Scorecard measures[1]	Description
Average Short-term Funding/Average Total Assets	Quarterly average of federal funds purchased and repurchase agreements divided by the quarterly average of total assets as reported on Schedule RC–K of the Call Reports

[1] The FDIC retains the flexibility, as part of the risk-based assessment system, without the necessity of additional notice-and-comment rulemaking, to update the minimum and maximum cutoff values for all measures used in the scorecard. The FDIC may update the minimum and maximum cutoff values for the higher-risk assets to Tier 1 capital and reserves ratio in order to maintain an approximately similar distribution of higher-risk assets to Tier 1 capital and reserves ratio scores as reported prior to April 1, 2013, or to avoid changing the overall amount of assessment revenue collected. 76 FR 10672, 10700 (February 25, 2011). The FDIC will review changes in the distribution of the higher-risk assets to Tier 1 capital and reserves ratio scores and the resulting effect on total assessments and risk differentiation between banks when determining changes to the cutoffs. The FDIC may update the cutoff values for the higher-risk assets to Tier 1 capital and reserves ratio more frequently than annually. The FDIC will provide banks with a minimum one quarter advance notice of changes in the cutoff values for the higher-risk assets to Tier 1 capital and reserves ratio with their quarterly deposit insurance invoice.

[2] EAD and SFTs are defined and described in the compilation issued by the Basel Committee on Banking Supervision in its June 2006 document, "International Convergence of Capital Measurement and Capital Standards." The definitions are described in detail in Annex 4 of the document. Any updates to the Basel II capital treatment of counterparty credit risk would be implemented as they are adopted. *http://www.bis.org/publ/bcbs128.pdf*

[3] A marked-to-market counterparty position is equal to the sum of the net marked-to-market derivative exposures for each counterparty. The net marked-to-market derivative exposure equals the sum of all positive marked-to-market exposures net of legally enforceable netting provisions and net of all collateral held under a legally enforceable CSA plus any exposure where excess collateral has been posted to the counterparty. For purposes of the Criticized and Classified Items/Tier 1 Capital and Reserves definition a marked-to-market counterparty position less any credit valuation adjustment can never be less than zero.

[4] Deposit runoff rates for the balance sheet liquidity ratio reflect changes issued by the Basel Committee on Banking Supervision in its December 2010 document, "Basel III: International Framework for liquidity risk measurement, standards, and monitoring," *http://www.bis.org/publ/bcbs188.pdf.*

[5] Market risk capital is defined in Appendix C of part 325 of the FDIC Rules and Regulations or subpart F of Part 324 of the FDIC Rules and Regulations, as applicable.

[74 FR 9557, Mar. 4, 2009, as amended at 76 FR 10720, Feb. 25, 2011; 76 FR 17521, Mar. 30, 2011; 77 FR 66015, Oct. 31, 2012; 78 FR 55594, Sept. 10, 2013]

Appendix B to Subpart A of Part 327—Conversion of Scorecard Measures into Score

1. Weighted Average CAMELS Rating

Weighted average CAMELS ratings between 1 and 3.5 are assigned a score between 25 and 100 according to the following equation:

$S = 25 + [(20/3) * (C^2 - 1)]$,

where:

S = the weighted average CAMELS score; and

C = the weighted average CAMELS rating.

2. Other Scorecard Measures

For certain scorecard measures, a lower ratio implies lower risk and a higher ratio implies higher risk. These measures include:

- Concentration measure;
- Credit quality measure;
- Market risk measure;
- Average short-term funding to average total assets ratio; and
- Potential losses to total domestic deposits ratio (loss severity measure).

For those measures, a value between the minimum and maximum cutoff values is converted linearly to a score between 0 and 100, according to the following formula:

$S = (V - \text{Min}) * 100/(\text{Max} - \text{Min})$,

where S is score (rounded to three decimal points), V is the value of the measure, Min is the minimum cutoff value and Max is the maximum cutoff value.

For other scorecard measures, a lower value represents higher risk and a higher value represents lower risk. These measures include:

- Tier 1 leverage ratio;
- Core earnings to average quarter-end total assets ratio;
- Core deposits to total liabilities ratio; and
- Balance sheet liquidity ratio.

For those measures, a value between the minimum and maximum cutoff values is converted linearly to a score between 0 and 100, according to the following formula:

$S = (\text{Max} - V) * 100/(\text{Max} - \text{Min})$,

where S is score (rounded to three decimal points), V is the value of the measure, Max is the maximum cutoff value and Min is the minimum cutoff value.

[76 FR 10720, Feb. 25, 2011]

Appendix C to Subpart A of Part 327

I. Concentration Measures

The concentration score for large banks is the higher of the higher-risk assets to Tier 1 capital and reserves score or the growth-adjusted portfolio concentrations score.[1] The concentration score for highly complex institutions is the highest of the higher-risk assets to Tier 1 capital and reserves score, the Top 20 counterparty exposure to Tier 1 capital and reserves score, or the largest counterparty to Tier 1 capital and reserves

[1] For the purposes of this Appendix, the term "bank" means insured depository institution.

score. The higher-risk assets to Tier 1 capital and reserves ratio and the growth-adjusted portfolio concentration measure are described herein.

A. Higher-Risk Assets/Tier 1 Capital and Reserves

The higher-risk assets to Tier 1 capital and reserves ratio is the sum of the concentrations in each of five risk areas described below and is calculated as:

$$H_i = \sum_{k=1}^{5} \left(\frac{\text{Amount of Exposure}_{i,k}}{\text{Tier 1 Capital} + \text{Reserves}_i} \right)$$

Where:

H_i is bank *i*'s higher-risk concentration measure and *k* is a risk area.[2] The five risk areas (*k*) are: construction and land development (C&D) loans; higher-risk commercial and industrial (C&I) loans and securities; higher-risk consumer loans; nontraditional mortgage loans; and higher-risk securitizations.

1. Construction and Land Development Loans

Construction and land development loans include construction and land development loans outstanding and unfunded commitments to fund construction and land development loans, whether irrevocable or unconditionally cancellable.[3]

[2] The higher-risk concentration ratio is rounded to two decimal points.

[3] Construction and land development loans are as defined in the instructions to Call Report Schedule RC–C Part I—Loans and Leases, as they may be amended from time to time, and include items reported on line items RC–C 1.a.1 (1–4 family residential construction loans), RC–C 1.a.2. (Other construction loans and all land development and other land loans), and RC–O M.10.a (Total unfunded commitments to fund construction, land development, and other land loans secured by real estate), and exclude RC–O M.10.b (Portion of unfunded commitments to fund construction, land development and other loans that are guaranteed or insured by the U.S. government, including the FDIC), RC–O M.13.a (Portion of funded construction, land development, and other land loans guaranteed or insured by the U.S. government, excluding FDIC loss sharing agreements), RC–M 13a.1.a.1 (1–4 family construction and land development loans covered by loss sharing agreements with the FDIC), and RC–M 13a.1.a.2 (Other construction loans and all land development loans covered by loss sharing agreements with the FDIC).

2. Higher-Risk Commercial and Industrial (C&I) Loans and Securities

Definitions

Higher-Risk C&I Loans and Securities

Higher-risk C&I loans and securities are:

(a) All commercial and industrial (C&I) loans (including funded amounts and the amount of unfunded commitments, whether irrevocable or unconditionally cancellable) owed to the reporting bank (*i.e.*, the bank filing its report of condition and income, or Call Report) by a higher-risk C&I borrower, as that term is defined herein, regardless when the loans were made;[4] [5] and

(b) All securities, except securities classified as trading book, issued by a higher-risk C&I borrower, as that term is defined herein, that are owned by the reporting bank, without regard to when the securities were purchased; however, higher-risk C&I loans and securities exclude:

(a) The maximum amount that is recoverable from the U.S. government under guarantee or insurance provisions;

(b) Loans (including syndicated or participated loans) that are fully secured by cash collateral as provided herein;

(c) Loans that are eligible for the asset-based lending exclusion, described herein, provided the bank's primary federal regulator (PFR) has not cited a criticism (included in the Matters Requiring Attention, or MRA) of the bank's controls or administration of its asset-based loan portfolio; and

[4] Commercial and industrial loans are as defined as commercial and industrial loans in the instructions to Call Report Schedule RC–C Part I—Loans and Leases, as they may be amended from time to time. This definition includes purchased credit impaired loans and overdrafts.

[5] Unfunded commitments are defined as unused commitments, as this term is defined in the instructions to Call Report Schedule RC–L, Derivatives and Off-Balance Sheet Items, as they may be amended from time to time.

(d) Loans that are eligible for the floor plan lending exclusion, described herein, provided the bank's PFR has not cited a criticism (included in the MRA) of the bank's controls or administration of its floor plan loan portfolio.

Higher-Risk C&I Borrower

A "higher-risk C&I borrower" is a borrower that:

(a) Owes the reporting bank on a C&I loan originally made on or after April 1, 2013, if:

(i) The C&I loan has an original amount (including funded amounts and the amount of unfunded commitments, whether irrevocable or unconditionally cancellable) of at least $5 million;

(ii) The loan meets the purpose and materiality tests described herein; and

(iii) When the loan is made, the borrower meets the leverage test described herein; or

(b) Obtains a refinance, as that term is defined herein, of an existing C&I loan, where the refinance occurs on or after April 1, 2013, and the refinanced loan is owed to the reporting bank, if:

(i) The refinanced loan is in an amount (including funded amounts and the amount of unfunded commitments, whether irrevocable or unconditionally cancellable) of at least $5 million;

(ii) The C&I loan being refinanced met the purpose and materiality tests (described herein) when it was originally made;

(iii) The original loan was made no more than 5 years before the refinanced loan; and

(iv) When the loan is refinanced, the borrower meets the leverage test.

When a bank acquires a C&I loan originally made on or after April 1, 2013, by another lender, it must determine whether the borrower is a higher-risk borrower as a result of the loan as soon as reasonably practicable, but not later than one year after acquisition. When a bank acquires loans from another entity on a recurring or programmatic basis, however, the bank must determine whether the borrower is a higher-risk borrower as a result of the loan as soon as is practicable, but not later than three months after the date of acquisition.

A borrower ceases to be a "higher-risk C&I borrower" only if:

(a) The borrower no longer has any C&I loans owed to the reporting bank that, when originally made, met the purpose and materiality tests described herein;

(b) The borrower has such loans outstanding owed to the reporting bank, but they have all been refinanced more than 5 years after originally being made; or

(c) The reporting bank makes a new C&I loan or refinances an existing C&I loan and the borrower no longer meets the leverage test described herein.

Original Amount

The original amount of a loan, including the amounts to aggregate for purposes of arriving at the original amount, as described herein, is:

(a) For C&I loans drawn down under lines of credit or loan commitments, the amount of the line of credit or loan commitment on the date of its most recent approval, extension or renewal prior to the date of the most recent Call Report; if, however, the amount currently outstanding on the loan as of the date of the bank's most recent Call Report exceeds this amount, then the original amount of the loan is the amount outstanding as of the date of the bank's most recent Call Report.

(b) For syndicated or participated C&I loans, the total amount of the loan, rather than just the syndicated or participated portion held by the individual reporting bank.

(c) For all other C&I loans (whether term or non-revolver loans), the total amount of the loan as of origination or the amount outstanding as of the date of the bank's most recent Call Report, whichever is larger.

For purposes of defining original amount and a higher-risk C&I borrower:

(a) All C&I loans that a borrower owes to the reporting bank that meet the purpose test when made, and that are made within six months of each other, must be aggregated to determine the original amount of the loan; however, only loans in the original amount of $1 million or more must be aggregated; and further provided, that loans made before the April 1, 2013, need not be aggregated.

(b) When a C&I loan is refinanced through more than one loan, and the loans are made within six months of each other, they must be aggregated to determine the original amount.

Refinance

For purposes of a C&I loan, a refinance includes:

(a) Replacing an original obligation by a new or modified obligation or loan agreement;

(b) Increasing the master commitment of the line of credit (but not adjusting sub-limits under the master commitment);

(c) Disbursing additional money other than amounts already committed to the borrower;

(d) Extending the legal maturity date;

(e) Rescheduling principal or interest payments to create or increase a balloon payment;

(f) Releasing a substantial amount of collateral;

(g) Consolidating multiple existing obligations; or

(h) Increasing or decreasing the interest rate.

A refinance of a C&I loan does not include a modification or series of modifications to a commercial loan other than as described above or modifications to a commercial loan that would otherwise meet this definition of refinance, but that result in the classification of a loan as a troubled debt restructuring (TDR), as this term is defined in the glossary of the Call Report instructions, as they may be amended from time to time.

Purpose Test

A loan or refinance meets the purpose test if it is to finance:

(a) A buyout, defined as the purchase or repurchase by the borrower of the borrower's outstanding equity, including, but not limited to, an equity buyout or funding an Employee Stock Ownership Plan (ESOP);

(b) An acquisition, defined as the purchase by the borrower of any equity interest in another company, or the purchase of all or a substantial portion of the assets of another company; or

(c) A capital distribution, defined as a dividend payment or other transaction designed to enhance shareholder value, including, but not limited to, a repurchase of stock.

At the time of refinance, whether the original loan met the purpose test may not be easily determined by a new lender. In such a case, the new lender must use its best efforts and reasonable due diligence to determine whether the original loan met the test.

Materiality Test

A loan or refinance meets the materiality test if:

(a) The original amount of the loan (including funded amounts and the amount of unfunded commitments, whether irrevocable or unconditionally cancellable) equals or exceeds 20 percent of the total funded debt of the borrower; total funded debt of the borrower is to be determined as of the date of the original loan and does not include the loan to which the materiality test is being applied; or

(b) Before the loan was made, the borrower had no funded debt.

When multiple loans must be aggregated to determine the original amount, the materiality test is applied as of the date of the most recent loan.

At the time of refinance, whether the original loan met the materiality test may not be easily determined by a new lender. In such a case, the new lender must use its best efforts and reasonable due diligence to determine whether the original loan met the test.

Leverage Test

A borrower meets the leverage test if:

(a) The ratio of the borrower's total debt to trailing twelve-month EBITDA (commonly known as the operating leverage ratio) is greater than 4; or

(b) The ratio of the borrower's senior debt to trailing twelve-month EBITDA (also commonly known as the operating leverage ratio) is greater than 3.

EBITDA is defined as earnings before interest, taxes, depreciation, and amortization.

Total debt is defined as all interest-bearing financial obligations and includes, but is not limited to, overdrafts, borrowings, repurchase agreements (repos), trust receipts, bankers acceptances, debentures, bonds, loans (including those secured by mortgages), sinking funds, capital (finance) lease obligations (including those obligations that are convertible, redeemable or retractable), mandatory redeemable preferred and trust preferred securities accounted for as liabilities in accordance with ASC Subtopic 480–10, Distinguishing Liabilities from Equity—Overall (formerly FASB Statement No. 150, ''Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity''), and subordinated capital notes. Total debt excludes pension obligations, deferred tax liabilities and preferred equity.

Senior debt includes any portion of total debt that has a priority claim on any of the borrower's assets. A priority claim is a claim that entitles the holder to priority of payment over other debt holders in bankruptcy.

When calculating either of the borrower's operating leverage ratios, the only permitted EBITDA adjustments are those specifically permitted for that borrower in the loan agreement (at the time of underwriting) and only funded amounts of lines of credit must be considered debt.

The debt-to-EBITDA ratio must be calculated using the consolidated financial statements of the borrower. If the loan is made to a subsidiary of a larger organization, the debt-to-EBITDA ratio may be calculated using the financial statements of the subsidiary or, if the parent company has unconditionally and irrevocably guaranteed the borrower's debt, using the consolidated financial statements of the parent company.

In the case of a merger of two companies or the acquisition of one or more companies or parts of companies, pro-forma debt is to be used as well as the trailing twelve-month pro-forma EBITDA for the combined companies. When calculating the trailing pro-forma EBITDA for the combined company, no adjustments are allowed for economies of scale or projected cost savings that may be realized subsequent to the acquisition unless specifically permitted for that borrower under the loan agreement.

Exclusions

Cash Collateral Exclusion

To exclude a loan based on cash collateral, the cash must be in the form of a savings or time deposit held by a bank. The bank (or lead bank or agent bank in the case of a participation or syndication) must have a perfected first priority security interest, a security agreement, and a collateral assignment of the deposit account that is irrevocable for the remaining term of the loan or commitment. In addition, the bank must place a hold on the deposit account that alerts the bank's employees to an attempted withdrawal. If the cash collateral is held at another bank or at multiple banks, a security agreement must be in place and each bank must have an account control agreement in place.[6] For the exclusion to apply to a revolving line of credit, the cash collateral must be equal to or greater than the amount of the total loan commitment (the aggregate funded and unfunded balance of the loan).

Asset-Based and Floor Plan Lending Exclusions

The FDIC retains the authority to verify that banks have sound internal controls and administration practices for asset-based and floor plan loans that are excluded from a bank's reported higher-risk C&I loans and securities totals. If the bank's PFR has cited a criticism of the bank's controls or administration of its asset-based or floor plan loan portfolios in an MRA, the bank is not eligible for the asset-based or floor plan lending exclusions.

Asset-Based Lending Conditions

Asset-based loans (loans secured by accounts receivable and inventory) that meet all the following conditions are excluded from a bank's higher-risk C&I loan totals:

(a) The loan is managed by a loan officer or group of loan officers at the reporting bank who have experience in asset-based lending and collateral monitoring, including, but not limited to, experience in reviewing the following: Collateral reports, borrowing base certificates (which are discussed herein), collateral audit reports, loan-to-collateral values (LTV), and loan limits, using procedures common to the industry.

(b) The bank has taken, or has the legally enforceable ability to take, dominion over the borrower's deposit accounts such that proceeds of collateral are applied to the loan balance as collected. Security agreements must be in place in all cases; in addition, if a borrower's deposit account is held at a bank other than the lending bank, an account control agreement must also be in place.

(c) The bank has a perfected first priority security interest in all assets included in the borrowing base certificate.

(d) If the loan is a credit facility (revolving or term loan), it must be fully secured by self-liquidating assets such as accounts receivable and inventory.[7] Other non-self-liquidating assets may be part of the borrowing base, but the outstanding balance of the loan must be fully secured by the portion of the borrowing base that is composed of self-liquidating assets. Fully secured is defined as a 100 percent or lower LTV ratio after applying the appropriate discounts (determined by the loan agreement) to the collateral. If an over advance (including a seasonal over advance) causes the LTV to exceed 100 percent, the loan may not be excluded from higher-risk C&I loans owed by a higher-risk C&I borrower. Additionally, the bank must have the ability to withhold funding of a draw or advance if the loan amount exceeds the amount allowed by the collateral formula.

(e) A bank's lending policy or procedures must address the maintenance of an accounts receivable loan agreement with the borrower. This loan agreement must establish a maximum percentage advance, which cannot exceed 85 percent, against eligible accounts receivable, include a maximum dollar amount due from any one account debtor, address the financial strength of debtor accounts, and define eligible receivables. The definition of eligible receivables must consider the receivable quality, the turnover and dilution rates of receivables pledged, the aging of accounts receivable, the concentrations of debtor accounts, and the performance of the receivables related to their terms of sale.

Concentration of debtor accounts is the percentage value of receivables associated with one or a few customers relative to the total value of receivables. Turnover of receivables is the velocity at which receivables

[6] An account control agreement, for purposes of this Appendix, means a written agreement between the lending bank (the secured party), the borrower, and the bank that holds the deposit account serving as collateral (the depository bank), that the depository bank will comply with instructions originated by the secured party directing disposition of the funds in the deposit account without further consent by the borrower (or any other party).

[7] An asset is self-liquidating if, in the event the borrower defaults, the asset can be easily liquidated and the proceeds of the sale of the assets would be used to pay down the loan. These assets can include machinery, heavy equipment or rental equipment if the machinery or equipment is inventory for the borrower's primary business and the machinery or equipment is included in the borrowing base.

are collected. The dilution rate is the uncollectible accounts receivable as a percentage of sales.

Ineligibles must be established for any debtor account where there is concern that the debtor may not pay according to terms. Monthly accounts receivable agings must be received in sufficient detail to allow the bank to compute the required ineligibles. At a minimum, the following items must be deemed ineligible accounts receivable:

(i) Accounts receivable balances over 90 days beyond invoice date or 60 days past due, depending upon custom with respect to a particular industry with appropriate adjustments made for dated billings;

(ii) Entire account balances where over 50 percent of the account is over 60 days past due or 90 days past invoice date;

(iii) Accounts arising from sources other than trade (*e.g.*, royalties, rebates);

(iv) Consignment or guaranteed sales;

(v) Notes receivable;

(vi) Progress billings;

(vii) Account balances in excess of limits appropriate to account debtor's credit worthiness or unduly concentrated by industry, location or customer;

(viii) Affiliate and intercompany accounts; and

(ix) Foreign accounts receivable.

(f) Loans against inventory must be made with advance rates no more than 65 percent of eligible inventory (at the lower of cost valued on a first-in, first-out (FIFO) basis or market) based on an analysis of realizable value. When an appraisal is obtained, or there is a readily determinable market price for the inventory, however, up to 85 percent of the net orderly liquidation value (NOLV) or the market price of the inventory may be financed. Inventory must be valued or appraised by an independent third-party appraiser using NOLV, fair value, or forced sale value (versus a "going concern" value), whichever is appropriate, to arrive at a net realizable value. Appraisals are to be prepared in accordance with industry standards, unless there is a readily available and determinable market price for the inventory (*e.g.*, in the case of various commodities), from a recognized exchange or third-party industry source, and a readily available market (*e.g.*, for aluminum, crude oil, steel, and other traded commodities); in that case, inventory may be valued using current market value. When relying upon current market value rather than an independent appraisal, the reporting bank's management must update the value of inventory as market prices for the product change. Valuation updates must be as frequent as needed to ensure compliance with margin requirements. In addition, appropriate mark-to-market reserves must be established to protect against excessive inventory price fluctuations. An asset has a readily identifiable and publicly available market price if the asset's price is quoted routinely in a widely disseminated publication that is readily available to the general public.

(g) A bank's lending policy or procedures must address the maintenance of an inventory loan agreement with the borrower. This loan agreement must establish a maximum percentage advance rate against acceptable inventory, address acceptable appraisal and valuation requirements, and define acceptable and ineligible inventory. Ineligibles must be established for inventory that exhibit characteristics that make it difficult to achieve a realizable value or to obtain possession of the inventory. Monthly inventory agings must be received in sufficient detail to allow the bank to compute the required ineligibles. At a minimum, ineligible inventory must include:

(i) Slow moving, obsolete inventory and items turning materially slower than industry average;

(ii) Inventory with value to the client only, which is generally work in process, but may include raw materials used solely in the client's manufacturing process;

(iii) Consigned inventory or other inventory where a perfected security interest cannot be obtained;

(iv) Off-premise inventory subject to a mechanic's or other lien; and

(v) Specialized, high technology or other inventory subject to rapid obsolescence or valuation problems.

(h) The bank must maintain documentation of borrowing base certificate reviews and collateral trend analyses to demonstrate that collateral values are actively, routinely and consistently monitored. A borrowing base certificate is a form prepared by the borrower that reflects the current status of the collateral. A new borrowing base certificate must be obtained within 30 days before or after each draw or advance on a loan. A bank is required to validate the borrowing base through asset-based tracking reports. The borrowing base validation process must include the bank requesting from the borrower a list of accounts receivable by creditor and a list of individual items of inventory and the bank certifying that the outstanding balance of the loan remains within the collateral formula prescribed by the loan agreement. Any discrepancies between the list of accounts receivable and inventory and the borrowing base certificate must be reconciled with the borrower. Periodic, but no less than annual, field examinations (audits) must also be performed by individuals who are independent of the credit origination or administration process. There must be a process in place to ensure that the bank is correcting audit exceptions.

Floor Plan Lending Conditions

Floor plan loans may include, but are not limited to, loans to finance the purchase of various vehicles or equipment including automobiles, boat or marine equipment, recreational vehicles (RV), motorized watersports vehicles such as jet skis, or motorized lawn and garden equipment such as tractor lawnmowers. Floor plan loans that meet all the following conditions are excluded from a bank's higher-risk C&I loan totals:

(a) The loan is managed by a loan officer or a group of loan officers at the reporting bank who are experienced in floor plan lending and monitoring collateral to ensure the borrower remains in compliance with floor plan limits and repayment requirements. Loan officers must have experience in reviewing certain items, including but not limited to: Collateral reports, floor plan limits, floor plan aging reports, vehicle inventory audits or inspections, and LTV ratios. The bank must obtain and review financial statements of the borrower (*e.g.*, tax returns, company-prepared financial statements, or dealer statements) on at least a quarterly basis to ensure that adequate controls are in place. (A ''dealer statement'' is the standard format financial statement issued by Original Equipment Manufacturers (OEMs) and used by nationally recognized automobile dealer floor plan lenders.)

(b) For automobile floor plans, each loan advance must be made against a specific automobile under a borrowing base certificate held as collateral at no more than 100 percent of (i) dealer invoice plus freight charges (for new vehicles) or (ii) the cost of a used automobile at auction or the wholesale value using the prevailing market guide (*e.g.*, NADA, Black Book, Blue Book). The advance rate of 100 percent of dealer invoice plus freight charges on new automobiles, and the advance rate of the cost of a used automobile at auction or the wholesale value, may only be used where there is a manufacturer repurchase agreement or an aggressive curtailment program in place that is tracked by the bank over time and subject to strong controls. Otherwise, permissible advance rates must be lower than 100 percent.

(c) Advance rates on vehicles other than automobiles must conform to industry standards for advance rates on such inventory, but may never exceed 100 percent of dealer invoice plus freight charges on new vehicles or 100 percent of the cost of a used vehicle at auction or its wholesale value.

(d) Each loan is self-liquidating (*i.e.*, if the borrower defaulted on the loan, the collateral could be easily liquidated and the proceeds of the sale of the collateral would be used to pay down the loan advance).

(e) Vehicle inventories and collateral values are closely monitored, including the completion of regular (at least quarterly) dealership automotive or other vehicle dealer inventory audits or inspections to ensure accurate accounting for all vehicles held as collateral. The lending bank or a third party must prepare inventory audit reports and inspection reports for loans to automotive dealerships, or loans to other vehicle dealers, and the lending bank must review the reports at least quarterly. The reports must list all vehicles held as collateral and verify that the collateral is in the dealer's possession.

(f) Floor plan aging reports must be reviewed by the bank as frequently as required under the loan agreement, but no less frequently than quarterly. Floor plan aging reports must reflect specific information about each automobile or vehicle being financed (*e.g.*, the make, model, and color of the automobile or other vehicle, and origination date of the loan to finance the automobile or vehicle). Curtailment programs should be instituted where necessary and banks must ensure that curtailment payments are made on stale automotive or other vehicle inventory financed under the floor plan loan.

Detailed Reports

Examples of detailed reports that must be provided to the asset-based and floor plan lending bank include:

(a) Borrowing Base Certificates: Borrowing base certificates, along with supporting information, must include:

(i) The accounts receivable balance (rolled forward from the previous certificate);

(ii) Sales (reported as gross billings) with detailed adjustments for returns and allowances to allow for proper tracking of dilution and other reductions in collateral;

(iii) Detailed inventory information (*e.g.*, raw materials, work-in-process, finished goods); and

(iv) Detail of loan activity.

(b) Accounts Receivable and Inventory Detail: A listing of accounts receivable and inventory that is included on the borrowing base certificate. Monthly accounts receivable and inventory agings must be received in sufficient detail to allow the lender to compute the required ineligibles.

(c) Accounts Payable Detail: A listing of each accounts payable owed to the borrower. Monthly accounts payable agings must be received to monitor payable performance and anticipated working capital needs.

(d) Covenant Compliance Certificates: A listing of each loan covenant and the borrower's compliance with each one. Borrowers must submit Covenant Compliance Certificates, generally on a monthly or quarterly basis (depending on the terms of the loan agreement) to monitor compliance with the covenants outlined in the loan agreement. Non-compliance with any covenants must be promptly addressed.

(e) Dealership Automotive Inventory or Other Vehicle Inventory Audits or Inspections: The bank or a third party must prepare inventory audit reports or inspection reports for loans to automotive dealerships and other vehicle dealerships. The bank must review the reports at least quarterly. The reports must list all vehicles held as collateral and verify that the collateral is in the dealer's possession.

(f) Floor Plan Aging Reports: Borrowers must submit floor plan aging reports on a monthly or quarterly basis (depending on the terms of the loan agreement). These reports must reflect specific information about each automobile or other type of vehicle being financed (*e.g.*, the make, model, and color of the automobile or other type of vehicle, and origination date of the loan to finance the automobile or other type of vehicle).

3. Higher-Risk Consumer Loans

Definitions

Higher-risk consumer loans are defined as all consumer loans where, as of origination, or, if the loan has been refinanced, as of refinance, the probability of default (PD) within two years (the two-year PD) is greater than 20 percent, excluding those consumer loans that meet the definition of a nontraditional mortgage loan.[8] [9]

Higher-risk consumer loans exclude:

(a) The maximum amounts recoverable from the U.S. government under guarantee or insurance provisions; and

(b) Loans fully secured by cash collateral. To exclude a loan based on cash collateral, the cash must be in the form of a savings or time deposit held by a bank. The lending bank (or lead or agent bank in the case of a participation or syndication) must, in all cases, (including instances in which cash collateral is held at another bank or banks) have a perfected first priority security interest under applicable state law, a security agreement in place, and all necessary documents executed and measures taken as required to result in such perfection and priority. In addition, the lending bank must place a hold on the deposit account that alerts the bank's employees to an attempted withdrawal. For the exclusion to apply to a revolving line of credit, the cash collateral must be equal to, or greater than, the amount of the total loan commitment (the aggregate funded and unfunded balance of the loan).

Banks must determine the PD of a consumer loan as of the date the loan was originated, or, if the loan has been refinanced, as of the date it was refinanced. The two-year PD must be estimated using an approach that conforms to the requirements detailed herein.

Loans Originated or Refinanced Before April 1, 2013, and all Acquired Loans

For loans originated or refinanced by a bank before April 1, 2013, and all acquired loans regardless of the date of acquisition, if information as of the date the loan was originated or refinanced is not available, then the bank must use the oldest available information to determine the PD. If no information is available, then the bank must obtain recent, refreshed data from the borrower or other appropriate third party to determine the PD. Refreshed data is defined as the most recent data available, and must be as of a date that is no earlier than three months before the acquisition of the loan. In addition, for loans acquired on or after April 1, 2013, the acquiring bank shall have six months from the date of acquisition to determine the PD.

When a bank acquires loans from another entity on a recurring or programmatic basis, the acquiring bank may determine whether the loan meets the definition of a higher-risk consumer loan using the origination criteria and analysis performed by the original lender only if the acquiring bank verifies the information provided. Loans acquired from another entity are acquired on a recurring basis if a bank has acquired other loans from that entity at least once within the calendar year of the acquisition of the loans in question or in the previous calendar year. If the acquiring bank cannot or does not verify the information provided by the original lender, the acquiring bank must obtain the necessary information from the borrower or other appropriate third party to make its

[8] For the purposes of this rule, consumer loans consist of all loans secured by 1–4 family residential properties as well as loans and leases made to individuals for household, family, and other personal expenditures, as defined in the instructions to the Call Report, Schedule RC–C, as the instructions may be amended from time to time. Higher-risk consumer loans include purchased credit-impaired loans that meet the definition of higher-risk consumer loans.

[9] The FDIC has the flexibility, as part of its risk-based assessment system, to change the 20 percent threshold for identifying higher-risk consumer loans without further notice-and-comment rulemaking as a result of reviewing data for up to the first two reporting periods after the effective date of this rule. Before making any such change, the FDIC will analyze the potential effect of changing the PD threshold on the distribution of higher-risk consumer loans among banks and the resulting effect on assessments collected from the industry. The FDIC will provide banks with at least one quarter advance notice of any such change to the PD threshold through a Financial Institution Letter.

own determination of whether the purchased assets should be classified as a higher-risk consumer loan.

Loans That Meet Both Higher-Risk Consumer Loans and Nontraditional Mortgage Loans Definitions

A loan that meets both the nontraditional mortgage loan and higher-risk consumer loan definitions at the time of origination, or, if the loan has been refinanced, as of refinance, must be reported only as a nontraditional mortgage loan. If, however, the loan ceases to meet the nontraditional mortgage loan definition but continues to meet the definition of a higher-risk consumer loan, the loan is to be reported as a higher-risk consumer loan.

General Requirements for PD Estimation

Scorable Consumer Loans

Estimates of the two-year PD for a loan must be based on the observed, stress period default rate (defined herein) for loans of a similar product type made to consumers with credit risk comparable to the borrower being evaluated. While a bank may consider additional risk factors beyond the product type and credit score (*e.g.*, geography) in estimating the PD of a loan, it must at a minimum account for these two factors. The credit risk assessment must be determined using third party or internal scores derived using a scoring system that qualifies as *empirically derived, demonstrably and statistically sound* as defined in 12 CFR 202.2(p), as it may be amended from time to time, and has been approved by the bank's model risk oversight and governance process and internal audit mechanism. In the case of a consumer loan with a co-signer or co-borrower, the PD may be determined using the most favorable individual credit score.

In estimating the PD based on such scores, banks must adhere to the following requirements:

(a) The PD must be estimated as the average of the two, 24-month default rates observed from July 2007 to June 2009, and July 2009 to June 2011, where the average is calculated according to the following formula and DR_t is the observed default rate over the 24-month period beginning in July of year t:

$$PD = 1 - \sqrt{(1 - DR_{2007})(1 - DR_{2009})}$$

(b) The default rate for each 24-month period must be calculated as the number of active loans that experienced at least one default event during the period divided by the total number of active loans as of the observation date (*i.e.*, the beginning of the 24-month period). An ''active'' loan is defined as any loan that was open and not in default as of the observation date, and on which a payment was made within the 12 months prior to the observation date.

(c) The default rate for each 24-month period must be calculated using a stratified random sample of loans that is sufficient in size to derive statistically meaningful results for the product type and credit score (and any additional risk factors) being evaluated. The product strata must be as homogenous as possible with respect to the factors that influence default, such that products with distinct risk characteristics are evaluated separately. The loans should be sampled based on the credit score as of the observation date, and each 24-month default rate must be calculated using a random sample of at least 1,200 active loans.

(d) Credit score strata must be determined by partitioning the entire credit score range generated by a given scoring system into a minimum of 15 bands. While the width of the credit score bands may vary, the scores within each band must reflect a comparable level of credit risk. Because performance data for scores at the upper and lower extremes of the population distribution is likely to be limited, however, the top and bottom bands may include a range of scores that suggest some variance in credit quality.

(e) Each credit score will need to have a unique PD associated with it. Therefore, when the number of score bands is less than the number of unique credit scores (as will almost always be the case), banks must use a linear interpolation between adjacent default rates to determine the PD for a particular score. The observed default rate for each band must be assumed to correspond to the midpoint of the range for the band. For example, if one score band ranges from 621 to 625 and has an observed default rate of 4 percent, while the next lowest band ranges from 616 to 620 and has an observed default rate of 6 percent, a 620 score must be assigned a default rate of 5.2 percent, calculated as

$$\left(\frac{.04-.06}{623-618}\right)\cdot\left(620-618\right)+.06=.052$$

When evaluating scores that fall below the midpoint of the lowest score band or above the midpoint of the highest score band, the interpolation must be based on an assumed adjacent default rate of 1 or 0, respectively.

(f) The credit scores represented in the historical sample must have been produced by the same entity, using the same or substantially similar methodology as the methodology used to derive the credit scores to which the default rates will be applied. For example, the default rate for a particular vendor score cannot be evaluated based on the score-to-default rate relationship for a different vendor, even if the range of scores under both systems is the same. On the other hand, if the current and historical scores were produced by the same vendor using slightly different versions of the same scoring system and equivalent scores represent a similar likelihood of default, then the historical experience could be applied.

(g) A loan is to be considered in default when it is 90+ days past due, charged-off, or the borrower enters bankruptcy.

Unscorable Consumer Loans

For unscorable consumer loans—where the available information about a borrower is insufficient to determine a credit score—the bank will be unable to assign a PD to the loan according to the requirements described above. If the total outstanding balance of the unscorable consumer loans of a particular product type (including, but not limited to, student loans) exceeds 5 percent of the total outstanding balance for that product type, including both foreign and domestic loans, the excess amount shall be treated as higher risk (the de minimis approach). Otherwise, the total outstanding balance of unscorable consumer loans of a particular product type will not be considered higher risk. The consumer product types used to determine whether the 5 percent test is satisfied shall correspond to the product types listed in the table used for reporting PD estimates.

A bank may not develop PD estimates for unscorable loans based on internal data.

If, after the origination or refinance of the loan, an unscorable consumer loan becomes scorable, a bank must reclassify the loan using a PD estimated according to the general requirements above. Based upon that PD, the loan will be determined to be either higher risk or not, and that determination will remain in effect until a refinancing occurs, at which time the loan must be re-evaluated. An unscorable loan must be reviewed at least annually to determine if a credit score has become available.

Alternative Methodologies

A bank may use internally derived default rates that were calculated using fewer observations or score bands than those specified above under certain conditions. The bank must submit a written request to the FDIC either in advance of, or concurrent with, reporting under the requested approach. The request must explain in detail how the proposed approach differs from the rule specifications and the bank must provide support for the statistical appropriateness of the proposed methodology. The request must include, at a minimum, a table with the default rates and number of observations used in each score and product segment. The FDIC will evaluate the proposed methodology and may request additional information from the bank, which the bank must provide. The bank may report using its proposed approach while the FDIC evaluates the methodology. If, after reviewing the request, the FDIC determines that the bank's methodology is unacceptable, the bank will be required to amend its Call Reports and report according to the generally applicable specifications for PD estimation. The bank will be required to submit amended information for no more than the two most recently dated and filed Call Reports preceding the FDIC's determination.

Foreign Consumer Loans

A bank must estimate the PD of a foreign consumer loan according to the general requirements described above unless doing so would be unduly complex or burdensome (*e.g.*, if a bank had to develop separate PD mappings for many different countries). A bank may request to use default rates calculated using fewer observations or score bands than the specified minimums, either in advance of, or concurrent with, reporting under that methodology, but must comply with the requirements detailed above for using an alternative methodology.

When estimating a PD according to the general requirements described above would be unduly complex or burdensome, a bank that is required to calculate PDs for foreign consumer loans under the requirements of the Basel II capital framework may: (1) Use the Basel II approach discussed herein, subject to the terms discussed herein; (2) submit a written request to the FDIC to use its own methodology, but may not use the methodology until approved by the FDIC; or (3) treat the loan as an unscorable consumer loan subject to the de minimis approach described above.

When estimating a PD according to the general requirements described above would be unduly complex or burdensome, a bank that is not required to calculate PDs for foreign consumer loans under the requirements of the Basel II capital framework may: (1) Treat the loan as an unscorable consumer loan subject to the de minimis approach described above; or (2) submit a written request to the FDIC to use its own methodology, but may not use the methodology until approved by the FDIC.

When a bank submits a written request to the FDIC to use its own methodology, the FDIC may request additional information from the bank regarding the proposed methodology and the bank must provide the information. The FDIC may grant a bank tentative approval to use the methodology while the FDIC considers it in more detail. If the FDIC ultimately disapproves the methodology, the bank may be required to amend its Call Reports; however, the bank will be required to amend no more than the two most recently dated and filed Call Reports preceding the FDIC's determination. In the amended Call Reports, the bank must treat any loan whose PD had been estimated using the disapproved methodology as an unscorable domestic consumer loan subject to the de minimis approach described above.

Basel II Approach

A bank that is required to calculate PDs for foreign consumer loans under the requirements of the Basel II capital framework may estimate the two-year PD of a foreign consumer loan based on the one-year PD used for Basel II capital purposes.[10] The bank must submit a written request to the FDIC in advance of, or concurrent with, reporting under that methodology. The request must explain in detail how one-year PDs calculated under the Basel II framework are translated to two-year PDs that meet the requirements above. While the range of acceptable approaches is potentially broad, any proposed methodology must meet the following requirements:

(a) The bank must use data on a sample of loans for which both the one-year Basel II PDs and two-year final rule PDs can be calculated. The sample may contain both foreign and domestic loans.

(b) The bank must use the sample data to demonstrate that a meaningful relationship exists between the two types of PD estimates, and the significance and nature of the relationship must be determined using accepted statistical principles and methodologies. For example, to the extent that a linear relationship exists in the sample data, the bank may use an ordinary least-squares regression to determine the best linear translation of Basel II PDs to final rule PDs. The estimated equation should fit the data reasonably well based on standard statistics such as the coefficient of determination; and

(c) The method must account for any significant variation in the relationship between the two types of PD estimates that exists across consumer products based on the empirical analysis of the data. For example, if the bank is using a linear regression to determine the relationship between PD estimates, it should test whether the parameter estimates are significantly different by product type.

The bank may report using this approach (if it first notifies the FDIC of its intention to do so), while the FDIC evaluates the methodology. If, after reviewing the methodology, the FDIC determines that the methodology is unacceptable, the bank will be required to amend its Call Reports. The bank will be required to submit amended information for no more than the two most recently dated and filed Call Reports preceding the FDIC's determination.

Refinance

For purposes of higher-risk consumer loans, a refinance includes:

(a) Extending new credit or additional funds on an existing loan;

(b) Replacing an existing loan with a new or modified obligation;

(c) Consolidating multiple existing obligations;

(d) Disbursing additional funds to the borrower. Additional funds include a material disbursement of additional funds or, with respect to a line of credit, a material increase in the amount of the line of credit, but not a disbursement, draw, or the writing of convenience checks within the original limits of the line of credit. A material increase in the amount of a line of credit is defined as a 10 percent or greater increase in the quarter-end line of credit limit; however, a temporary increase in a credit card line of credit is not a material increase;

(e) Increasing or decreasing the interest rate (except as noted herein for credit card loans); or

(f) Rescheduling principal or interest payments to create or increase a balloon payment or extend the legal maturity date of the loan by more than six months.

A refinance for this purpose does not include:

(a) A re-aging, defined as returning a delinquent, open-end account to current status

[10] Using these Basel II PDs for this purpose does not imply that a bank's PFR has approved use of these PDs for the Basel II capital framework. If a bank's PFR requires it to revise its Basel II PD methodology, the bank must use revised Basel II PDs to calculate (or recalculate if necessary) corresponding PDs under this Basel II approach.

without collecting the total amount of principal, interest, and fees that are contractually due, provided:

(i) The re-aging is part of a program that, at a minimum, adheres to the re-aging guidelines recommended in the interagency approved Uniform Retail Credit Classification and Account Management Policy;[11]

(ii) The program has clearly defined policy guidelines and parameters for re-aging, as well as internal methods of ensuring the reasonableness of those guidelines and monitoring their effectiveness; and

(iii) The bank monitors both the number and dollar amount of re-aged accounts, collects and analyzes data to assess the performance of re-aged accounts, and determines the effect of re-aging practices on past due ratios;

(b) Modifications to a loan that would otherwise meet this definition of refinance, but result in the classification of a loan as a TDR;

(c) Any modification made to a consumer loan pursuant to a government program, such as the Home Affordable Modification Program or the Home Affordable Refinance Program;

(d) Deferrals under the Servicemembers Civil Relief Act;

(e) A contractual deferral of payments or change in interest rate that is consistent with the terms of the original loan agreement (*e.g.*, as allowed in some student loans);

(f) Except as provided above, a modification or series of modifications to a closed-end consumer loan;

(g) An advance of funds, an increase in the line of credit, or a change in the interest rate that is consistent with the terms of the loan agreement for an open-end or revolving line of credit (*e.g.*, credit cards or home equity lines of credit);

(h) For credit card loans:

(i) Replacing an existing card because the original is expiring, for security reasons, or because of a new technology or a new system;

(ii) Reissuing a credit card that has been temporarily suspended (as opposed to closed);

(iii) Temporarily increasing the line of credit;

(iv) Providing access to additional credit when a bank has internally approved a higher credit line than it has made available to the customer; or

(v) Changing the interest rate of a credit card line when mandated by law (such as in the case of the Credit CARD Act).

4. Nontraditional mortgage loans

Nontraditional mortgage loans include all residential loan products that allow the borrower to defer repayment of principal or interest and include all interest-only products, teaser rate mortgages, and negative amortizing mortgages, with the exception of home equity lines of credit (HELOCs) or reverse mortgages. A teaser-rate mortgage loan is defined as a mortgage with a discounted initial rate where the lender offers a lower rate and lower payments for part of the mortgage term. A mortgage loan is no longer considered a nontraditional mortgage loan once the teaser rate has expired. An interest-only loan is no longer considered a nontraditional mortgage loan once the loan begins to amortize.

Banks must determine whether residential loans meet the definition of a nontraditional mortgage loan as of origination, or, if the loan has been refinanced, as of refinance, as refinance is defined in this Appendix for purposes of higher-risk consumer loans. When a bank acquires a residential loan, it must determine whether the loan meets the definition of a nontraditional mortgage loan using the origination criteria and analysis performed by the original lender. If this information is unavailable, the bank must obtain refreshed data from the borrower or other appropriate third party. Refreshed data for residential loans is defined as the most recent data available. The data, however, must be as of a date that is no earlier than three months before the acquisition of the residential loan. The acquiring bank must also determine whether an acquired loan is higher risk not later than three months after acquisition.

When a bank acquires loans from another entity on a recurring or programmatic basis, however, the acquiring bank may determine whether the loan meets the definition of a nontraditional mortgage loan using the origination criteria and analysis performed by the original lender only if the acquiring bank verifies the information provided. Loans acquired from another entity are acquired on a recurring basis if a bank has acquired other loans from that entity at least once within the calendar year or the previous calendar year of the acquisition of the loans in question.

5. Higher-Risk Securitizations

Higher-risk securitizations are defined as securitizations or securitization exposures (except securitizations classified as trading book), where, in aggregate, more than 50 percent of the assets backing the securitization meet either the criteria for higher-risk C & I loans or securities, higher-risk consumer

[11] Among other things, for a loan to be considered for re-aging, the following must be true: (1) The borrower must have demonstrated a renewed willingness and ability to repay the loan; (2) the loan must have existed for at least nine months; and (3) the borrower must have made at least three consecutive minimum monthly payments or the equivalent cumulative amount.

loans, or nontraditional mortgage loans, except those classified as trading book. A securitization is as defined in 12 CFR part 325, Appendix A, Section II(B)(16), or in 12 CFR 324.2, as applicable, as they may be amended from time to time. A higher-risk securitization excludes the maximum amount that is recoverable from the U.S. government under guarantee or insurance provisions.

A bank must determine whether a securitization is higher risk based upon information as of the date of issuance (*i.e.*, the date the securitization is sold on a market to the public for the first time). The bank must make this determination within the time limit that would apply under this Appendix if the bank were directly acquiring loans or securities of the type underlying the securitization. In making the determination, a bank must use one of the following methods:

(a) For a securitization collateralized by a static pool of loans, whose underlying collateral changes due to the sale or amortization of these loans, the 50 percent threshold is to be determined based upon the amount of higher-risk assets, as defined in this Appendix, owned by the securitization on the date of issuance of the securitization.

(b) For a securitization collateralized by a dynamic pool of loans, whose underlying collateral may change by the purchase of additional assets, including purchases made during a ramp-up period, the 50 percent threshold is to be determined based upon the highest amount of higher-risk assets, as defined in this Appendix, allowable under the portfolio guidelines of the securitization.

A bank is not required to evaluate a securitization on a continuous basis when the securitization is collateralized by a dynamic pool of loans; rather, the bank is only required to evaluate the securitization once.

A bank is required to use the information that is reasonably available to a sophisticated investor in reasonably determining whether a securitization meets the 50 percent threshold. Information reasonably available to a sophisticated investor includes, but is not limited to, offering memoranda, indentures, trustee reports, and requests for information from servicers, collateral managers, issuers, trustees, or similar third parties. When determining whether a revolving trust or similar securitization meets the threshold, a bank may use established criteria, model portfolios, or limitations published in the offering memorandum, indenture, trustee report, or similar documents.

Sufficient information necessary for a bank to make a definitive determination may not, in every case, be reasonably available to the bank as a sophisticated investor. In such a case, the bank may exercise its judgment in making the determination. In some cases, the bank need not rely upon all of the aforementioned pieces of information to make a higher-risk determination if fewer documents provide sufficient data to make the determination.

In cases in which a securitization is required to be consolidated on the balance sheet as a result of SFAS 166 and SFAS 167, and a bank has access to the necessary information, a bank may opt for an alternative method of evaluating the securitization to determine whether it is higher risk. The bank may evaluate individual loans in the securitization on a loan-by-loan basis and only report as higher risk those loans that meet the definition of a higher-risk asset; any loan within the securitization that does not meet the definition of a higher-risk asset need not be reported as such. When making this evaluation, the bank must follow the provisions of section I.B herein. Once a bank evaluates a securitization for higher-risk asset designation using this alternative evaluation method, it must continue to evaluate all securitizations that it has consolidated on the balance sheet as a result of SFAS 166 and SFAS 167, and for which it has the required information, using the alternative evaluation method. For securitizations for which the bank does not have access to information on a loan-by-loan basis, the bank must determine whether the securitization meets the 50 percent threshold in the manner previously described for other securitizations.

B. Application of Definitions

Section I of this Appendix applies to:

(1) All construction and land development loans, whenever originated or purchased;

(2) C&I loans (as that term is defined in this Appendix) owed to a reporting bank by a higher-risk C&I borrower (as that term is defined in this Appendix) and all securities issued by a higher-risk C&I borrower, except securitizations of C&I loans, that are owned by the reporting bank;

(3) Consumer loans (as defined in this Appendix), except securitizations of consumer loans, whenever originated or purchased;

(4) Securitizations of C&I and consumer loans (as defined in this Appendix) issued on or after April 1, 2013, including those securitizations issued on or after April 1, 2013, that are partially or fully collateralized by loans originated before April 1, 2013.

For C&I loans that are either originated or refinanced by a reporting bank before April 1, 2013, or purchased by a reporting bank before April 1, 2013, where the loans are owed to the reporting bank by a borrower that does not meet the definition of a higher-risk C&I borrower as that term is defined in this Appendix (which requires, among other things, that the borrower have obtained a C&I loan or refinanced an existing C&I loan on or after April 1, 2013) and securities purchased before April 1, 2013, that are issued by an entity that does not meet the definition of a higher-risk C&I borrower, as that term is defined in this Appendix, banks must continue to use the transition guidance in the September 2012 Call Report instructions to determine whether to report the loan or security as a higher-risk asset for purposes of the higher-risk assets to Tier 1 capital and reserves ratio. A bank may opt to apply the definition of higher-risk C&I loans and securities in this Appendix to all of its C&I loans and securities, but, if it does so, it must also apply the definition of a higher-risk C&I borrower in this Appendix without regard to when the loan is originally made or refinanced (*i.e.*, whether made or refinanced before or after April 1, 2013).

For consumer loans (other than securitizations of consumer loans) originated or purchased prior to April 1, 2013, a bank must determine whether the loan met the definition of a higher-risk consumer loan no later than June 30, 2013.

For all securitizations issued before April 1, 2013, banks must either (1) continue to use the transition guidance or (2) apply the definitions in this Appendix to all of its securitizations. If a bank applies the definition of higher-risk C&I loans and securities in this Appendix to its securitizations, it must also apply the definition of a higher-risk C&I borrower in this Appendix to all C&I borrowers without regard to when the loans to those borrowers were originally made or refinanced (*i.e.*, whether made or refinanced before or after April 1, 2013).

II. Growth-Adjusted Portfolio Concentration Measure

The *growth-adjusted concentration measure* is the sum of the values of concentrations in each of the seven portfolios, each of the values being first adjusted for risk weights and growth. The product of the risk weight and the concentration ratio is first squared and then multiplied by the growth factor. The measure is calculated as:

$$N_i = \sum_{k=1}^{7} \left[w_k * \left(\frac{\text{Amount of exposure}_{i,k}}{\text{Tier 1 Capital} + \text{Reserves}_i} \right) \right]^2 * g_k$$

Where:

N is bank i's growth-adjusted portfolio concentration measure;[12]

k is a portfolio;

g is a growth factor for bank i's portfolio k; and,

w is a risk weight for portfolio k.

The seven portfolios (k) are defined based on the Call Report/TFR data and they are:

- Construction and land development loans;
- Other commercial real estate loans;
- First-lien residential mortgages and non-agency residential mortgage-backed securities (excludes CMOs, REMICS, CMO and REMIC residuals, and stripped MBS issued by non-U.S. government issuers for which the collateral consists of MBS issued or guaranteed by U.S. government agencies);
- Closed-end junior liens and home equity lines of credit (HELOCs);
- Commercial and industrial loans;
- Credit card loans; and
- Other consumer loans.[13] [14]

The growth factor, g, is based on a three-year merger-adjusted growth rate for a given portfolio; g ranges from 1 to 1.2 where a 20 percent growth rate equals a factor of 1 and an 80 percent growth rate equals a factor of 1.2.[15] For growth rates less than 20 percent, g is 1; for growth rates greater than 80 percent, g is 1.2. For growth rates between 20 percent and 80 percent, the growth factor is calculated as:

$$g_{i,k} = 1 + \left[\frac{1}{3} \left(G_{i,k} - 0.20 \right) \right]$$

[12] The growth-adjusted portfolio concentration measure is rounded to two decimal points.

[13] All loan concentrations should include the fair value of purchased credit impaired loans.

[14] Each loan concentration category should exclude the amount of loans recoverable from the U.S. government under guarantee or insurance provisions.

[15] The growth factor is rounded to two decimal points.

Where:

$$G_{i,k} = \frac{V_{i,k,t}}{V_{i,k,t-12}} - 1,$$

V is the portfolio amount as reported on the Call Report/TFR and t is the quarter for which the assessment is being determined.

The risk weight for each portfolio reflects relative peak loss rates for banks at the 90th percentile during the 1990–2009 period.[16] These loss rates were converted into equivalent risk weights as shown in Table C.1.

TABLE C.1—90TH PERCENTILE ANNUAL LOSS RATES FOR 1990–2009 PERIOD AND CORRESPONDING RISK WEIGHTS

Portfolio	Loss rates (90th percentile)	Risk weights
First-Lien Mortgages	2.3%	0.5
Second/Junior Lien Mortgages	4.6%	0.9
Commercial and Industrial (C&I) Loans	5.0%	1.0
Construction and Development (C&D) Loans	15.0%	3.0
Commercial Real Estate Loans, excluding C&D	4.3%	0.9
Credit Card Loans	11.8%	2.4
Other Consumer Loans	5.9%	1.2

[77 FR 66017, Oct. 31, 2013, as amended at 78 FR 55594, Sept. 10, 2013]

APPENDIX D TO SUBPART A OF PART 327—DESCRIPTION OF THE LOSS SEVERITY MEASURE

The loss severity measure applies a standardized set of assumptions to an institution's balance sheet to measure possible losses to the FDIC in the event of an institution's failure. To determine an institution's loss severity rate, the FDIC first applies assumptions about uninsured deposit and other unsecured liability runoff, and growth in insured deposits, to adjust the size and composition of the institution's liabilities. Assets are then reduced to match any reduction in liabilities.[1] The institution's asset values are then further reduced so that the Tier 1 leverage ratio reaches 2 percent.[2] In both cases, assets are adjusted pro rata to preserve the institution's asset composition. Assumptions regarding loss rates at failure for a given asset category and the extent of secured liabilities are then applied to estimated assets and liabilities at failure to determine whether the institution has enough unencumbered assets to cover domestic deposits. Any projected shortfall is divided by current domestic deposits to obtain an end-of-period loss severity ratio. The loss severity measure is an average loss severity ratio for the three most recent quarters of data available.

Runoff and Capital Adjustment Assumptions

Table D.1 contains run-off assumptions.

TABLE D.1—RUNOFF RATE ASSUMPTIONS

Liability type	Runoff rate * (percent)
Insured Deposits	(10)
Uninsured Deposits	58
Foreign Deposits	80
Federal Funds Purchased	100
Repurchase Agreements	75

[16] The risk weights are based on loss rates for each portfolio relative to the loss rate for C&I loans, which is given a risk weight of 1. The peak loss rates were derived as follows. The loss rate for each loan category for each bank with over $5 billion in total assets was calculated for each of the last twenty calendar years (1990–2009). The highest value of the 90th percentile of each loan category over the twenty year period was selected as the peak loss rate.

[1] In most cases, the model would yield reductions in liabilities and assets prior to failure. Exceptions may occur for institutions primarily funded through insured deposits, which the model assumes to grow prior to failure.

[2] Of course, in reality, runoff and capital declines occur more or less simultaneously as an institution approaches failure. The loss severity measure assumptions simplify this process for ease of modeling.