row where the LTV has been updated since the last report date, that is, the updated LTV is based upon a refreshed assessment of the collateral value. If LTVs were not updated for any accounts in the segments reported in the row since the last report date, report 0 .

In column A, the EAD-weighted average PD (WAPD) in percentage terms is calculated as follows:
$\operatorname{WAPD}(\%)=\frac{\left(\sum_{i=1}^{15} A_{i} \cdot E_{i}\right)}{\sum_{i=1}^{15} E_{i}}$
where $A_{i}$ and $E_{i}$ are the weighted average PD (\%) and EAD (\$) reported in columns A and $E$, respectively, for the $i^{\text {th }}$ PD range in item numbers 1 through 15 of this schedule. Note that $\mathrm{A}_{15}$ equals 100 .

In column F , the EAD-weighted average age (WAA) in months is calculated as follows:
$W A A($ Months $)=\frac{\left(\sum_{i=1}^{15} F_{i} \cdot E_{i}\right)}{\sum_{i=1}^{15} E_{i}}$
where $F_{i}$ and $E_{i}$ are the weighted average age (months) and EAD (\$) reported in columns $F$ and $E$, respectively, for the $i^{\text {th }}$ PD range in item numbers 1 through 15 of this schedule.

In column G, the EAD-weighted average LGD (WALGD) in percentage terms is calculated as follows:
$W \operatorname{ALGD}(\%)=\frac{\left(\sum_{i=1}^{15} G_{i} \cdot E_{i}\right)}{\sum_{i=1}^{15} E_{i}}$
where $G_{i}$ and $E_{i}$ are the weighted average LGD (\%) and EAD (\$) reported in columns G and E , respectively, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 15 of this schedule.

In column O, report the EAD-weighted average bureau score (WABS), rounded to the nearest whole number, using the following calculation:
$W A B S=\frac{\left(\sum_{i=1}^{15} O_{i} \cdot E_{i}^{\prime}\right)}{\sum_{i=1}^{15} E_{i}^{\prime}}$
where $\mathrm{O}_{\mathrm{i}}$ is the weighted average bureau score reported in column O and $E_{i}^{\prime}$ is the EAD (\$) of exposures with a bureau score available, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 15 of this schedule. The EAD reported in column $E_{i}$ will be greater or equal to the EAD of exposures with a bureau score available, $E_{i}^{\prime}$.

In columns B, C, D, E, H, I, J, K, L, M, N, and P, the sums are calculated as the total of amounts reported in item numbers 1 through 15 of this schedule for each of these respective columns.

Report the risk-weighted assets of non-material portfolios reportable in this schedule but not included in the above cells.

Report the name of the credit bureau or credit scoring system used to produce the values in column O. Leave blank if not applicable.

## Schedule L - Retail Exposures - Residential Mortgage - Closed-end Junior Lien Exposures

Report all residential mortgage exposures that (1) are secured by liens subordinate to any other lien, and (2) are not revolving.

## Item No. Instructions

1-15 In column A, report the weighted average PD of all segments of exposures applicable to this section as noted above, whose PD falls within each range indicated. Cell A-15 equals 100 .

In column B, report the total number of exposures in all segments included in this row for column A.

In column $C$, report the total balance sheet amount of exposures within the segments included in this row for column A.

In column D , report the dollar volume of available but undrawn balances of exposures within the segments included in this row for column A. Include undrawn commitments to lend, including available negative amortization and unfunded mortgage commitments.

In column E, report the total EAD of segments of exposures included in this row for column A.

In column F , report the weighted average age in months of exposures in the segments included in this row for column A.

In column G, report the weighted average LGD of exposures in the segments included in this row for column A .

In column $H$, report total risk-weighted assets associated with all segments of exposures included in this row for column A.

In column I, report the dollar volume of ECL, after consideration of credit risk mitigation, for segments of exposures included in this row for column A .

In column $J$, report the EAD of exposures included in this row for column A that have less than a 70\% LTV.

In column K , report the EAD of exposures included in this row for column A that have at least a 70\% but less than 80\% LTV.

In column $L$, report the EAD of exposures included in this row for column A that have at least an $80 \%$ but less than $90 \%$ LTV.

In column $M$, report the EAD of exposures included in this row for column $A$ that have at least a $90 \%$ but less than $100 \%$ LTV.

In column $N$, report the EAD of exposures included in this row for column $A$ that have an LTV greater than or equal to $100 \%$.

In column O , report the weighted average credit risk score of exposures in the segments included in this row for column A.

In column P, report the EAD of accounts that are included in the segments reported in this row where the LTV has been updated since the last report date, that is, the updated LTV is based upon a refreshed assessment of the collateral value. If LTVs were not updated for any accounts in the segments reported in the row since the last report date, report 0 .

In column A, the EAD-weighted average PD (WAPD) in percentage terms is calculated as follows:
$W A P D(\%)=\frac{\left(\sum_{i=1}^{15} A_{i} \cdot E_{i}\right)}{\sum_{i=1}^{15} E_{i}}$
where $A_{i}$ and $E_{i}$ are the weighted average PD (\%) and EAD (\$) reported in columns $A$ and $E$, respectively, for the $i^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 15 of this schedule. Note that $\mathrm{A}_{15}$ equals 100.

In column F, the EAD-weighted average age (WAA) in months is calculated as follows:
$W A A($ Months $)=\frac{\left(\sum_{i=1}^{15} F_{i} \cdot E_{i}\right)}{\sum_{i=1}^{15} E_{i}}$
where $\mathrm{F}_{\mathrm{i}}$ and $\mathrm{E}_{\mathrm{i}}$ are the weighted average age (months) and EAD (\$) reported in columns $F$ and $E$, respectively, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 15 of this schedule.

In column G, the EAD-weighted average LGD (WALGD) in percentage terms is calculated as follows:
$W A L G D(\%)=\frac{\left(\sum_{i=1}^{15} G_{i} \cdot E_{i}\right)}{\sum_{i=1}^{15} E_{i}}$
where $G_{i}$ and $E_{i}$ are the weighted average LGD (\%) and EAD (\$) reported in columns G and E , respectively, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 15 of this schedule.

In column O, report the EAD-weighted average bureau score (WABS), rounded to the nearest whole number, using the following calculation:
$W A B S=\frac{\left(\sum_{i=1}^{15} O_{i} \cdot E_{i}^{\prime}\right)}{\sum_{i=1}^{15} E_{i}^{\prime}}$
where $\mathrm{O}_{\mathrm{i}}$ is the weighted average bureau score reported in column O and $E_{i}^{\prime}$ is the EAD (\$) of exposures with a bureau score available, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 15 of this schedule. The EAD reported in column $\mathrm{E}_{\mathrm{i}}$ will be greater or equal to the EAD of exposures with a bureau score available, $E_{i}^{\prime}$.

In columns B, C, D, E, H, I, J, K, L, M, N, and P, the sums are calculated as the total of amounts reported in item numbers 1 through 15 of this schedule for each of these respective columns.

Report the risk-weighted assets of non-material portfolios reportable in this schedule but not included in the above cells.

Report the name of the credit bureau or credit scoring system used to produce the values in column O. Leave blank if not applicable.

## Schedule M - Retail Exposures - Residential Mortgage - Revolving Exposures

Report all residential mortgage exposures that are revolving.

## Item No. Instructions

1-15 In column A, report the weighted average PD of all segments of exposures applicable to this section as noted above, whose PD falls within each range indicated. Cell A-15 equals 100 .

In column $B$, report the total number of exposures in all segments included in this row for column A.

In column C, report the total balance sheet amount of exposures within the segments included in this row for column A.

In column D , report the dollar volume of available but undrawn balances of exposures within the segments included in this row for column A. Include undrawn commitments to lend, including available negative amortization and unfunded mortgage commitments.

In column E, report the total EAD of segments of exposures included in this row for column A.

In column F , report the weighted average age in months of exposures in the segments included in this row for column A .

In column G, report the weighted average LGD of exposures in the segments included in this row for column A .

In column $H$, report total risk-weighted assets associated with all segments of exposures included in this row for column A.

In column I, report the dollar volume of ECL, after consideration of credit risk mitigation, for segments of exposures included in this row for column A .

In column J , report the EAD of exposures included in this row for column A that have less than a 70\% LTV.

In column K , report the EAD of exposures included in this row for column A that have at least a 70\% but less than 80\% LTV.

In column $L$, report the EAD of exposures included in this row for column A that have at least an $80 \%$ but less than $90 \%$ LTV.

In column M , report the EAD of exposures included in this row for column A that have at least a $90 \%$ but less than 100\% LTV.

In column N , report the EAD of exposures included in this row for column A that have an LTV greater than or equal to $100 \%$.

In column $O$, report the weighted average credit risk score of exposures in the segments included in this row for column A.

In column P, report the EAD of accounts that are included in the segments reported in this row where the LTV has been updated since the last report date, that is, the updated LTV is based upon a refreshed assessment of the collateral value. If LTVs were not updated for any accounts in the segments reported in the row since the last report date, report 0.

In column A, the EAD-weighted average PD (WAPD) in percentage terms is calculated as follows:
$W A P D(\%)=\frac{\left(\sum_{i=1}^{15} A_{i} \cdot E_{i}\right)}{\sum_{i=1}^{15} E_{i}}$
where $A_{i}$ and $E_{i}$ are the weighted average $P D$ (\%) and EAD (\$) reported in columns $A$ and $E$, respectively, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 15 of this schedule. Note that $\mathrm{A}_{15}$ equals 100.

In column F, the EAD-weighted average age (WAA) in months is calculated as follows:

WAA (Months $)=\frac{\left(\sum_{i=1}^{15} F_{i} \cdot E_{i}\right)}{\sum_{i=1}^{15} E_{i}}$
where $F_{i}$ and $E_{i}$ are the weighted average age (months) and EAD (\$) reported in columns $F$ and $E$, respectively, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 15 of this schedule.

In column G, the EAD-weighted average LGD (WALGD) in percentage terms is calculated as follows:
$W A L G D(\%)=\frac{\left(\sum_{i=1}^{15} G_{i} \cdot E_{i}\right)}{\sum_{i=1}^{15} E_{i}}$
where $G_{i}$ and $E_{i}$ are the weighted average LGD (\%) and EAD (\$) reported in columns G and E , respectively, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 15 of this schedule.

In column O, report the EAD-weighted average bureau score (WABS), rounded to the nearest whole number, using the following calculation:
$W A B S=\frac{\left(\sum_{i=1}^{15} O_{i} \cdot E_{i}^{\prime}\right)}{\sum_{i=1}^{15} E_{i}^{\prime}}$
where $\mathrm{O}_{\mathrm{i}}$ is the weighted average bureau score reported in column O and $E_{i}^{\prime}$ is the EAD (\$) of exposures with a bureau score available, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1
through 15 of this schedule. The EAD reported in column $E_{i}$ will be greater or equal to the EAD of exposures with a bureau score available, $E_{i}^{\prime}$.

In columns B, C, D, E, H, I, J, K, L, M, N, and P, the sums are calculated as the total of amounts reported in item numbers 1 through 15 of this schedule for each of these respective columns.

17 Report the risk-weighted assets of non-material portfolios reportable in this schedule but not included in the above cells.

Report the name of the credit bureau or credit scoring system used to produce the values in column O. Leave blank if not applicable.

## Schedule N - Retail Exposures - Qualifying Revolving Exposures

Report all qualifying revolving exposures.

## Item No. Instructions

1-15 In column A, report the weighted average PD of the segments whose PDs fall within each of the PD ranges indicated. Cell A-15 equals 100.

In column $B$, report the total number of exposures in all segments included in this row for column A.

In column C, report the total balance sheet amount of exposures within the segments included in this row for column A .

In column D , report the dollar amount of available but undrawn balances of exposures within the segments included in this row for column A .

In column E, report the total EAD of segments of exposures included in this row for column A.

In column F , report the total EAD for the exposures in the segments included in this row for column A that are less than 2 years old. Report zero if all exposures in this row are more than 2 years old.

In column G, report the weighted average LGD of exposures in the segments included in this row for column A .

In column $H$, report total risk-weighted assets associated with all segments of exposures included in this row for column A.

In column I, report the dollar amount of ECL, after consideration of credit risk mitigation, for segments of exposures included in this row for column A .

In column J , report the weighted average credit risk score of exposures in the segments included in this row for column A.

In column A, the EAD-weighted average PD (WAPD) in percentage terms is calculated as follows:
$W A P D(\%)=\frac{\left(\sum_{i=1}^{15} A_{i} \cdot E_{i}\right)}{\sum_{i=1}^{15} E_{i}}$
where $A_{i}$ and $E_{i}$ are the weighted average PD (\%) and EAD (\$) reported in columns $A$ and $E$, respectively, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 15 of this schedule. Note that $\mathrm{A}_{15}$ equals 100.

In column G, the EAD-weighted average LGD (WALGD) in percentage terms is calculated as follows:
$W A L G D(\%)=\frac{\left(\sum_{i=1}^{15} G_{i} \cdot E_{i}\right)}{\sum_{i=1}^{15} E_{i}}$
where $G_{i}$ and $E_{i}$ are the weighted average LGD (\%) and EAD (\$) reported in columns G and E , respectively, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 15 of this schedule.

In column $J$, report the EAD-weighted average bureau score (WABS), rounded to the nearest whole number, using the following calculation:
$W A B S=\frac{\left(\sum_{i=1}^{15} J_{i} \cdot E_{i}^{\prime}\right)}{\sum_{i=1}^{15} E_{i}^{\prime}}$
where $\mathrm{J}_{\mathrm{i}}$ is the weighted average bureau score reported in column J and $E_{i}$ is the EAD (\$) of exposures with a bureau score available, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 15 of this schedule. The EAD reported in column $\mathrm{E}_{\mathrm{i}}$ will be greater or equal to the EAD of exposures with a bureau score available, $E_{i}^{\prime}$.

In columns B, C, D, E, F, H, and I, the sums are calculated as the total of amounts reported in item numbers 1 through 15 of this schedule for each of these respective columns.

## Schedule O - Retail Exposures - Other Retail Exposures

Report other retail exposures.

## Item No. Instructions

1-15 In column A, report the weighted average PD of the segments whose PDs fall within each of the PD ranges indicated. Cell A-15 equals 100.

In column $B$, report the total number of exposures in all segments included in this row for column A.

In column C, report the total balance sheet amount of exposures within the segments included in this row for column A.

In column D , report the dollar amount of available but undrawn balances of exposures within the segments included in this row for column A .

In column E, report the total EAD of segments of exposures included in this row for column A.

In column F , report the total EAD for the exposures in the segments included in this row for column A that are less than 2 years old. Report zero if all exposures in this row are more than 2 years old.

In column G, report the weighted average LGD of exposures in the segments included in this row for column A .

In column $H$, report total risk-weighted assets associated with all segments of exposures included in this row for column A.

In column I, report the dollar amount of ECL, after consideration of credit risk mitigation, for segments of exposures included in this row for column A .

In column J , report the weighted average credit risk score of exposures in the segments included in this row for column A.

In column A, the EAD-weighted average PD (WAPD) in percentage terms is calculated as follows:
$W A P D(\%)=\frac{\left(\sum_{i=1}^{15} A_{i} \cdot E_{i}\right)}{\sum_{i=1}^{15} E_{i}}$
where $A_{i}$ and $E_{i}$ are the weighted average $P D$ (\%) and EAD (\$) reported in columns $A$ and E , respectively, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 15 of this schedule. Note that $\mathrm{A}_{15}$ equals 100.

In column G, the EAD-weighted average LGD (WALGD) in percentage terms is calculated as follows:
$W \operatorname{WAGD}(\%)=\frac{\left(\sum_{i=1}^{15} G_{i} \cdot E_{i}\right)}{\sum_{i=1}^{15} E_{i}}$
where $\mathrm{G}_{\mathrm{i}}$ and $\mathrm{E}_{\mathrm{i}}$ are the weighted average LGD (\%) and EAD (\$) reported in columns G and E, respectively, for the $\mathrm{i}^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 15 of this schedule.

In column J, report the EAD-weighted average bureau score (WABS), rounded to the nearest whole number, using the following calculation:

WABS $=\frac{\left(\sum_{i=1}^{15} J_{i} \cdot E_{i}^{\prime}\right)}{\sum_{i=1}^{15} E_{i}^{\prime}}$
where $\mathrm{J}_{\mathrm{i}}$ is the weighted average bureau score reported in column J and $E_{i}^{\prime}$ is the EAD (\$) of exposures with a bureau score available, for the $i^{\text {th }} \mathrm{PD}$ range in item numbers 1 through 15 of this schedule. The EAD reported in column $\mathrm{E}_{\mathrm{i}}$ will be greater or equal to the EAD of exposures with a bureau score available, $E_{i}^{\prime}$.

In columns B, C, D, E, F, H, and I, the sums are calculated as the total of amounts reported in item numbers 1 through 15 of this schedule for each of these respective columns.

Report the risk-weighted assets of non-material portfolios reportable in this schedule but not included in the above cells.

Report the name of the credit bureau or credit scoring system used to produce the values in column J. Leave blank if not applicable.

## Schedules P and Q - Securitization Exposures

## General Instructions

Definitions. Apply the definitions from the advanced approaches rules to the following terms: (1) securitization exposure; (2) securitization; (3) early amortization provision; (4) exposure at default (EAD); (5) investors' interest EAD; and (6) synthetic securitization.

The Ratings-based Approach (RBA), Internal Assessment Approach (IAA), and Supervisory Formula Approach (SFA) are described in sections 43, 44, and 45, respectively, of the advanced approaches rules.

## Reporting under specific cases defined in the advanced approaches rules.

Proration of adjustments to capital requirements across multiple exposure categories within a single securitization transaction. If, according to the provisions of section 42(d) of the advanced approaches rules, an adjustment is made to the capital requirements of a securitization that involves multiple exposure categories (e.g., part of the securitization is subject to one of the hierarchy of approaches and part represents investors' interest), the adjustment to risk-weighted assets should be allocated across these exposures in proportion to associated exposure amounts such that the total risk-based capital requirements equal the maximum risk-based capital requirements for the securitization transaction.

Securitization exposures that fail one or more operational criteria for recognizing the transfer of risk. If a securitization exposure fails one or more of the conditions specified in section 41(a) or 41(b), the bank would not report that exposure in Schedules P or Q. Instead, such securitization exposures should be reported in the schedule appropriate for the underlying exposures according to the instructions for that schedule. Any associated after-tax gain-on-sale associated with such securitizations should be reported in line item 2 of Schedule Q and in line item 9d of Schedule A, Part 1 for banks and bank holding companies (line item 6 in Schedule A, Part 2 for savings associations).

Implicit support. According to section 42(h) of the advanced approaches rules, banks that provide implicit support to a securitization are required to hold regulatory capital against the underlying exposures as if the exposures had not been securitized. Banks should not report such exposures in Schedules P or Q. Instead, banks should report the underlying exposures in the schedule appropriate for those exposures according to the instructions for that schedule. Any associated after-tax gain-on-sale associated with such securitizations should be reported in line item 2 of Schedule Q and in line item 9d of Schedule A, part I for banks and bank holding companies (line item 6 in Schedule A, part II for savings associations).

## Schedule P - Exposures Subject to Ratings-Based or Internal Assessment Approaches

## Item No. Instructions

1-4 Report the aggregate amount of securitization exposures (consistent with section 42(c) of the advanced approaches rules) in each line item that correspond to a particular rating category, separating those subject to the Ratings-based Approach (RBA) from those subject to the Internal Assessment Approach (IAA). Report risk weighted assets for each line item in the last column. Do not include exposures that require deduction.

5 In columns A, B, and C, the sums are calculated as the total of amounts reported in item numbers 1 through 4 of this schedule for each of these respective columns. [Note: these totals do not include amounts related to long-term exposures rated more than one
category below investment grade, and short-term exposures rated below the third highest grade.]

## Schedule Q - Securitization Exposures - Additional Detail

## Item No. Instructions

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In column C, report the aggregate amount that must be deducted for exposures under the RBA and IAA approaches. Do not use columns A or B.

In column C, report the aggregate amount that must be deducted for all other securitization exposures (except those exposures deducted under the SFA and reported in item 3 below). Do not use columns A or B .

In column A, report the amount of exposures under the SFA.
In column B, report the risk weight assets associated with the exposures in column $A$.
In column C, report the amount that must be deducted due to a 1250 percent or greater risk weight under the SFA.

In column A, report the total exposure to synthetic securitizations.
In column B, report the amount of risk weighted assets associated with synthetic securitizations.

In column C, report deductions associated with synthetic securitizations.
In column A, report the EAD associated with the investors’ interest in revolving retail credit line (e.g., individual credit line) securitizations.

In column B, report the risk weighted assets associated with the investors’ interest in revolving retail credit line (e.g., individual credit line) securitizations.

In column A, report the EAD associated with the investors’ interest in revolving nonretail credit line securitizations.

In column B, report the risk weighted assets associated with the investors’ interest in revolving non-retail credit line securitizations.

## Schedule R - Equity Exposures

## General Instructions

Definitions. Apply the definitions provided in the advanced approaches rules for the following terms: (1) publicly traded; (2) investment fund; and (3) equity exposure.

The following terms are described in section 52 of the advanced approaches rules: (1) community development equity exposures; (2) hedge pairs and measures of an effective hedge; and (3) nonsignificant equity exposures.

The term adjusted carrying value is described in section 51 of the advanced approaches rules.
The Simple Risk Weight Approach (SRWA) and the Internal Models Approach (IMA) are described in sections 52 and 53, respectively, of the advanced approaches rules. The effective and ineffective portion of a hedge pair are described in section 52(c) of the advanced approaches rules.

Banks subject to the SRWA should complete only columns A and B. Banks subject to the full IMA should complete only columns C and D . Banks subject to the IMA for only publicly-traded equity exposures (referred to hereafter as the partial IMA) should complete only columns E and F.

## Item No. Instructions

1 Total Equity Exposures. In column A, report the aggregate adjusted carrying value of equity exposures that are subject to the SRWA. Do not include equity exposures subject to the market risk capital framework.

In column C, report the aggregate adjusted carrying value of equity exposures that are subject to the full IMA. Do not include equity exposures subject to the market risk capital framework.

In column E, report the aggregate adjusted carrying value of equity exposures that are subject to the partial IMA. Do not include equity exposures subject to the market risk capital framework.

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0\% Risk Weight. For banks subject to the SRWA, report in column A the adjusted carrying value of equity exposures that are sovereign exposures or exposures to the Bank for International Settlements, the International Monetary Fund, the European Commission, the European central bank or a multilateral development bank, to which the bank assigns a rating grade associated with a PD of less than 0.03 percent.

For banks subject to the SRWA, report 0 in column B.
For banks subject to the full IMA, report in column C the adjusted carrying value of equity exposures that are sovereign exposures or exposures to the Bank for International Settlements, the International Monetary Fund, the European Commission, the European central bank or a multilateral development bank, to which the bank assigns a rating grade associated with a PD of less than 0.03 percent.

For banks subject to full IMA, report 0 in column D.
For banks subject to the partial IMA, report in column E the adjusted carrying value of equity exposures that are sovereign exposures or exposures to the Bank for International Settlements, the International Monetary Fund, the European Commission, the European central bank or a multilateral development bank, to which the bank assigns a rating grade associated with a PD of less than 0.03 percent.

For banks subject to the partial IMA, report 0 in column F.

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$\underline{\mathbf{2 0 \%}}$ Risk Weight. For banks subject to the SRWA, report in column A the adjusted carrying value of equity exposures to a Federal Home Loan Bank and Farmer Mac.

For banks subject to the SRWA, report 20 percent of the amount in column A for this item in column B.

For banks subject to the full IMA, report in column C the adjusted carrying value of equity exposures to a Federal Home Loan Bank and Farmer Mac.

For banks subject to the full IMA, report 20 percent of the amount in column $C$ for this item in column D .

For banks subject to the partial IMA, report in column E the adjusted carrying value of equity exposures to a Federal Home Loan Bank and Farmer Mac.

For banks subject to the partial IMA, report 20 percent of the amount in column E for this item in column F.

Community Development Equity Exposures. For banks subject to the SRWA, report in column A the adjusted carrying value of community development equity exposures.

For banks subject to the SRWA, report 100 percent of the amount in column A for this item in column B.

For banks subject to the full IMA, report in column C the adjusted carrying value of community development equity exposures.

For banks subject to the full IMA, report 100 percent of the amount in column C for this item in column D.

For banks subject to the partial IMA, report in column E the adjusted carrying value of community development equity exposures.

For banks subject to the partial IMA, report 100 percent of the amount in column E for this item in column F.

## Simple Risk Weight Approach (SRWA)

Effective Portion of Hedge Pairs. For bank subject to the SRWA, report in column A the effective portion of each hedge pair.

For banks subject to the SRWA, report 100 percent of the amount in column $A$ for this item in column B.

This item is not applicable to banks subject to the full IMA or the partial IMA.

Non-Significant Equity Exposures. For banks subject to the SRWA, report in column A the adjusted carrying value of non-significant equity exposures (excluding amounts reported in column A, items 2 through 5) up to 10 percent of tier 1 plus tier 2 capital.

For banks subject to the SRWA, report 100 percent of the amount in column A for this item in column B.

This item is not applicable to banks subject to the full IMA or the partial IMA.
Publicly Traded Equity Exposures Under the SRWA. For banks subject to the SRWA, report in column A the adjusted carrying value of the bank's publicly traded equity exposures not included in column A, items 2 through 6 , and not subject to a 600 percent risk weight per the advanced approaches rules, including the ineffective portion of each hedge pair.

For banks subject to the SRWA, report 300 percent of the amount in column A for this item in column B.

This item is not applicable to banks subject to the full IMA or the partial IMA.
Non-Publicly Traded Equity Exposures Under the SRWA. For banks subject to the SRWA, report in column A the adjusted carrying value of the bank's non-publicly traded equity exposures not included in column A, items 2 through 6 , and not subject to a 600 percent risk weight per the advanced approaches rules.

For banks subject to the SRWA, report 400 percent of the amount in column A for this item in column B.

For banks subject to partial IMA, report in column E the adjusted carrying value of the bank's non-publicly traded equity exposures not included in column E, items 2 through 6, and not subject to a 600 percent risk weight per the final rule.

For banks subject to the partial IMA, report 400 percent of the amount in column E for this item in column F.

This item is not applicable to banks subject to the full IMA.
600\% Risk Weight Equity Exposures Under the SRWA. For banks subject to the SRWA, report in column A the adjusted carrying value of the bank's equity exposures subject to a 600 percent risk weight under paragraph (b)(6) of section 52 of the advanced approaches rules.

For banks subject to the SWRA, report 600 percent of the amount in column A for this item in column B.

For banks subject to partial IMA, report in column E the adjusted carrying value of the bank's equity exposures subject to a 600 percent risk weight under paragraph (b)(6) of section 52 of the final rule.

For banks subject to the partial IMA, report 600 percent of the amount in column E for this item in column F.

This item is not applicable to banks subject to the full IMA.
10 Total Risk Weighted Assets (RWA) Under the SRWA. For banks subject to the SRWA, report in column B the sum of amounts in column B, items 2 through 9.

This item is not applicable to banks subject to the full IMA or the partial IMA.

## Equity Exposures to Investment Funds

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Full Look-through Approach. For banks subject to the SRWA, report in column A the adjusted carrying value of all equity exposures to investment funds to which the bank applies the full look-through approach as described in paragraph (b) of section 54 of the advanced approaches rules.

For banks subject to the SRWA, report the risk weighted assets of the amount in column A for this item in column B.

For banks subject to full IMA, report in column C the adjusted carrying value of all equity exposures to investment funds to which the bank applies the full look-through approach as described in paragraph (b) of section 54 of the final rule.

For banks subject to the full IMA, report the risk weighted assets of the amount in column C for this item in column D.

For banks subject to the partial IMA, report in column E the adjusted carrying value of all equity exposures to investment funds to which the bank applies the full look-through approach as described in paragraph (b) of section 54 of the final rule.

For banks subject to the partial IMA, report the risk weighted assets of the amount in column E for this item in column F .

Simple Modified Look-through Approach. For banks subject to the SRWA, report in column A the adjusted carrying value of all equity exposures to investment funds to which the bank applies the simple modified look-through approach as described in paragraph (c) of section 54 of the advanced approaches rules.

For banks subject to the SRWA, report the risk weighted assets for the amount in column A for this item in column B.

For banks subject to the full IMA, report in column C the adjusted carrying value of all equity exposures to investment funds to which the bank applies the simple modified lookthrough approach as described in paragraph (c) of section 54 of the final rule.

For banks subject to the full IMA, report the risk weighted assets for the amount in column C for this item in column D .

For banks subject to the partial IMA, report in column E the adjusted carrying value of all equity exposures to investment funds to which the bank applies the simple modified lookthrough approach as described in paragraph (c) of section 54 of the final rule.

For banks subject to the partial IMA, report the risk weighted assets for the amount in column E for this item in column F .

Alternative Modified Look-through Approach. For banks subject to the SRWA, report in column A the adjusted carrying value of all equity exposures to investment funds for which the bank applies the alternative modified look-through approach as described in paragraph (d) of section 54 of the advanced approaches rules.

For banks subject to the SRWA, report the risk weighted assets for the amount in column A for this item in column B.

For banks subject to the full IMA, report in column C the adjusted carrying value of all equity exposures to investment funds for which the bank applies the alternative modified look-through approach as described in paragraph (d) of section 54 of the final rule.

For banks subject to the full IMA, report the risk weighted assets for the amount in column C for this item in column D.

For banks subject to the partial IMA, report in column E the adjusted carrying value of all equity exposures to investment funds for which the bank applies the alternative modified look-through approach as described in paragraph (d) of section 54 of the final rule.

For banks subject to the partial IMA, report the risk weighted assets for the amount in column E for this item in column F .

Money Market Fund Approach. For banks subject to the SRWA, report in column A the adjusted carrying value of all equity exposures to investment funds that qualify for the Money Market Fund Approach described in paragraph (e) of section 54 of the advanced approaches rules.

For banks subject to the SRWA, report 7 percent of the amount in column A for this item in column B.

For banks subject to the full IMA, report in column C the adjusted carrying value of all equity exposures to investment funds that qualify for the Money Market Fund Approach described in paragraph (e) of section 54 of the final rule.

For banks subject to the full IMA, report 7 percent of the amount in column C for this item in column D.

For banks subject to the partial IMA, report in column E the adjusted carrying value of all equity exposures to investment funds that qualify for the Money Market Fund Approach described in paragraph (e) of section 54 of the final rule.

For banks subject to the partial IMA, report 7 percent of the amount in column E for this item in column F.

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Total Risk Weighted Assets for Investment Funds. For banks subject to the SRWA, report in column B the sum of amounts in column B, items 11 through 14.

For banks subject to the full IMA, report in column D the sum of amounts in column D, items 11 through 14.

For banks subject to the partial IMA, report in column F the sum of amounts in column F , items 11 through 14.

Total: SRWA. For banks subject to the SRWA, report in column B the sum of column B, items 10 and 15.

This item is not applicable to banks subject to the full IMA or the partial IMA.

## Full Internal Models Approach (Full IMA)

17 Estimate of Potential Losses on Equity Exposures. For banks subject to the full IMA, report in column C the estimated potential losses on the bank's equity exposures, excluding those exposures reported in column C , items 2 through 4 of this schedule and equity exposures to investment funds.

For banks subject to the full IMA, report 12.5 times the amount in column C for this item in column D.

This item is not applicable to banks subject to the SRWA or the partial IMA.

## Floors for Full IMA

18 Publicly Traded. For banks subject to the full IMA, report in column C the sum of (i) the aggregated adjusted carrying value of the bank's publicly traded equity exposures that do not belong to a hedge pair, are not reported in column C, items 2 through 4 of this schedule, and are not equity exposures to an investment fund, and (ii) the aggregate ineffective portion of all hedge pairs.

For banks subject to the full IMA, report 200 percent of the amount in column C for this item in column D.

This item is not applicable to banks subject to the SRWA or the partial IMA.
19 Non-publicly Traded. For banks subject to the full IMA, report in column C the aggregated adjusted carrying value of the bank's equity exposures that are not publicly traded, are not reported in column C, items 2 through 4 of this schedule, and are not equity exposures to an investment fund.

For banks subject to the full IMA, report 300 percent of the amount in column C for this item in column D.

This item is not applicable to banks subject to the SRWA or the partial IMA.

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Risk Weighted Asset Floors. For banks subject to the full IMA, report in column D the sum of column D, items 18 and 19.

This item is not applicable to banks subject to the SRWA or the partial IMA.

Total Risk Weighted Assets - Full IMA. For banks subject to the full IMA, report in column D the larger of column D, item 17 or column D, item 20.

This item is not applicable to banks subject to the SRWA or the partial IMA.

Total: Full IMA. For banks subject to the full IMA, report in column $D$ the sum of column D, items 3, 4, 15, and 21

This item is not applicable to banks subject to the SRWA or the partial IMA.

## Publicly-Traded Internal Models Approach (Partial IMA)

Estimate of Potential Losses on Publicly Traded Equity Exposures. For banks subject to the partial IMA, report in column E the estimated potential losses on the bank's publicly traded equity exposures, excluding those reported in column E, items $2,3,4,8$, and 9 of this schedule, and equity exposures to investment funds.

For banks subject to the partial IMA, report 12.5 times the amount in column $E$ for this item in column F .

This item is not applicable to banks subject to the SRWA or the full IMA.

## Floor for Partial IMA

24 Publicly Traded. For banks subject to the partial IMA, report in column E sum of (i) the aggregated adjusted carrying value of the bank's publicly traded equity exposures that do not belong to a hedge pair, are not reported in column E, items 2 through 4 of this schedule, and are not equity exposures to an investment fund, and (ii) the ineffective portion of all hedge pairs.

For banks subject to the partial IMA, report 200 percent of the amount in column E for this item in column F.

This item is not applicable to banks subject to the SRWA or the full IMA.

25 Total Risk Weighted Assets - Partial IMA. For banks subject to the partial IMA, report in column $F$ the larger of column $F$, item 23 or column $F$, item 24.

This item is not applicable to banks subject to the SRWA or the full IMA.

26 Total: Partial IMA, Partial SRWA. For banks subject to the partial IMA, report in column F the sum of column F, items 3, 4, 8, 9, 15 and 25.

SCHEDULE R

This item is not applicable to banks subject to the SRWA or the full IMA.

## Schedule S - Operational Risk

## Operational Risk Capital

Definitions. Apply the definitions provided in the advanced approaches rules for the following terms: (1) business environment and internal control factors; (2) dependence; (3) eligible operational risk offsets; (4) expected operational loss; (5) operational loss event; (6) operational risk; (7) operational risk exposure;
(8) GAAP; (9) scenario analysis; (10) unexpected operational loss; and (11) unit of measure. Frequency Distribution means the statistical distribution used to calculate the frequency of losses. Severity Distribution means the statistical distribution used to calculate the severity of losses.

All line items described in this schedule should be completed based on available data. The agencies recognize that certain circumstances may pose reporting challenges for banks. For example, the inherent flexibility of the Advanced Measurement Approach (AMA) or a bank's use, with prior written supervisory approval, of an alternative operational risk quantification system may result in a bank having limited data to report for certain line items. In determining its response to each line item, a bank should carefully review the instructions and report the information it has available. In instances where a bank does not have information to report for a particular line item, it should leave the reported item blank.

## Item No. $\quad$ Caption and Instructions

## Public Items

1 Risk-based Capital Requirement for Operational Risk. Report the dollar amount of the risk-based capital requirement for operational risk pursuant to the requirements of the advanced approaches rules.

2
Is item 1 generated from an "alternative operational risk quantification system?" Report whether the risk-based capital figure reported in item 1 results from an "alternative operational risk quantification system" (as discussed in section 22(h)(3)(ii) of the advanced approaches rules) by indicating " 1 " for (yes) or "0" for (no) for this item.

## Confidential Items

## Expected Operational Loss (EOL) and Eligible Operational Risk Offsets

3 Expected Operational Loss (EOL). Report the dollar amount of the expected value of the distribution of potential aggregate operational losses, as generated by the bank's operational risk quantification system using a one-year horizon.

4 Total Eligible Operational Risk Offsets.

4a Eligible GAAP reserves. Report the dollar amount of reserves calculated in a manner consistent with GAAP.

4b
Other eligible offsets. Report the dollar amount of offsets approved by the institution's supervisor outside of GAAP reserves reported in item 4a above.

## Total Risk-based Capital Requirement for Operational Risk without:

The effects of each of the following three adjustments on risk-based capital for operational risk should be calculated independently (e.g. item 7 should only exclude Risk Mitigants from the calculation, and should continue to include adjustments for dependence assumptions and those related to business environment and internal control factors).

5 Dependence Assumptions. Report the risk-based capital requirement for operational risk without any diversification benefits.

Adjustments Reflecting Business Environment and Internal Control Factors. Report the risk-based capital requirement for operational risk excluding the effects of qualitative adjustments that account for business environment and internal control factors.

Risk Mitigants (e.g., insurance). Report the risk-based capital requirement for operational risk excluding the effects of qualifying operational risk mitigants, as discussed in section 61 of the advanced approaches rules.

## Internal Operational Loss Event Data Characteristics

$8 \quad$ Date ranges of internal operational loss event data used in modeling operational risk capital. For items 8a through 8d, all dates should be expressed in the MM/YYYY format on the schedule. If the distributions identified in 8a through 8d are not used, then leave these items blank.

8a Starting date for frequency distribution (if applicable). Report the earliest date relevant to the internal operational loss event data used in modeling the frequency distribution for operational risk capital.

8b Ending date for frequency distribution (if applicable). Report the latest date relevant to the internal operational loss event data used in modeling the frequency distribution for operational risk capital.

8c Starting date for severity distribution (if applicable). Report the earliest date relevant to the internal operational loss event data used in modeling the severity distribution for operational risk capital.

8d Ending date for severity distribution (if applicable). Report the latest date relevant to the internal operational loss event data used in modeling the severity distribution for operational risk capital.

Highest dollar threshold applied in modeling internal operational loss event data. Report the dollar threshold that is used to exclude smaller internal operational loss event data from operational risk capital modeling. If more than one threshold is applied in the modeling process, report the highest threshold used. If no thresholds are used, report " 0 " for this item.

Does the dollar threshold change across units of measure? Report whether the thresholds for the internal loss data used in modeling operational risk capital differ across units of measure by indicating " 1 " for (yes) or " 0 " for (no) for this item. As defined in the advanced approaches rules, unit of measure is the level (for example, organizational unit or operational loss event type) at which the bank's operational risk quantification system generates a separate distribution of potential operational losses.

Total number of loss events. Report the total number of internal loss events used in the model to determine the risk-based capital requirement for operational risk. A loss event may encompass one loss transaction or may comprise multiple loss transactions all related to the same event. For example, individual losses of $\$ 2,000, \$ 6,000$, and $\$ 12,000$ that all relate to a single loss event should be considered one loss (amounting to \$20,000) for purposes of calculating this item. Conversely, losses that do not relate to the same event should be considered separate loss events. For example, a bank may group losses together for certain purposes (e.g., because of similarity in causal factors), but these losses should be counted separately for reporting purposes if they do not relate to the same event.

Total dollar amount of loss events. Report the total dollar amount of internal loss events used in the model to determine the risk-based capital requirement for operational risk.

Dollar amount of largest loss event. Report the dollar value of the largest single internal loss event used in the model to determine the risk-based capital requirement for operational risk. The largest internal loss event should include all the loss transactions related to the single event.

Number of loss events in the following ranges (e.g., $\geq \$ 10,000$ and $<\$ 100,000$ ).
14a. Less than $\$ 10,000$
14b. \$10,000 to \$100,000
14c. $\$ 100,000$ to $\$ 1$ Million
14d. \$1 Million to \$10 Million
14e. $\$ 10$ Million to $\$ 100$ Million
14f. $\$ 100$ Million to $\$ 1$ Billion
14g. $\$ 1$ Billion or Greater
For each range, report the total number of internal losses used in the model to determine the risk-based capital requirement for operational risk. If the bank has set a threshold for its internal loss event data capture and events below that threshold are not captured, that should be reflected by marking " 0 " in the ranges that are below the threshold. In addition, if no losses have been experienced in a particular range, report " 0 " for that item.

The number of losses should be calculated on an event basis to ensure that related losses are counted as a single loss.

Total dollar amount of losses in the following ranges (e.g., $\geq \$ 10,000$ and $<$ $\underline{\$ 100,000)}$.

15a. Less than $\$ 10,000$
15b. \$10,000 to $\$ 100,000$
15c. $\$ 100,000$ to $\$ 1$ Million
15d. \$1 Million to \$10 Million
15e. $\$ 10$ Million to $\$ 100$ Million
15f. $\$ 100$ Million to $\$ 1$ Billion
15 g . $\$ 1$ Billion or Greater

For each range, report the total dollar amount of internal losses used in the model to determine the risk-based capital requirement for operational risk. If the bank has set a threshold for its internal loss event data capture and events below that threshold are not captured, that should be reflected by marking " 0 " in the ranges that are below the threshold. In addition, if no losses have been experienced in a particular range, report " 0 " for that item.

The dollar amount of losses should be calculated on an event basis to ensure that related losses are summed for purposes of calculating the total dollar amount for each range.

## Scenario Analysis

16 How many individual scenarios were used in calculating the risk-based capital requirement for operational risk? Report the total number of scenarios that were used as direct inputs in the model to determine the risk-based capital requirement for operational risk.

What is the dollar value of the largest individual scenario? Report the dollar value of the largest scenario used as a direct input in the model to determine the risk-based capital requirement for operational risk.

Number of scenarios in the following ranges (e.g., $\geq \$ 1$ Million and $<\$ 10$ Million).
Based on the response to item 16, for each range, report the total number of scenarios used as direct inputs into the model to determine the risk-based capital requirement. Report " 0 " for any ranges where there were no scenarios or they do not apply.

18a. Less than $\$ 1$ million
18b. \$1 Million to \$10 Million
18c. \$10 Million to $\$ 100$ Million
18d. $\$ 100$ Million to $\$ 500$ Million
18e. \$500 Million to \$1 Billion
18f. \$1 Billion or Greater

## Distributional Assumptions

19 How many units of measure were used in calculating the risk-based capital requirement for operational risk? Report the number of units of measure for which a separate distribution of potential operational losses is generated by the institution's operational risk quantification system.

20 Frequency Distribution: Across how many individual units of measure did the choice of frequency distribution change since the last reporting period? Report the total number of units of measure for which the statistical distribution(s) used this reporting period to estimate loss frequency differs from those used in the prior reporting period. This refers to changes in the distribution type. If frequency distributions are not used, leave the item blank.

21 Severity Distribution: Across how many individual units of measure did the choice of severity distribution change since the last reporting period? Report the total number of units of measure for which the statistical distribution(s) used this reporting
period to estimate loss severity differs from those used in the prior reporting period. This refers to changes in the distribution type. If frequency distributions are not used, leave the item blank.

## Loss Caps

Items 22 through 24 solicit information on the extent to which such loss caps are used and the levels at which those caps are set.

How many loss caps are used in calculating the risk-based capital requirement for operational risk? Report the number of loss caps used to limit loss size in the quantification process for determining the risk-based capital requirement for operational risk. If loss caps are not used, report " 0 " for this item.

What is the dollar amount of the smallest cap used (if applicable)? Report the dollar amount of the smallest cap used to limit loss size in the quantification process for determining the risk-based capital requirement for operational risk. If "0" is reported in item 22, leave this item blank.

What is the dollar amount of the largest cap used (if applicable)? Report the dollar amount of the largest cap used to limit loss size in the quantification process for determining the risk-based capital requirement for operational risk. If " 0 " is reported in item 22, leave this item blank.


[^0]:    ${ }^{1}$ See 72 FR 69288.

