Article Title: Sector And Industry Variables | Criteria | Financial Institutions | General: Risk-Adjusted Capital Framework Methodology Data: Editor's note: This sector and industry variables report incorporates content previously included in "Archive: Guidance: Risk-Adjusted Capital Framework Methodology," published Sept. 13, 2018. For information on the phasing out of guidance documents, see "Evolution Of The Methodologies Framework: Introducing Sector And Industry Variables Reports," published Oct. 1, 2021. Overview And Scope Here S&P; Global Ratings provides additional information on the variables it uses to apply the criteria "Risk-Adjusted Capital Framework Methodology," published July 20, 2017. This report is intended to be read in conjunction with those criteria. For a further explanation of sector and industry variables reports, please see the description at the end of this article. We will revise these sector and industry variables from time to time, when market dynamics or regulatory changes warrant reevaluating the quantitative assumptions, to increase transparency about how we apply our criteria. Key Publication Information This article is related to "Risk-Adjusted Capital Framework Methodology," published July 20, 2017. We will update this publication periodically based on changes in regulatory developments and market conditions. Sector And Industry Variables Equity Market Groups In paragraph 125 of the risk-adjusted capital framework (RACF) criteria, we detail the treatment of exposures to listed and unlisted securities and outline the factors typically used to classify equity investments into four groups by country. The four equity market groups are listed in table 1. We apply a different capital charge to each of the four groups, reflecting our view of the degree of riskiness (least risky is group 1; most risky is group 4). Equity Market Groups Classification By Country EQUITY MARKET GROUP COUNTRIES Group 1 Switzerland, U.K., U.S. Group 2 Australia, Austria, Belgium, Canada, Chile, Colombia, Denmark, France, Germany, Hong Kong, Israel, Italy, Japan, Mexico, Netherlands, New Zealand, Norway, Portugal, Singapore, South Korea, Spain, Sweden Group 3 Bahrain, Brazil, China, Czech Republic, Finland, Hungary, India, Ireland, Kuwait, Latvia, Lithuania, Luxembourg, Malaysia, Malta, Poland, Qatar, Saudi Arabia, Slovenia, Slovakia, South Africa, Taiwan, Turkiye, United Arab Emirates Group 4 All other countries Paragraph 151 of the RACF criteria details our approach to deriving the overall equity market group when we don't have the equity exposures broken down by country. We classify them by region or subregion and then calculate a GDP-weighted average of the equity market group for the countries included. Table 2 shows the classification of some of the main regions or groups of countries in the four equity market groups. Equity Market Groups Classification By Region Or Group Of Countries REGIONS OR GROUP OF COUNTRIES EQUITY BUCKET Northern America 1 Europe or EU 2 Asia-Pacific; Europe, the Middle East, and Africa; Gulf Cooperation Council; Latin America; and world 3 Africa; Central America; and Caribbean 4 RACF Risk Weights Associated With Certain Types Of Exposures In The U.S. Paragraph 83 of the RACF criteria explains the weighting applied to the separate counterparty risks associated with securities lending, sale and repurchase agreements (repos), reverse repos, and Lombard (margin) loans. The risk weights reflect the collateralization we typically observe for these kinds of exposure in the U.S. (see table 3). We also apply risk weights and normalized losses for subprime mortgages in the U.S., as described in paragraphs 78 and 195 of the RACF criteria. Normalized losses for subprime mortgages in the U.S. are currently 130 basis points. RACF Risk Weights For Counterparty Risks Associated With Certain Types Of Exposures In The U.S. TYPE OF COUNTERPARTY RISK EXPOSURE RISK WEIGHT (%) U.S. securities lent 11 U.S. repos 3 U.S. reverse repos 8 U.S. margin loans 15 U.S. subprimes 189 RACF Risk Weights For Pass-Through Securities Paragraph 101 of the RACF criteria currently applies only to the Federal National Mortgage Assn. (known as Fannie Mae) and Federal Home Loan Mortgage Corp. (known as Freddie Mac). The current RACF risk weight applicable to pass-through securities issued by these entities in the U.S. is 20%. RACF Credit Valuation Adjustment Charge In Jurisdictions With No Exempted Counterparties The RACF criteria targets a one-year 99.9% confidence level (see paragraphs 85-86). Because the most commonly used regulatory credit valuation adjustment (CVA) approach (the "standardized CVA" approach) uses a one-year 99% confidence level, we apply a multiplier of 1.3 to the CVA charge. Thus, in jurisdictions where no counterparties have been exempted from computation of the regulatory CVA charge, the RACF CVA charge is 1.3x the regulatory CVA charge. RACF CVA Charge In The EU In the EU, sovereign and nonfinancial corporate entities are currently exempted from the regulatory CVA charge, but financial institutions are not. The current value of the add-on described in paragraph 88 of the RACF criteria--which represents the incremental risks

posed by the generally lower creditworthiness of exempted counterparties in the EU compared with financial institutions--is 64%. For example, for an entity with financial institutions exposures representing 45% of total over-the-counter (OTC) derivatives exposures, the second multiplier described in paragraph 87 is $(1 + [1 + 64\%] \times [1 - 45\%]/45\%) = 3.0$. Overall, the RACF CVA charge for this entity would be $(1.3 \times 3.0) = 3.9 \times 10^{-2}$ the regulatory charge. When we do not get the breakdown of OTC derivatives exposures by types of counterparties, we currently assume that nonexempted counterparties represent 45% of total derivative counterparties. In these cases, the default value of the multiplier applied to the regulatory CVA charge (as defined in paragraph 89) is 3.9. RACF CVA Charge When The Regulatory CVA Charge Is Not Available In paragraphs 92-94 of the RACF criteria, we define our approach for entities that meet the materiality thresholds but for which the regulatory CVA charge is not available. We compute the RAC CVA charge as a percentage of derivatives receivable, with percentages calibrated on a set of representative banks. We use two percentages, one for entities in jurisdictions for which derivatives are presented on a gross basis (as in International Financial Reporting Standards [IFRS]) and one for entities in jurisdictions for which derivatives are presented on a net basis (as in U.S. generally accepted accounting principles [GAAP]). The current values of the two multipliers are: 11% of derivatives receivable for entities reporting under U.S. GAAP or equivalent, and 2% of derivatives receivable for entities reporting under IFRS or equivalent. Computing The RAC Central Counterparties Charge For Entities Reporting Under Basel III Standards Only, When Certain Information Is Not Available For entities reporting under Basel III standards, we apply a RAC central counterparty (CCP) charge, reflecting capital allocation to trade exposures, initial margins, and guarantee fund contributions, as outlined in the RACF criteria. When information on one or more of these three types of exposure is not available, paragraphs 66-67 in the RACF criteria detail how we use either regulatory risk-weighted assets or the available accounting information to determine the level of these exposures. The criteria describe how we determine trade exposures or initial margins at CCPs as a percentage of derivatives receivable--the percentage differs, according to whether the derivatives receivable are reported gross or net--and CCP guarantee fund contributions as a flat percentage of trade and initial margin exposures: When guarantee fund contributions are not disclosed separately, we assume that they represent 6.5% of trade and initial margin exposures (consistent with the current average guarantee fund contributions of a representative sample of rated banks). When trade exposures and initial margin are not disclosed, we assume that they represent 25% of derivatives receivable for entities under IFRS (or local GAAP equivalent) and 150% of derivatives receivable for entities under U.S. GAAP. These are conservative estimates based on representative samples of rated banks. Computing The Counterparty Risk Charge On Derivatives Exposures (Cleared Or OTC) For Entities That Do Not Report Exposures According To Basel Standards For entities that do not report counterparty risk exposures according to Basel standards, the criteria include, in paragraph 82, the determination of exposures to derivatives (OTC and listed) as a percentage of derivatives receivable (different depending whether reported gross or net), based on a sample of representative banks. These multipliers are defined as follows: When a firm reports derivatives under U.S. GAAP rules (or equivalent), counterparty risk exposure on derivatives is assumed to be equal to 475% of derivatives receivable. Exposures are assumed to be OTC and split 50/50 between financial institutions and corporate entities, unless a majority of derivative activity is in exchange-settled products, in which case we assume that 100% of the derivative exposure is with clearinghouses. When a firm reports derivatives under IFRS (or local GAAP equivalent for the accounting treatment of derivatives), counterparty risk on derivatives is assumed to be equal to 55% of derivatives receivable. Exposures are assumed to be OTC and split 50/50 between financial institutions and corporate entities, unless a majority is in exchange-settled products, in which case we assume that 100% of derivatives are with clearinghouses. Credit Conversion Factors As explained in paragraph 148 of the RACF criteria, whenever banks do not report Basel exposures, we apply the Basel III standardized approach credit conversion factors (CCFs) to off-balance-sheet commitments (except for credit card commitments). For example, commitments that will mature in less than one year (except retail commitments that are unconditionally cancelable) are assigned a 20% CCF. Commitments that have a maturity of more than one year are assigned a 50% CCF. Related Criteria Risk-Adjusted Capital Framework Methodology, July 20, 2017 Related Research Evolution Of The Methodologies Framework: Introducing Sector And

Industry Variables Reports, Oct. 1, 2021 S&P; Global Ratings Definitions, Jan. 5, 2021 Calibrating The Risk-Adjusted Capital Framework, July 20, 2017 This is a sector and industry variables report. A sector and industry variables report is a publicly available criteria-related publication that describes sector, industry, asset class, or regional variables that we expect to periodically update mainly to reflect our views on changing macroeconomic and market conditions. Sector and industry variables reports are not criteria because they do not establish a methodological framework for determining credit ratings.