Citigroup Inc.

Pillar 3

Basel III Advanced Approaches Disclosures

For the Quarterly Period Ended March 31, 2015

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Organization

Citigroup Inc. (Citi) is a global diversified financial services holding company incorporated under the laws of the state of Delaware, and whose businesses provide consumers, corporations, governments and institutions with a broad range of financial products and services, including consumer banking and credit, corporate and investment banking, securities brokerage, trade and securities services, and wealth management. Citi has approximately 200 million customer accounts and does business in more than 160 countries and jurisdictions.

Citigroup currently operates, for management reporting purposes, via two primary business segments: Citicorp, consisting of Citi's *Global Consumer Banking (GCB)* businesses and *Institutional Clients Group (ICG);* and Citi Holdings, consisting of businesses and portfolios of assets that Citigroup has determined are not central to its core Citicorp businesses.

Citi's principal banking (depository institution) subsidiary is Citibank, N.A., a national banking association, with offerings encompassing consumer finance, credit cards, mortgage lending and retail banking products and services; investment banking, commercial banking, cash management, trade finance and e-commerce products and services; and private banking products and services. Significant Citigroup legal entities other than Citibank, N.A. include Banco Nacional de Mexico, S.A. (Banamex), Mexico's second largest bank, as well as Citigroup Global Markets Inc. and Citigroup Global Markets Limited, the primary U.S. and U.K. broker-dealer (nonbanking) subsidiaries, respectively.

Regulatory Capital Standards and Disclosures

Citi is subject to regulatory capital standards issued by the Federal Reserve Board (FRB) which, commencing with 2014, constitute the U.S. Basel III rules. These rules establish a comprehensive capital adequacy framework encompassing both risk-based capital ratios and leverage ratios.

The U.S. Basel III rules set forth the composition of regulatory capital (including the application of regulatory capital adjustments and deductions), as well as two comprehensive methodologies (a Standardized Approach and Advanced Approaches) for measuring total risk-weighted assets. Total risk-weighted assets under the Advanced Approaches, which are primarily models-based, include credit, market, and operational risk-weighted assets.

In addition, Citi, as an Advanced Approaches banking organization under the U.S. Basel III rules, is also required to publicly disclose certain qualitative and quantitative information regarding Citi's capital structure and adequacy, credit risk and related mitigation policies, securitizations, equity exposures, market risk, operational risk, and other matters, all in accordance with the U.S. Basel III rules (the Basel III Advanced Approaches Disclosures). These Basel III Advanced Approaches Disclosures constitute the often referred to "Pillar 3 Disclosures." Commencing with the first quarter of 2015, Citi, as an Advanced Approaches banking organization, is also required to publicly disclose certain quantitative information regarding Citi's Supplementary Leverage ratio, which is included within these Basel III Advanced Approaches Disclosures. Further, where applicable, quantitative disclosures are presented in accordance with the current regulatory capital standards (Basel III Transition Arrangements) under the U.S. Basel III rules.

Moreover, these Citigroup Basel III Advanced Approaches Disclosures were reviewed and approved in accordance with Citi's Basel Public Disclosures Policy, the latter of which has been approved by Citi's Board of Directors.

For additional information regarding the implementation of the U.S. Basel III rules, see "*Capital Resources*" in Citi's 2014 Annual Report on Form 10-K (2014 Form 10-K) and Quarterly Report on Form 10-Q for the period ended March 31, 2015 (First Quarter 2015 Form 10-Q). Further, see Citi's FFIEC 101 Report, "*Regulatory Capital Reporting for Institutions Subject to the Advanced Capital Adequacy Framework*," as of March 31, 2015 (First Quarter 2015 FFIEC 101 Report), available on the National Information Center's website.

Basis of Consolidation

Citi's basis of consolidation for both financial and regulatory accounting purposes is in accordance with U.S. GAAP. The U.S. Basel III rules are applied to these consolidated financial statements and off-balance sheet exposures.

Certain of Citi's equity investments in entities carried under either the cost or equity method of accounting for U.S. GAAP purposes are neither consolidated nor deducted from regulatory capital under the U.S. Basel III rules, but rather are appropriately risk-weighted. However, so-called "significant investments" (greater than 10% ownership or exposure) in the common stock of unconsolidated financial institutions are subject, under the U.S. Basel III rules, to potential deduction in arriving at Common Equity Tier 1 Capital. To the extent not deducted, these significant investments are risk-weighted.

In addition, under the U.S. Basel III rules, Citi must deduct 50% of the minimum regulatory capital requirements of insurance underwriting subsidiaries from each of Tier 1 Capital and Tier 2 Capital.

For further information regarding Citi's more significant subsidiaries and basis of consolidation, see Note 1, "*Basis of Presentation*" and Note 20, "*Securitizations and Variable Interest Entities*" in the Notes to Consolidated Financial Statements in Citi's First Quarter 2015 Form 10-Q.

Funds and Capital Transfer Restrictions

For information regarding restrictions or other major impediments on the transfer of funds and capital distributions between Citi entities, see Note 19, "*Regulatory Capital and Citigroup Inc. Parent Company Information*" in the Notes to Consolidated Financial Statements in Citi's 2014 Form 10-K.

Regulated Subsidiaries' Capital

Total Capital for each of Citi's regulated banking subsidiaries was in excess of their respective minimum total capital requirements as of March 31, 2015. Likewise, all of Citi's regulated broker-dealer subsidiaries were also in compliance with their net capital requirements at that date.

Further, the aggregate amount of surplus capital in Citi's insurance subsidiaries included in consolidated Total Capital as of March 31, 2015 was $3.0 billion. Separately, no Citi insurance subsidiary had a capital shortfall relative to its minimum regulatory capital requirement as of such date.

Regulatory Capital Instruments

Aside from common stock, Citi's other currently qualifying regulatory capital instruments consist of outstanding noncumulative perpetual preferred stock, trust preferred securities and subordinated debt.

Citigroup common stock entitles each holder to one vote per share for the election of directors and for all other matters to be voted on by Citigroup's common shareholders. Except as otherwise provided by Delaware law, the holders of common stock vote as one class. Upon a liquidation, dissolution or winding up of Citigroup, the holders of common stock share ratably in the assets remaining and available for distribution after payments to creditors and provision for any preference of any preferred stock. There are no preemptive or other subscription rights, conversion rights or redemption or scheduled installment payment provisions relating to the common stock. For additional information on the terms and conditions of Citi's common stock, see Citi's Consolidated Balance Sheet and "*Unregistered Sales of Equity, Purchases of Equity Securities, Dividends—Equity Security Repurchases*" in Citi's First Quarter 2015 Form 10-Q.

Each series of Citigroup preferred stock is noncumulative and perpetual and ranks senior to the common stock but ranks equally with each other series of outstanding preferred stock as to dividends and distributions upon a liquidation, dissolution or winding up of Citigroup. Unless full noncumulative dividends for the dividend period then ending have been paid, Citigroup cannot pay any cash dividends on any common stock or other capital stock ranking junior to the preferred stock during the subsequent dividend period. Holders of preferred stock generally do not have voting rights other than those described in the corresponding certificate of designation and as specifically required by Delaware law. For additional information on the terms and conditions of the outstanding preferred stock, see Citi's Consolidated Balance Sheet and Note 19, "*Preferred Stock*" in the Notes to the Consolidated Financial Statements in Citi's First Quarter 2015 Form 10-Q.

Under the U.S. Basel III rules however, trust preferred securities largely phase out as qualifying regulatory capital instruments. For additional information regarding the structure and terms of Citi's currently outstanding trust preferred securities, see Note 17, "*Debt*" in the Notes to the Consolidated Financial Statements in Citi's First Quarter 2015 Form 10-Q, and with respect to the phase out of trust preferred securities see "*Capital Resources—Current Regulatory Capital Standards—Risk-Based Capital Ratios*" in Citi's First Quarter 2015 Form 10-Q.

Citi's subordinated debt contains customary provisions applicable to all debt securities, with the exception that subordinated debt contains no financial covenants and the only events of default are those related to bankruptcy, insolvency, receivership and other similar actions. The following table presents Citi's qualifying subordinated debt as of March 31, 2015.

Table 1: Qualifying Subordinated Debt

In millions of dollars, except percentages **March 31, 2015**

Issuance Date	Coupon	Redeemable by Issuer Beginning	Maturity	Amortized Cost
June 6, 2002	6.63%		June 15, 2032	$ 1,000
February 19, 2003	5.88%		February 22, 2033	818
August 1, 2003	5.13%		December 12, 2018	713
October 30, 2003	6.00%		October 31, 2033	993
February 10, 2004	1.45% (1)	February 10, 2014	February 10, 2019	831
July 1, 2004	5.88%		July 1, 2024	588
February 25, 2005	4.25% (2)	February 25, 2025	February 25, 2030	870
April 8, 2005	3.50% (2)	April 8, 2015	April 8, 2020	73
October 7, 2005	4.65% (2)	October 11, 2017	October 11, 2022	380
November 30, 2005	1.31% (1)	November 30, 2012	November 30, 2017	285
March 3, 2006	4.50%		March 3, 2031	453
March 6, 2006	5.37%		March 6, 2036	180
April 6, 2006	2.75% (2)	April 6, 2016	April 6, 2021	187
June 9, 2006	0.50% (3)		June 9, 2016	270
June 29, 2006	4.05%		June 29, 2016	42
August 25, 2006	6.13%		August 25, 2036	1,600
August 25, 2006	0.78% (3)		August 25, 2036	524
February 12, 2007	5.50%		February 15, 2017	204
May 24, 2007	5.16% (2)	May 24, 2022	May 24, 2027	64
May 31, 2007	0.74% (1)	May 31, 2012	May 31, 2017	459
February 4, 2013	4.05%		July 30, 2022	538
May 14, 2013	3.50%		May 15, 2023	1,244
September 9, 2013	5.50%		September 13, 2025	822
September 9, 2013	6.68%		September 13, 2043	550
May 6, 2014	5.30%		May 6, 2044	996
August 5, 2014	4.00%		August 5, 2024	749
November 20, 2014	4.30%		November 20, 2026	995
March 26, 2015	3.88%		March 26, 2025	999
Total Amount Prior to Exclusion				**$ 17,427**
Exclusion(4)				(927)
Total Qualifying Subordinated Debt				**$ 16,500**

(1) Subordinated debt issuances containing a fixed-to-floating rate step-up feature where the call/step-up date has passed, and which carried the indicated floating rate as of March 31, 2015.

(2) Subordinated debt issuances containing a fixed-to-floating rate step-up feature where the call/step-up date has not passed, and which carried the indicated fixed rate as of March 31, 2015.

(3) Subordinated debt issuances with floating rates based on three month LIBOR plus a fixed spread.

(4) Under the transition arrangements of the U.S. Basel III rules, non-qualifying subordinated debt issuances which consist of those with a fixed-to-floating rate step-up feature where the call/step-up date has not passed are eligible for inclusion in Tier 2 Capital during 2015 up to 25% of the aggregate outstanding principal amounts of such issuances as of January 1, 2014.

Regulatory Capital Tiers

For Citi's Common Equity Tier 1 Capital, Tier 1 Capital and Total Capital, and related components, as of March 31, 2015, see "*Capital Resources*" in Citi's First Quarter 2015 Form 10-Q, and Schedule A in Citi's First Quarter 2015 FFIEC 101 Report.

Capital Management

Citi's capital management framework is designed to ensure that Citigroup and its principal subsidiaries maintain sufficient capital consistent with each entity's respective risk profile and all applicable regulatory standards and guidelines. For additional information regarding Citigroup's capital management, see "*Capital Resources—Capital Management*" in Citi's 2014 Form 10-K.

Capital Planning

At the core of Citi's capital assessment framework is a focus on safety, soundness, credibility and confidence, aimed to ensure Citi remains well capitalized through economic cycles. To assess the adequacy of its capital to support current and expected future activities, Citi produces regular capital forecasts taking into account both normal business conditions and a variety of hypothetical stressed scenarios. Beginning in June 2012, Citi integrated its previously existing Internal Capital Adequacy Assessment Process (ICAAP) and the Federal Reserve Board's Comprehensive Capital Analysis and Review (CCAR) through a semi-annual Citi-wide, cross-functional, capital planning process. As part of this process, Citi prepares a capital plan annually for submission to the Federal Reserve Board. The capital plan assesses Citi's regulatory capital requirements, capital goals, liquidity position, stress testing capabilities and results, and associated policies and procedures in addition to a comprehensive discussion of material risks that could impact Citi's capital adequacy. Commencing in January 2013, Citibank, N.A. also prepares annually an integrated Dodd-Frank Annual Stress Test (DFAST)/ICAAP for submission to the Office of the Comptroller of the Currency (OCC). These documents are presented to the Board of Directors of Citi and Citibank, N.A., respectively, for approval prior to submission to the appropriate regulatory authority.

Economic Capital

Citi calculates and allocates economic capital (risk capital) across the company in order to consistently measure risk taking amongst business activities and to assess risk-reward relationships.

Citi measures risk capital as the amount of capital required to absorb potential unexpected economic losses resulting from extremely severe events over a one year time period, assuming Citi remains a going concern. Economic losses include any decline in the economic value of assets and any increase in the economic value of liabilities. The drivers of economic losses are risks which, for Citi, are broadly categorized as credit risk, market risk and operational risk. Citi's risk capital framework is reviewed and enhanced on a regular basis in light of market developments and evolving practices.

The calculation of economic losses depends on whether the risk is classified as "price risk" or "value risk." Price risk is the potential unexpected loss of market value over a one year horizon. Value risk is the potential unexpected loss based on realizable value to maturity. If any of the following criteria are met, the risk is "price risk;" otherwise it is "value risk:"

- intent to sell or hedge exposures at market price;
- funding with short-term liabilities (sufficient long-term financing, even under stress situations, should be available to support all exposures whose risk capital is determined based on value risk); or
- mark-to-market accounting or equivalent (e.g., fair value).

Citi's methodology does not include any offset for expected income. For accrual instruments such as loans, this means that risk capital is calculated as the difference between expected loss on the loan and potential total loss (no offset for interest revenue or fee revenue). For mark-to-market instruments, such as those carried in the trading book, this means that the unexpected loss is based on price volatility and assumes an expected total return of zero. Citi's risk capital framework covers both systematic risk and idiosyncratic risk, where material. It is designed to avoid pro-cyclicality, meaning that changes in risk capital are primarily driven by changes in position, not by changes in shocks or assumptions. Citi's methodology covers all risk types, legal entities, and Citi's reportable segments. To account for tail risks, Citi's methodology includes fat-tailed distributions (non-normal price behavior) for individual market factors and high correlation assumptions during stress periods.

Advanced Approaches Risk-Weighted Assets

The following table presents the components of Citi's Basel III Advanced Approaches risk-weighted assets as of March 31, 2015 and December 31, 2014.

Table 2: Advanced Approaches Risk-Weighted Assets

In millions of dollars	**March 31, 2015**	December 31, 2014[1]
Credit Risk-Weighted Assets:		
Wholesale Exposures	**$ 373,831**	$ 385,064
Retail Exposures:		
Residential Mortgage Exposures	**74,400**	81,242
Qualifying Revolving Exposures	**122,610**	126,394
Other Retail Exposures	**35,861**	37,067
Total Retail Exposures	**$ 232,871**	$ 244,703
Securitization Exposures	**$ 41,026**	$ 38,739
Central Counterparty Exposures	**4,432**	4,709
Equity Exposures:		
Equity Exposures Subject to the Simple Risk Weight Approach	**12,569**	13,654
Equity Exposures to Investment Funds	**3,219**	3,042
Total Equity Exposures	**$ 15,788**	$ 16,696
Other[2]	**$ 87,265**	$ 88,958
Total Credit Risk-Weighted Assets Subject to Supervisory 6% Multiplier[3]	**$ 755,213**	$ 778,869
Supervisory 6% Multiplier	**$ 45,313**	$ 46,731
Credit Valuation Adjustments (CVA)	**36,579**	36,091
Total Credit Risk-Weighted Assets[4]	**$ 837,105**	$ 861,691
Market Risk-Weighted Assets:		
Regulatory Value-at-Risk (VaR)[5]	**$ 10,674**	$ 10,194
Regulatory Stressed Value-at-Risk (SVaR)[6]	**27,136**	26,060
Incremental Risk Charge (IRC)[7]	**1,661**	2,299
Comprehensive Risk Measure (CRM)[8]	**12,819**	13,325
Standard Specific Risk Charge (SSRC)	**21,789**	23,979
Securitization Charges[9]	**20,267**	21,325
Other[10]	**3,894**	3,299
Total Market Risk-Weighted Assets	**$ 98,240**	$ 100,481
Operational Risk-Weighted Assets	**$ 325,000**	$ 312,500
Total Risk-Weighted Assets	**$ 1,260,345**	$ 1,274,672

(1) Restated to reflect the retrospective adoption of ASU 2014-01 for Low Income Housing Tax Credit (LIHTC) investments, consistent with current period presentation.
(2) Primarily consists of net deferred tax assets, net premises and equipment, receivables, intangible assets and other assets not subject to the application of internal models in deriving credit risk-weighted assets under the U.S. Basel III rules.
(3) Under the U.S. Basel III rules, a supervisory 6% multiplier is applied to all components of credit risk-weighted assets other than derivatives CVA.
(4) Under the U.S. Basel III rules, credit risk-weighted assets during the transition period reflect the effects of transitional arrangements related to regulatory capital adjustments and deductions. For additional information regarding the Basel III transition arrangements for regulatory capital adjustments and deductions, see "*Capital Resources—Current Regulatory Capital Standards—Risk-Based Capital Ratios*" in Citi's First Quarter 2015 Form 10-Q.
(5) Includes $2,392 million and $2,269 million add-on for Risk Not In the Model (RNIM) as of March 31, 2015 and December 31, 2014, respectively.
(6) Includes $5,965 million and $5,414 million add-on for RNIM as of March 31, 2015 and December 31, 2014, respectively.
(7) Includes $32 million and $150 million add-on for RNIM as of March 31, 2015 and December 31, 2014, respectively.
(8) Includes $250 million and $72 million add-on for RNIM as of March 31, 2015 and December 31, 2014, respectively.
(9) Includes standard specific risk charges attributable to securitization positions, as well as non-modeled correlation trading securitization positions.
(10) As of March 31, 2015 and December 31, 2014, includes $3,222 million and $2,157 million of risk-weighted assets arising from de minimis exposures, respectively. Additionally, as of March 31, 2015 includes $672 million incremental SVaR, and as of December 31, 2014 includes $204 million incremental VaR and $938 million incremental SVaR, resulting from the inclusion of structural non-trading book foreign exchange and commodity exposures.

Total risk-weighted assets declined from December 31, 2014, primarily due to lower credit risk-weighted assets, partially offset by an increase in operational risk-weighted assets. The decrease in credit risk-weighted assets was largely attributable to a reduction in wholesale commitments and retail loans and commitments as well as the impact of foreign currency translation, partially offset by an increase in securitization exposures. Citi's operational risk-weighted assets increased quarter over quarter, reflecting an evaluation of ongoing events in the banking industry as well as continued enhancements to Citi's operational risk model. Market risk-weighted assets declined slightly as decreases due to volume reductions and changes in portfolio composition of assets subject to both standard specific risk charges and securitization charges were partially offset by an increase in charges arising from de minimis exposures.

Citi's credit, market and operational risk-weighted assets under the Basel III Advanced Approaches rules are derived, in part, from various internal models. These internal models remain subject to ongoing review and approval by the FRB and OCC. Any modifications or requirements resulting from these ongoing reviews could result in changes in Citi's risk-weighted assets as calculated under the Basel III Advanced Approaches rules.

Risk-Based Capital Ratios

For Citi and Citibank, N.A.'s Common Equity Tier 1 Capital, Tier 1 Capital and Total Capital ratios as of March 31, 2015, as calculated under the Basel III Advanced Approaches framework, see "*Capital Resources*" in Citi's First Quarter 2015 Form 10-Q.

Overview

Citigroup believes that effective risk management is of primary importance to its overall operations. Accordingly, Citi's risk management process has been designed to monitor, evaluate and manage the principal risks it assumes in conducting its activities. Specifically, the activities that Citi engages in—and the risks those activities generate—must be consistent with Citi's underlying commitment to the principles of "responsible finance." For Citi, responsible finance means conduct that is transparent, prudent and dependable, and that delivers better outcomes for Citi's clients and society.

Citi selectively takes risks in support of its underlying customer-centric strategy, while striving to ensure it operates within the principles of responsible finance. Reaching the goal of becoming an indisputably strong and stable institution goes beyond financial performance; ethics is an area where Citi has zero tolerance for breaches. Citi evaluates and rewards employees with specific consideration to their risk behaviors, including transparency, communication and escalation of concerns.

Citi's Risk programs are based on three lines of defense: business management, independent control functions and internal audit.

Business Management

Businesses, including in-business risk, own and manage the risks, including compliance risks, inherent in or arising from their business, and are responsible for having controls in place to mitigate key risks, performing manager assessments of internal controls, and promoting a culture of compliance and control.

Independent Control Functions

Independent control functions, including Compliance, Finance, Legal and Risk, set standards according to which Citi and its businesses are expected to manage and oversee risks, including compliance with applicable laws, regulatory requirements, policies and standards of ethical conduct. In addition, among other things, the independent control functions provide advice and training to the businesses and establish tools, methodologies, processes and oversight of controls used by the businesses to foster a culture of compliance and control and to satisfy those standards.

Internal Audit

Internal Audit independently reviews activities of the first two lines of defense discussed above based on a risk-based audit plan and methodology approved by the Board of Directors.

Organization Structure, Policies and Processes

For further information on Citi's risk management organization, policies and processes, see "*Managing Global Risk*" in Citi's 2014 Form 10-K.

Scope and Nature of Credit Risk Reporting and Measurement Systems

Citi uses a global risk reporting system to manage credit exposure to its wholesale obligors and counterparties. Retail exposures are booked in local systems specific to local credit risk regulations, however all retail exposures are monitored and managed centrally at the portfolio level. The counterparty exposure profile for derivative counterparty credit risk is calculated using Monte Carlo simulation.

Credit Risk Management Objectives and Policies

Credit risk is the potential financial loss resulting from the failure of a borrower or counterparty to honor its financial or contractual obligations. Credit risk arises in many of Citi's business activities, including: wholesale and retail lending; capital markets derivative transactions; structured finance; reverse repurchase agreements and repurchase agreements; and settlement and clearing activities.

A discussion of Citi's credit risk management policy can be found in "*Managing Global Risk—Credit Risk*" in Citi's 2014 Form 10-K.

Corporate Credit Risk

For corporate clients and investment banking activities across Citi, the credit process is grounded in a series of fundamental policies, including:

- joint business and independent risk management responsibility for managing credit risks;
- a single center of control for each credit relationship, which coordinates credit activities with each client;
- portfolio limits to ensure diversification and maintain risk/capital alignment;
- a minimum of two authorized credit officer signatures required on most extensions of credit, one of which must be from a credit officer in credit risk management;
- risk rating standards, applicable to every obligor and facility; and
- consistent standards for credit origination documentation and remedial management.

Consumer Credit Risk

Within *GCB*, credit risk management is responsible for establishing the Global Consumer Credit and Fraud Risk Policies, approving business-specific policies and procedures, monitoring business risk management performance, providing ongoing assessment of portfolio credit risk, ensuring the appropriate level of loan loss reserves and approving new products and new risks.

Past Due and Impaired Exposures

For Citi's significant accounting policies regarding past due and impaired loans, see Note 1, "*Summary of Significant Accounting Policies,*" in the Notes to the Consolidated Financial Statements in Citi's 2014 Form 10-K and Note 14, "*Loans*" in the Notes to the Consolidated Financial Statements in Citi's First Quarter 2015 Form 10-Q.

For information on Citi's significant accounting policies and estimates regarding impaired securities, including the determination of other-than-temporary impairment, see "*Significant Accounting Policies and Significant Estimates—Valuations of Financial Instruments*" in Citi's 2014 Form 10-K and Note 13, "*Investments*" in the Notes to the Consolidated Financial Statements in Citi's First Quarter 2015 Form 10-Q.

Allowance for Credit Losses

For a description of Citi's significant accounting policies and estimates regarding the allowance for credit losses, including policies for charging-off accounts deemed uncollectible, see "*Significant Accounting Policies and Significant Estimates—Allowance for Credit Losses*" and Note 1, "*Summary of Significant Accounting Policies*" in the Notes to the Consolidated Financial Statements in Citi's 2014 Form 10-K.

Credit Risk Exposures

The following table sets forth the geographic distribution of Citi's major credit risk exposures as of March 31, 2015.

Table 3: Principal Credit Risk Exposures by Geographic Region[1][2]

	March 31, 2015				
In millions of dollars	**North America**	**EMEA**	**Latin America**	**Asia**	**Total**
On-Balance Sheet Exposures					
Cash and Due From Banks (Including Segregated Cash and Other Deposits)	$ 4,639	$ 4,985	$ 5,009	$ 7,247	**$ 21,880**
Deposits With Banks	82,607	10,936	4,678	35,675	**133,896**
Fed Funds Sold and Securities Borrowed or Purchased Under Agreements to Resell	148,483	64,965	9,778	15,789	**239,015**
Brokerage Receivables	20,752	12,433	828	1,624	**35,637**
Debt Securities:					
Available-for-Sale	212,866	18,824	19,437	43,122	**294,249**
Held-to-Maturity	18,170	534	4,550	—	**23,254**
Total Debt Securities	**$ 231,036**	**$ 19,358**	**$ 23,987**	**$ 43,122**	**$ 317,503**
Loans Held-for-Investment:					
Consumer	$ 210,263	$ 7,284	$ 37,374	$ 86,785	**$ 341,706**
Corporate	120,294	58,382	38,080	62,592	**279,348**
Loans Held-for-Investment, Net of Unearned Income	**$ 330,557**	**$ 65,666**	**$ 75,454**	**$ 149,377**	**$ 621,054**
Allowance for Loan Losses	$ (9,587)	$ (883)	$ (2,600)	$ (1,528)	**$ (14,598)**
Total Loans Held-for-Investment, Net	**$ 320,970**	**$ 64,783**	**$ 72,854**	**$ 147,849**	**$ 606,456**
Receivables	$ 5,667	$ 2,957	$ 1,729	$ 2,757	**$ 13,110**
Loans Held-for-Sale	5,027	4,128	—	816	**9,971**
Off-Balance Sheet Exposures					
Guarantees[3]					
Financial Standby Letters of Credit	$ 67,154	$ 19,335	$ 812	$ 9,653	**$ 96,954**
Performance Guarantees	2,748	3,210	2,170	3,237	**11,365**
Securities Lending Indemnifications	78,191	68,736	—	420	**147,347**
Credit Commitments and Lines of Credit					
Commercial and Similar Letters of Credit	1,033	2,044	267	2,371	**5,715**
One- to Four-Family Residential Mortgages	1,840	—	3	2,273	**4,116**
Revolving Open-End Loans Secured by One-to Four-Family Residential Properties	13,598	—	504	1,854	**15,956**
Commercial Real Estate, Construction and Land Development	6,824	336	29	800	**7,989**
Credit Card Lines	497,306	6,238	22,513	83,425	**609,482**
Commercial and Other Consumer Loan Commitments	154,005	57,585	7,906	16,920	**236,416**

(1) Credit risk exposures are presented on a U.S. GAAP basis and in the geographic region in which each exposure is managed, rather than the geographic region in which the obligor is domiciled.

(2) ***North America*** includes the U.S., Canada and Puerto Rico; ***EMEA*** represents Europe, Middle East and Africa; ***Latin America*** includes Mexico; and ***Asia*** includes Japan.

(3) Represents the maximum potential amount of future payments.

The following table sets forth Citi's major credit risk exposures by counterparty for wholesale exposures and subcategories for retail exposures as of March 31, 2015.

Table 4: Principal Credit Risk Exposures by Wholesale Exposure Counterparty and Retail Exposure Subcategory[1][2]

	March 31, 2015								
	Wholesale Exposures					Retail Exposures			
In millions of dollars	Bank	Corporate[3]	Sovereign	Other	Netting[4]	Residential Mortgages	Qualifying Revolving	Other Retail	Total
On-Balance Sheet Exposures									
Cash and Due From Banks (Including Segregated Cash and Other Deposits)[5]	$ 3,042	$ 744	$ 9,581	$ 8,513	$ —	$ —	$ —	$ —	**$ 21,880**
Deposits With Banks	9,861	1,553	122,482	—	—	—	—	—	**133,896**
Fed Funds Sold and Securities Borrowed or Purchased Under Agreements to Resell	57,921	203,275	30,325	859	(53,365)	—	—	—	**239,015**
Brokerage Receivables	—	—	—	35,637	—	—	—	—	**35,637**
Derivatives Receivables[6]	456,293	148,500	28,452	264,527	(826,191)	—	—	—	**71,581**
Debt Securities:									
Available-for-Sale	5,568	70,566	204,691	5,651	—	6,941	832	—	**294,249**
Held-to-Maturity	—	16,733	5,248	958	—	315	—	—	**23,254**
Total Debt Securities	**$ 5,568**	**$ 87,299**	**$ 209,939**	**$ 6,609**	**$ —**	**$ 7,256**	**$ 832**	**$ —**	**$ 317,503**
Loans Held-for-Investment:									
Consumer[7]	$ 320	$ 40,037	$ 2,269	$ 391	$ —	$ 131,870	$ 135,172	$ 31,647	**$ 341,706**
Corporate[8]	20,606	200,460	4,038	19,260	—	23,402	1,417	10,165	**279,348**
Loans Held-for-Investment, Net of Unearned Income	**$ 20,926**	**$ 240,497**	**$ 6,307**	**$ 19,651**	**$ —**	**$ 155,272**	**$ 136,589**	**$ 41,812**	**$ 621,054**
Receivables	$ 253	$ 1,904	$ 1,274	$ 8,428	$ —	$ 967	$ 31	$ 253	**$ 13,110**
Loans Held-for-Sale	235	4,494	—	107	—	5,075	—	60	**9,971**
Off-Balance Sheet Exposures									
Guarantees[9]									
Financial Standby Letters of Credit	$ 2,449	$ 91,798	$ 1,112	$ 1,513	$ —	$ 26	$ —	$ 56	**$ 96,954**
Performance Guarantees	603	10,645	5	—	—	—	—	112	**11,365**
Securities Lending Indemnifications	101,912	45,243	192	—	—	—	—	—	**147,347**
Credit Commitments and Lines of Credit									
Commercial and Similar Letters of Credit	1,513	4,143	59	—	—	—	—	—	**5,715**
One- to Four-Family Residential Mortgages	—	—	—	—	—	4,116	—	—	**4,116**
Revolving Open-End Loans Secured by One-to Four-Family Residential Properties	—	—	—	—	—	15,309	544	103	**15,956**
Commercial Real Estate, Construction and Land Development	—	7,651	—	—	—	338	—	—	**7,989**
Credit Card Lines[10]	60	22,046	533	—	—	—	585,313	1,530	**609,482**
Commercial and Other Consumer Loan Commitments	2,449	206,187	507	9,723	—	264	12,352	4,934	**236,416**

(1) Credit risk exposures are presented on a U.S. GAAP basis.
(2) Securitization exposures are reflected within wholesale exposure counterparties and retail exposure subcategories, as appropriate, based upon the nature of the underlying securitized assets or party on which credit risk is assumed.
(3) Corporate credit exposures include non-depository financial institutions, bank holding companies (BHCs), insurance companies and non-central government public sector entities, consistent with FFIEC 101 reporting.
(4) Represents the netting of receivable and payable balances with the same counterparty under enforceable netting agreements and, with respect to derivatives receivables, also the netting of cash collateral paid and received by counterparty under enforceable credit support agreements. For additional information regarding enforceable netting agreements and credit support agreements, see Note 10, "*Federal Funds, Securities Borrowed, Loaned and Subject to Repurchase Agreements*" and Note 21, "*Derivatives Activities*" in the Notes to the Consolidated Financial Statements in Citi's First Quarter 2015 Form 10-Q.
(5) Other represents $8,513 million of currency and coin as well as cash items in process of collection.
(6) Other includes exchange traded and cleared derivatives receivables. Cleared derivatives include derivatives executed bilaterally with a counterparty in the OTC market but then novated to a central clearing house, whereby the central clearing house becomes the counterparty to both of the original counterparties. Exchange traded derivatives include derivatives executed directly on an organized exchange that provides pre-trade price transparency.
(7) Classifiably-managed (individually risk rated) consumer loans are considered wholesale exposures in accordance with the U.S. Basel III rules.
(8) Certain wholesale or commercial credit risk exposures less than or equal to $1 million are considered retail exposures in accordance with the U.S. Basel III rules.
(9) Represents maximum potential amount of future payments.
(10) Credit card lines extended to wholesale counterparties for use by employees are considered wholesale exposures in accordance with the U.S. Basel III rules.

See the following references to Citi's First Quarter 2015 Form 10-Q for additional quantitative information regarding credit risk exposures, all of which are presented in accordance with U.S. GAAP.

Corporate and Consumer Loans

- See Note 14, "*Loans*" for information on loans outstanding by counterparty type, additional detail by geographic region, non-accrual and delinquent loans and certain impaired loans.
- See "*Managing Global Risk—Credit Risk*" for additional information on loans outstanding by counterparty type, geographic region, non-accrual and delinquent loans and impaired loans.

Investment Securities

- See Note 13, "*Investments*" for information on investment securities by issuer type, remaining contractual maturity and investment securities determined to be other-than-temporarily impaired.

Repo-Style Transactions, Eligible Margin Loans and OTC Derivatives

- See Note 10, "*Federal Funds, Securities Borrowed, Loaned and Subject to Repurchase Agreements*" for respective carrying values.
- See Note 21, "*Derivatives Activities*" for derivative notional amounts, gross mark-to-market receivables/ payables, collateral netting benefits and net mark-to-market receivables/ payables, as well as credit derivative notional amounts and gross mark-to-market receivables/ payables by counterparty type and remaining contractual maturity.

Other Off-Balance Sheet Exposures

- See Note 24, "*Guarantees and Commitments*" for information on the maximum potential amount of future payments under guarantees and credit commitments by type of product.

Allowance for Credit Losses

- See "*Managing Global Risk—Credit Risk—Details of Credit Loss Experience*" for a reconciliation of changes in the allowance for credit losses.
- See Note 15, "*Allowance for Credit Losses*" for a disaggregation of the allowance for credit losses by impairment method.

Average Credit Risk Exposures

- See "*Managing Global Risk—Market Risk—Price Risk—Price Risk—Non-Trading Portfolios (including Interest Rate Exposure)—Average Balances and Interest Rates—Assets*" for consolidated average total assets for the three months ended March 31, 2015.

Additionally, see Citi's 2014 Form 10-K for the following information regarding corporate and consumer loans, as well as off-balance sheet exposures.

- See Note 15, "*Loans*" for information on purchased distressed loans.
- See "*Managing Global Risk—Credit Risk—Consumer Loan Details*" and "*Managing Global Risk—Credit Risk—Corporate Credit Details*" for information on consumer and corporate loans by remaining contractual maturity, respectively.
- See Note 27, "*Pledged Assets, Collateral, Commitments and Guarantees*" for information on lease commitments.

Overview

Under the U.S. Basel III rules Citi is required to categorize its credit risk into wholesale, retail, securitization, central counterparty, and equity exposures. Each category may cross multiple business segments as presented in Citi's other publicly disseminated reports, such as its Forms 10-K and 10-Q.

Wholesale exposures are classifiably-managed (individually risk rated) and retail exposures are delinquency-managed (portfolio based). Wholesale exposures are primarily found in the *ICG* businesses (including Citi Private Bank), as well as Corporate Treasury. Additionally, classifiably-managed exposures are found in certain commercial business lines within the *GCB* and Citi Holdings. Typical financial reporting categories that include wholesale exposures are deposits with banks, debt securities available-for-sale or held-to-maturity, loans, and off-balance sheet exposures such as unused commitments to lend and letters of credit.

Wholesale exposures, which include counterparty credit risk exposures arising from OTC derivative contracts, repo-style transactions and eligible margin loans, consist of exposures such as those to corporates, banks, securities firms, financial institutions, central governments, government agencies, local governments, other public sector entities, income producing real estate, high volatility commercial real estate, high net worth individuals not eligible for retail exposure treatment, and other obligor/counterparty types not included in retail exposures.

Retail exposures are primarily found in consumer business lines within the *GCB* and Citi Holdings. Additionally, certain wholesale or commercial exposures less than or equal to $1 million that are found in the *ICG* and Citi Private Bank are treated as retail exposures in accordance with the U.S. Basel III rules. Typical financial reporting categories that include retail exposures are loans and off-balance sheet commitments to lend. Retail exposures consist of three subcategories: residential mortgage exposures, qualifying revolving exposures, and other retail exposures. Residential mortgage exposures include one-to-four family residential mortgages, both first lien and second lien, as well as home equity lines of credit. Qualifying revolving exposures include credit card and charge card products where the overall credit limit is less than or equal to $100,000 and overdraft lines on individual checking accounts. Other retail exposures include credit card products above the $100,000 threshold, personal loans, auto loans, student loans, and commercial delinquency-managed exposures, such as wholesale exposures less than or equal to $1 million.

Wholesale Credit Risk Management

Use of Risk Parameter Estimates Other Than for Regulatory Capital Purposes

For Citi's wholesale exposures, internal credit ratings are used in determining approval levels, concentration limits, economic risk capital, and reserves, in addition to regulatory capital. Each wholesale obligor is assigned an obligor risk rating (ORR) that reflects the one-year probability of default (PD) of the obligor. Each wholesale facility is assigned a facility risk rating (FRR) that reflects the expected loss rate of the facility, the product of the one-year PD and the expected loss given default (LGD) associated with the facility characteristics.

ORRs are established through an integrated framework that combines quantitative and qualitative tools, calibrated and tested across economic cycles, with risk manager expertise on customers, markets and industries. ORRs are generally expected to change in line with material changes in the PD of the obligor. Rating categories are defined consistently across wholesale credit by ranges of PDs and are used to calibrate and objectively test rating models and the final ratings assigned to individual obligors.

Independently validated models and, in limited cases, external agency ratings, establish the starting point in the obligor rating process. The use of external agency ratings in establishing an internal rating occurs when agency ratings have been reviewed against internal rating performance and definitions, and is generally limited to ratings of BBB+/Baa1 or higher.

Internal rating models include statistically derived models and expert judgment rating models. The statistical models are developed by an independent analytical team in conjunction with independent risk management. The analytical team resides in Credit & Operational Risk Analytics (CORA) which is part of the corporate-level independent group within Citi's overall Franchise Risk and Strategy organization. The statistical rating models cover Citi's corporate segment and certain commercial activity within the consumer business lines and are based on statistically-significant financial variables. Expert judgment rating models, developed by independent risk management for the segment, cover industry or obligor segments where there are limited defaults or data histories, or highly specialized or heterogeneous populations.

To the extent that risk management believes the applicable model does not capture all the relevant factors affecting the credit risk of an obligor, discretionary adjustments may be applied to derive the final ORR, within limits defined by policy. For larger obligors, the final ORRs are derived through the use of a scorecard that is designed to capture the key risks for the segment. For the larger credit relationships comprised of multiple obligors, the final ORRs are the starting point for deriving a longer term credit rating that is used as the basis for obligor limits and approval levels.

Institutional Clients Group

As previously noted, Citi's wholesale exposures primarily relate to activities in the *ICG*. *ICG* provides corporate, institutional, public sector and high-net worth clients around the world with a range of wholesale banking products and services. Citi's *ICG* businesses that incur credit, market, operational and franchise risk are covered by an *ICG* risk management manual (*ICG* risk manual) which sets forth *ICG*'s core risk principles, policy framework, limits, definitions, rules and standards for identifying, measuring, approving and reporting risk, including business conducted in majority-owned, management-controlled entities.

Obligors are assigned a risk rating through a risk rating process governed by the *ICG* risk manual. Total facilities to an obligor are also approved in accordance with the *ICG* risk manual. The *ICG* risk manual requires an annual comprehensive analysis of each obligor and all proposed credit exposures to that obligor.

Independent risk management periodically reviews exposures across the banking book and trading book portfolios to ensure compliance with various limit and concentration constructs. Quarterly reviews are conducted of certain high risk exposures in the *ICG*.

Use of Credit Risk Mitigation

Risk mitigation may depend on the type of product. For counterparty credit risk, counterparties may be required to post cash or securities margin as part of the credit service agreement with that counterparty. Margin posted is reflected as a reduction of exposure (at the transaction or netting set level, depending on the degree of legal certainty of the jurisdiction of the transaction) against pre-settlement exposure in Citi's risk systems. For lending based transactions, the primary risk mitigants within the *ICG* are guarantees or other types of full support from third parties or related entities, as well as collateral such as cash, securities, real estate, or other asset types. Additionally, exposure can be mitigated through the purchase of credit default swaps. The *ICG* risk manual defines specific documentation requirements for all product contracts, and specific requirements for a guarantee to qualify as "full support" which align with the guarantee eligibility requirements under the U.S. Basel III rules.

Recognizing Credit Risk Mitigation

For purposes of calculating Basel III regulatory capital for counterparty credit risk, posted margin is reflected as a reduction to exposure at default (EAD) in accordance with the U.S. Basel III rules. For purposes of calculating Basel III regulatory capital for lending products, collateral is recognized in the LGD calculation based on the specific LGD for the related collateral as defined annually by CORA. The benefit of eligible guarantees or other types of full support is captured through PD substitution in the regulatory capital calculation and in the internal assignment of FRRs. In certain cases, collateral may be recognized as an improvement in the rating of the facility based on constraints outlined in the *ICG* risk manual.

Control Mechanisms for the Ratings System

The assignment of risk ratings is governed by the *ICG* risk rating policy. In addition, each business must have an approved risk rating process. The head of CORA must also approve the process to ensure consistent and appropriate practices. Each business' risk rating process must be reviewed and approved at least once every three years, unless more frequent review is specified as a condition of the approval. It is the responsibility of the risk manager to ensure that the process remains appropriate for the business' activities.

The business and independent risk management are involved in assigning risk ratings, and Fundamental Credit Review (FCR) reviews the appropriateness of the risk rating. In addition, FCR may change an existing risk rating during a review, or during ongoing business monitoring, and has final authority. ORRs and FRRs must be reviewed on an annual basis at a minimum and are often subject to more frequent review as developments warrant, such as new extensions of credit or changes in an obligor's performance.

Retail Credit Risk Management

Policies and Processes for Retail Credit Risk Management

Citi extends retail credit on the basis of the customer's willingness and ability to repay, rather than placing primary reliance on credit risk mitigation. Depending on a customer's standing and the type of product, facilities may be provided on an unsecured basis.

Citi's retail banking operations use credit models in assessing and managing risk in their businesses and, as a result, models play an integral role in customer approval and management processes. Models used include PD models, primarily in the form of custom application scorecards, custom behavioral scorecards, and generic bureau scores, for example a Fair Isaacs Corporation (FICO) score.

Application scorecards are derived from the historically observed performance of new customers. They are derived using customer demographic and financial information, including data available through credit bureaus. Through statistical techniques, the relationship between these variables and the credit performance is quantified to produce output scores reflecting a PD. These scores are used primarily for decision-making regarding new customers and may reflect different default definitions than those required by the U.S. Basel III rules. These scores are in general not used as segmentation variables in the Basel model.

Behavioral scorecards are derived from the historically observed performance of existing customers (including bureau data). They can be based upon internal information, credit bureau information, or both. The techniques used to derive the output scores reflecting certain PDs are very similar to those used for application scoring. The output scores are used for existing customer management activities. These scores may be used as a segmentation variable in the Basel model.

Citi's retail credit risk custom models are primarily internally derived, although occasionally external consultants may be contracted to build models on behalf of the businesses. All such external models (including generic scores) are subject to internal model validation policies and processes.

Collateral Valuation and Management

In Citi's residential mortgage businesses, Citi's credit policy requires annual assessment of portfolio loan to value, with individual loans valued more frequently as necessary. A variety of methods, ranging from the use of market indices to individual professional inspection, may be used. For margin and security backed loans, Citi's credit policy generally requires that collateral valuations be performed daily.

Types of Collateral

In Citi's residential real estate businesses, a mortgage of the property is obtained to secure claims. Physical collateral is also typically obtained in vehicle financing in most jurisdictions. Loans to private banking or investment management clients may be made against the pledge of eligible marketable securities, cash or real estate.

Calculation of Risk-Weighted Assets Using Internal Parameters

In accordance with the requirements of the U.S. Basel III rules, Citi applies the Advanced Internal Ratings Based (A-IRB) approach for credit risk. Under the A-IRB approach, Citi uses its own estimates of PD, LGD and credit conversion factors (CCF) as risk parameter inputs to Basel III supervisory formulas for the different types of wholesale, counterparty, and retail credit risk exposures when calculating risk-weighted assets.

Wholesale Credit Risk

For wholesale credit risk exposures, the estimates for PD, LGD and EAD are updated on an annual basis by an analytics team in CORA. PD is an estimate of the long-run average one-year default rate for each rating category, adjusted to ensure increasing default rates along the rating scale. PDs and EADs are based on internal data as of 2000 onward.

LGD represents the economic loss associated with defaults occurring in a downturn period (or the long-run average, whichever is higher). The economic loss is measured as the present value of the cash flows, post default, and includes costs associated with the work out, such as legal costs. Adjustments are also made for accrued interest and fees and unresolved defaults. Downturn periods are determined in accordance with the U.S. Basel III rules and reflect periods of significantly higher internal default rates. LGD is segmented by key drivers of losses, such as product type, collateral type and coverage, seniority, jurisdiction, and/or obligor segment (such as large corporates, financial institutions, sovereigns, SMEs or private banking clients). With the exception of bonds and sovereign LGDs, where external information is sourced to supplement internal data, LGDs are based on Citi's internal data for defaults as of 2000 onward.

The EAD for each facility is equal to 100% of the on-balance sheet (direct) exposure, plus the expected percentage drawdown from any off-balance sheet (unused commitment or contingent) exposure multiplied by the unused or contingent amount of a facility. The percentage of the drawdown amount is referred to as the CCF. CCFs for unused commitments are calculated using regression models on internal data. The key drivers for the models include factors such as current usage, obligor segment, credit quality and/or jurisdiction. As required under the U.S. Basel III rules, the average CCF is used for contingent trade letters of credit, while fixed CCFs are applied to performance letters of credit (50%) and for financial/standby letters of credit (100%) due to limited default data for these products. CCFs include adjustments for downturn periods, consistent with those used for LGD, and accrued but unpaid interest and fees at the time of default.

Maturity for loans and leases is based on remaining contractual maturity. Maturity is capped at five years and with a floor of one year, except as permitted by the U.S. Basel III rules.

Retail Credit Risk

The estimates for PD, LGD and CCFs for retail credit exposures are generally updated on a monthly basis using internal data covering a range of economic conditions and are defined similarly to those for wholesale credit. As required by the U.S. Basel III rules, PD is an estimate of the one-year default rate based on the long-term averages. The LGD is an estimate of the economic loss that is associated with the defaulted exposures and any risk mitigants, such as insurance and/or collateral, if applicable. CCF is an estimate of the percentage of an undrawn credit line that will be drawn down within a one-year period. The EAD is estimated as a sum of 100% of the drawn exposure at the beginning of this year and the expected portion of undrawn exposure (as of the beginning of the year) corresponding to CCF.

The long-run average CCFs and LGDs are subject to certain adjustments, including an adjustment to reflect the averages associated with downturn periods. The downturn periods are identified based on internal default rates by major product category and country (similar to the approach used for wholesale) in accordance with the U.S. Basel III rules.

All Basel III retail parameters are calculated for homogenous segments of credit exposures delineated by risk drivers, such as consumer credit score band, loan to value ratio, months-on-book or delinquency aging. Segments are defined by specific product characteristics within a portfolio. The credit scores used are generic bureau scores (for example, a FICO score) or internally developed scoring models, which are subject to Citi's model risk management policy, as discussed further below.

Generally, the approach to estimating PD, LGD, and CCF is consistent across all retail exposure subcategories—residential mortgage exposures, qualifying revolving exposures, and other retail exposures.

Credit Rating and Basel Parameter Governance

The *ICG* risk rating policy requires that all wholesale businesses have an approved risk rating process for deriving risk ratings for all obligors and facilities. Establishing the risk rating process is the responsibility of the independent risk manager aligned with each business. The processes must be approved by the head of an independent analytical team, based on review of default rates, LGD, and alternative practices. The process must also be approved by a risk manager who has the highest senior credit officer designation. It is the responsibility of the risk manager to ensure that the process remains appropriate for the business' activities. At a minimum, the risk rating process must be re-approved at least once every three years, unless more frequent review is specified as a condition of the approval. All ratings must be reviewed annually, at a minimum.

Risk and the business share responsibility for the accuracy of risk ratings. Independent risk management also has the final authority on an assigned rating. Recognition of loss mitigation in the FRRs for collateral or support requires that the mitigant and the reporting comply with the collateral and support policies. In addition, the accuracy of ratings is tested on an annual basis and at various levels. The annual ORR validation, as well as the rating model testing, is reviewed by senior credit risk managers. Various levels of back-testing, benchmarking and validation cover all models and methodologies used in the assignment of ratings, as well as the models used to calculate Basel parameters.

The estimation of Basel parameters are governed under parameter control standards for wholesale and retail credit exposures. All models used to estimate Basel parameters must comply with Citi's model risk management policy, including the requirement to be validated by an independent model validation unit and approved by senior risk management.

Model Risk Management Policy

Model risk refers to the potential adverse impact to Citi from using a model arising from model limitations, model errors or from incorrect or inappropriate use of the model output.

Citi's model risk management policy is designed to comply with supervisory guidance on model risk management and is approved by each of Citi's and Citibank, N.A.'s Chief Risk Officer and Citi's Board of Directors. This policy establishes a model risk management framework designed to ensure consistent standards across Citi for identifying model risk, assessing its magnitude, and managing the risks that arise when using certain quantitative models.

Citi's Chief Risk Officer is responsible for and must approve this policy. The Citi Model Risk Management Committee oversees model risk levels within Citi and reports directly to the Chief Risk Officer.

Independent Validation of Models

Models for wholesale credit and retail credit risk are subject to periodic reviews of assumptions and performance as required under the model risk management policy. Wholesale credit rating models and Basel parameter models (for both wholesale and retail) are integrated into internal risk systems by business, risk and information technology. An independent validation unit conducts initial model validation for the assessment of model risk, including independent review of model documentation and implementation, conceptual soundness and the intended use of a model. The unit also performs independent statistical testing with effective challenges for sensitivity analysis, benchmarking and back-testing of the model methodology. Independent control functions (including risk and validation units) jointly conduct ongoing model performance review and back-testing of a model using internal performance data that meets the regulatory requirements, which includes the assessment of modeling assumptions and data inputs, model output, modeling methodology, and model limitations and compensating controls. This testing is performed on an annual basis for statistical rating models and Basel parameters for wholesale credit risk and on a quarterly basis for Basel parameters for retail credit risk. The definition of default for wholesale and retail credit risk conforms with the applicable definitions in the U.S. Basel III rules.

Internal audit is responsible for independently assessing the adequacy and effectiveness of the overall model risk management framework and implementation (including risk rating processes).

Basel Parameters by Exposure Type

Tables 5 through 9 below set forth the key Basel parameters (PD, LGD, CCF) that are based on internal models as they are reflected in Citi's wholesale, counterparty credit risk, and retail portfolios of exposures. These key parameters are used as inputs to the Basel III supervisory formulas to calculate credit risk-weighted assets. These tables do not include securitization, central counterparty or equity exposures, which are primarily based on supervisory formulas and risk weights. The presentation is consistent as to categories, exposure types, PD range bands, and definitions with U.S. regulatory reporting for Basel III in Citi's First Quarter 2015 FFIEC 101 Report.

Table 5: Wholesale Credit Risk Exposures by Probability of Default[1]

In millions of dollars, except percentages	March 31, 2015					
PD Range Bands	**Undrawn Exposures[2]**	**Total EAD[3]**	**CCF[4]**	**PD[4]**	**LGD[4]**	**Risk Weight[4]**
0.00% to < 0.15%	$ 108,919	$ 496,660	54.46 %	0.03 %	38.66 %	10.46 %
0.15% to < 0.25%	39,675	65,759	51.38	0.16	37.08	31.95
0.25% to < 0.35%	40,877	53,014	48.07	0.27	39.49	43.42
0.35% to < 0.50%	38,980	62,893	49.01	0.43	36.33	50.69
0.50% to < 0.75%	30,260	70,024	48.96	0.71	35.96	59.25
0.75% to < 1.35%	23,068	51,181	49.14	1.16	36.16	70.17
1.35% to < 2.50%	16,757	38,565	50.26	1.88	34.97	76.28
2.50% to < 5.50%	15,697	26,562	46.93	3.61	35.77	92.08
5.50% to < 10.00%	2,867	4,225	52.58	7.80	33.52	101.37
10.00% to < 20.00%	4,404	7,177	53.22	16.40	37.56	143.99
20.00% to < 100%	3,215	6,536	51.29	30.09	36.20	141.66
100% (Default)[5]	1,596	3,038	72.75	100.00	35.71	96.73
Total	**$ 326,315**	**$ 885,634**	**51.13%**	**1.12%**	**37.76%**	**32.29%**

(1) Excludes repo-style transactions, eligible margin loans and OTC derivative exposures.
(2) Amounts represent the face value of undrawn commitments and letters of credit.
(3) Represents total EAD for on-balance sheet and undrawn exposures.
(4) Exposure-weighted average by PD range bands and in total.
(5) The portion of EAD for defaulted wholesale exposures covered by an eligible guarantee from the U.S. government or its agencies is assigned a 20% risk weight in accordance with the U.S. Basel III rules.

Table 6: Counterparty Credit Risk Exposures by Probability of Default[1]

In millions of dollars, except percentages	March 31, 2015			
PD Range Bands	**Total EAD[2]**	**PD[3]**	**LGD[3]**	**Risk Weight[3]**
0.00% to < 0.03%	$ 30,073	0.02 %	47.57 %	9.11 %
0.03% to < 0.10%	37,680	0.07	44.44	17.68
0.10% to < 0.15%	—	—	—	—
0.15% to < 0.25%	18,849	0.16	42.75	33.83
0.25% to < 0.50%	29,201	0.35	42.48	51.06
0.50% to < 0.75%	21,529	0.70	49.72	106.20
0.75% to < 1.35%	11,823	1.16	42.28	79.62
1.35% to < 2.50%	8,191	1.88	41.85	98.95
2.50% to < 5.50%	5,177	3.42	39.36	113.51
5.50% to < 10.00%	1,621	7.80	39.86	162.71
10.00% to < 100.00%	3,176	28.07	45.67	238.41
100% (Default)	745	100.00	40.84	100.00
Total	**$ 168,065**	**1.51%**	**44.67%**	**52.30%**

(1) Consists of repo-style transactions, eligible margin loans and OTC derivative exposures.
(2) Represents total EAD for on- and off-balance sheet exposures.
(3) Exposure-weighted average by PD range bands and in total.

Table 7: Residential Mortgage Exposures by Probability of Default

In millions of dollars, except percentages	March 31, 2015					
PD Range Bands	**Undrawn Exposures[1]**	**Total EAD[2]**	**CCF[3]**	**PD[3]**	**LGD[3]**	**Risk Weight[3]**
0.00% to < 0.05%	$ 10,593	$ 61,302	54.90 %	0.03 %	30.54 %	2.93 %
0.05% to < 0.10%	1,892	19,834	60.08	0.07	35.95	6.59
0.10% to < 0.15%	997	9,844	79.73	0.13	29.66	8.34
0.15% to < 0.20%	471	2,481	45.91	0.17	51.57	17.77
0.20% to < 0.25%	2,432	8,579	47.66	0.22	55.27	24.17
0.25% to < 0.35%	1,116	7,558	58.71	0.28	42.88	22.10
0.35% to < 0.50%	440	6,891	55.49	0.42	46.89	32.38
0.50% to < 0.75%	184	4,453	96.78	0.58	46.19	39.44
0.75% to < 1.35%	417	11,688	47.76	0.94	53.82	63.99
1.35% to < 2.50%	187	9,865	52.33	1.78	55.65	101.49
2.50% to < 5.50%	24	8,255	45.44	3.60	55.51	151.45
5.50% to < 10.00%	9	7,060	45.97	7.15	52.03	202.48
10.00% to < 20.00%	2	2,993	36.16	13.48	46.19	229.65
20.00% to < 100%	961	3,312	99.86	73.74	29.77	133.18
100% (Default)[4]	2	9,044	100.00	100.00	33.52	74.48
Total	**$ 19,727**	**$ 173,159**	**58.15%**	**7.58%**	**39.71%**	**42.97%**

(1) Amounts represent the face value of undrawn commitments.
(2) Represents total EAD for on-balance sheet and undrawn exposures.
(3) Exposure-weighted average by PD range bands and in total.
(4) The portion of EAD for defaulted retail exposures covered by an eligible guarantee from the U.S. government or its agencies is assigned a 20% risk weight in accordance with the U.S. Basel III rules.

Table 8: Qualifying Revolving Exposures by Probability of Default

In millions of dollars, except percentages	March 31, 2015					
PD Range Bands	**Undrawn Exposures[1]**	**Total EAD[2]**	**CCF[3]**	**PD[3]**	**LGD[3]**	**Risk Weight[3]**
0.00% to < 0.50%	$ 484,551	$ 169,106	26.30 %	0.18 %	88.47 %	8.79 %
0.50% to < 1.00%	54,293	37,538	30.34	0.67	88.65	27.83
1.00% to < 1.50%	13,179	13,362	35.30	1.25	89.34	44.26
1.50% to < 2.00%	18,046	26,225	38.30	1.69	90.33	60.01
2.00% to < 2.50%	7,182	11,752	35.14	2.11	89.89	72.18
2.50% to < 3.00%	3,218	4,859	38.95	2.75	89.25	80.99
3.00% to < 3.50%	3,496	5,599	44.39	3.15	90.86	93.17
3.50% to < 4.00%	4,514	10,703	44.80	3.69	91.14	109.27
4.00% to < 5.00%	2,933	7,546	46.89	4.35	89.79	118.19
5.00% to < 6.00%	967	1,653	44.20	5.43	87.22	122.57
6.00% to < 7.00%	879	2,649	44.49	6.57	89.47	150.64
7.00% to < 8.00%	687	1,749	35.29	7.47	87.64	152.79
8.00% to < 10.00%	1,028	3,200	43.05	8.94	90.39	188.89
10.00% to < 100%	2,212	9,976	38.28	35.06	89.60	227.17
100% (Default)[4]	—	—	—	—	—	—
Total	**$ 597,185**	**$ 305,917**	**27.89%**	**2.17%**	**88.98%**	**40.08%**

(1) Amounts represent the face value of undrawn commitments.
(2) Represents total EAD for on-balance sheet and undrawn exposures.
(3) Exposure-weighted average by PD range bands and in total.
(4) Unsecured qualifying revolving loans and credit cards are charged off at 180 days contractually past due.

Table 9: Other Retail Exposures by Probability of Default

In millions of dollars, except percentages

	March 31, 2015					
PD Range Bands	**Undrawn Exposures[1]**	**Total EAD[2]**	**CCF[3]**	**PD[3]**	**LGD[3]**	**Risk Weight[3]**
0.00% to < 0.50%	$ 19,266	$ 30,090	30.22 %	0.13 %	47.88 %	15.09 %
0.50% to < 1.00%	1,606	6,671	38.81	0.74	75.50	66.64
1.00% to < 1.50%	473	2,569	27.81	1.26	69.27	72.65
1.50% to < 2.00%	832	3,259	23.63	1.79	78.66	98.65
2.00% to < 2.50%	172	1,994	17.89	2.30	73.23	98.53
2.50% to < 3.00%	151	2,076	21.30	2.80	72.26	93.51
3.00% to < 3.50%	151	870	16.43	3.22	66.59	95.71
3.50% to < 4.00%	52	2,434	33.91	3.68	74.59	107.58
4.00% to < 5.00%	197	2,623	32.57	4.39	76.93	113.91
5.00% to < 6.00%	43	928	24.90	5.51	84.52	123.35
6.00% to < 7.00%	25	3,960	39.73	6.32	81.45	124.95
7.00% to < 8.00%	33	221	24.24	7.72	70.50	115.25
8.00% to < 10.00%	20	457	14.79	9.06	76.95	127.06
10.00% to < 100%	127	2,881	38.83	29.67	76.38	146.32
100% (Default)	5	304	100.00	100.00	86.24	100.00
Total	**$ 23,153**	**$ 61,337**	**30.36%**	**3.32%**	**62.18%**	**58.47%**

(1) Amounts represent the face value of undrawn commitments.
(2) Represents total EAD for on-balance sheet and undrawn exposures.
(3) Exposure-weighted average by PD range bands and in total.

COUNTERPARTY CREDIT RISK: OTC DERIVATIVE CONTRACTS, REPO-STYLE TRANSACTIONS AND ELIGIBLE MARGIN LOANS

Counterparty Credit Risk Exposures

Counterparty credit risk is the risk that the counterparty to a transaction could default before the final settlement of the transaction's cash flows. For derivatives, counterparty credit risk also arises from unsettled security, commodity and foreign exchange transactions with a contractual settlement or delivery lag that is longer than the lesser of the market standard for the particular instrument or five business days (long settlement transactions). Repo-style transactions consist of repurchase or reverse repurchase transactions, or securities borrowing or securities lending transactions, including transactions in which Citi acts as agent for a customer and indemnifies the customer against loss, and are based on securities taken or given as collateral, which are marked-to-market, generally daily. Eligible margin loans are extensions of credit collateralized by liquid and readily marketable debt or equity securities, or gold, and that satisfy other conditions under the U.S. Basel III rules.

Methodology Used to Assign Economic Capital

Citi calculates economic capital for the counterparty credit risk of OTC derivative contracts by simulating the potential economic loss resulting from counterparty defaults and the potential market rate driven changes in each counterparty's CVA. The latter simulation uses a process that integrates stress scenarios and Monte Carlo simulation. Citi does not currently calculate economic capital for the credit risk of either repo-style transactions or eligible margin loans, as these products have been evaluated to have de minimis risk because of the frequency of margin calls, the quality of the collateral, and the extent of overcollateralization.

Methodology Used to Assign Credit Limits

The process for approving a counterparty's credit risk exposure limit is guided by: core credit policies, procedures and standards; experience and judgment of credit risk professionals; and the amount of exposure at risk. The process applies to all counterparty credit risk products—OTC derivative contracts, repo-style transactions and eligible margin loans. The process includes the determination of maximum potential exposure after recognition of netting agreements and collateral as appropriate.

While internal ratings are the starting point in establishing credit assessments, a range of factors, such as quality of management and strategy, nature of industry, and regulatory environment, among others, are also taken into consideration for obligor limits and approval levels. Exposure to credit risk on derivatives is also impacted by market volatility, which may impair the ability of clients to satisfy their obligations to Citi. Credit risk analysts conduct daily monitoring versus limits and any resulting issues are escalated to credit officers and business management as appropriate. Usage against the credit limits may reflect netting agreements and collateral.

Counterparty Credit Risk Capital Calculations

In accordance with the requirements of the U.S. Basel III rules, Citi calculates counterparty credit risk-weighted assets using the PD and LGD estimates described in the "*Credit Risk: Portfolio Disclosures – Internal Ratings Based Approach*" section above. The methods used to determine EAD are described below.

For purposes of calculating regulatory capital for counterparty credit risk for derivatives, in accordance with the U.S. Basel III rules, Citi uses a Monte Carlo simulation of potential future exposure to determine an expected positive exposure (EPE) measure as input to Citi's EAD calculation. The model is calibrated with historical volatilities and correlations subject to a set of independent internal validation and statistical backtesting standards. The model utilizes a standard supervisory alpha multiplication factor of 1.4. Citi also uses the mark-to-market method (also known as the current exposure method) for certain counterparty credit risk exposures. This method assigns to each transaction a regulatory stipulated exposure based on the mark-to-market value and a measure of potential future exposure. To calculate EAD for repo-style transactions across all portfolios and for eligible margin loans within Citi's prime lending portfolios, Citi uses the simple VaR methodology. For positions that do not use simple VaR, Citi uses the (supervisory) collateral haircut approach as prescribed in the U.S. Basel III rules. Counterparty credit risk treatment also includes an explicit capital calculation (CVA RWA) to address potential fair value losses from CVA. Citi primarily utilizes the advanced CVA RWA approach for its OTC derivatives. However, the simple CVA RWA approach is used for exchange traded derivatives and other exposures that are cleared through central counterparties for which the current exposure method is applied; this approach is also used for certain exposures in non-U.S. jurisdictions.

Netting agreements and margin collateral may be recognized as credit risk mitigants provided they meet certain eligibility criteria outlined in the U.S. Basel III rules, as described below.

Derivative Master Netting Agreements

Credit risk from derivatives is mitigated where possible through netting agreements whereby derivative assets and liabilities with the same counterparty can be offset. Citi policy requires all netting arrangements to be legally documented. ISDA master agreements are Citi's preferred manner for documenting OTC derivatives. The agreements provide the contractual framework within which dealing activities across a full range of OTC products are conducted and contractually binds both parties to apply close-out netting across all outstanding transactions covered by an agreement if either party defaults or other predetermined events occur.

Citi considers the level of legal certainty regarding enforceability of its offsetting rights under master netting agreements and credit support annexes to be an important factor in its risk management process. For example, Citi generally transacts much lower volumes of derivatives under master

netting agreements where Citi does not have the requisite level of legal certainty regarding enforceability. For further information on Citi's policies regarding master netting agreements see Note 21, "*Derivatives Activities*" in the Notes to the Consolidated Financial Statements of Citi's First Quarter 2014 Form 10-Q.

Policies for Securing, Valuing and Managing Collateral, and Establishing Credit Reserves

Citi's policies and procedures cover management and governance of financial assets (including securing and valuing collateral) utilized for the purpose of mitigating the credit risk of OTC derivatives, repo-style transactions and eligible margin loans. Specifically, businesses are required to establish standard eligibility criteria for collateral usage and review processes for approving non-standard collateral. Industry standard legal agreements combined with internal reviews for legal enforceability are used to achieve a perfected security interest in the collateral. Additionally, risk management establishes guidelines on appropriate collateral haircuts related to repo-style transactions and eligible margin loans. Potential correlations between the exposure and the underlying collateral are reflected through appropriate haircuts. A haircut is the percentage of reduction in current market value applicable to each type of collateral and is largely based on liquidity and price volatility of the underlying security.

The current market value of collateral is monitored on a regular basis. Margin procedures are established for managing margin calls for which daily margining is considered best practice in order to maintain an appropriate level of collateral coverage reflecting market value fluctuations. Trades are reconciled on a regular basis that is consistent with regulatory or industry best practice guidelines and margin dispute processes are in place. Procedures are established surrounding collateral substitution and collateral reuse/rehypothecation. Limits and concentration monitoring are utilized to control Citi's collateral concentrations to different types of asset classes.

Additionally, for eligible margin loans, procedures are established to ensure an appropriate level of allowance for credit losses, and the counterparty credit risk arising on derivative transactions is managed through CVA to the fair value of derivative contracts.

Primary Types of Collateral

Cash collateral and security collateral in the form of G10 government debt securities generally is posted to secure the net open exposure of OTC derivative transactions, at a counterparty level, whereby the receiving party is free to commingle/rehypothecate such collateral in the ordinary course of business. Nonstandard collateral, such as corporate bonds, municipal bonds, U.S. agency securities and/or mortgage-backed securities, may also be pledged as collateral for OTC derivative transactions. Security collateral posted to open and maintain a master netting agreement with a counterparty, in the form of cash and securities, may from time to time be segregated in an account at a third-party custodian pursuant to a tri-party Account Control Agreement.

With respect to repo-style transactions and eligible margin loans, the majority of the collateral is in the form of cash, long-term debt securities rated one category below investment grade or higher, investment grade short-term debt securities and public equity securities, although occasionally, with appropriate agreement, other forms of collateral may be accepted.

Policies With Respect to Wrong-Way Risk Exposures

Wrong-way risk (WWR) occurs when a movement in a market factor causes Citi's exposure to a counterparty to increase at the same time as the counterparty's capacity to meet its obligations is decreasing. Stated differently, WWR occurs when exposure to a counterparty is adversely correlated with the credit quality of the counterparty.

Specific WWR arises when the exposure to a particular counterparty is positively correlated with the probability of default of the counterparty due to the nature of the transactions with the counterparty. General WWR is less definite than specific WWR and occurs where the credit quality of the counterparty is subject to impairment due to changes in macroeconomic factors.

WWR in a trading exposure arises when there is significant correlation between the underlying asset and the counterparty which, in the event of default, would lead to a significant mark-to-market loss. The interdependence between the counterparty credit exposure and underlying reference asset or collateral for each transaction can exacerbate and magnify the speed in which a portfolio deteriorates. Thus, the goal of Citi's WWR policy is to provide best practices and guidelines for the identification, approval, reporting and mitigation of specific and general WWR.

Citi requires that transactions involving specific WWR, as well as highly correlated WWR, are approved by independent risk management prior to commitment, along with post-trade ongoing risk reporting and reviews by senior management to determine appropriate management and risk mitigation. Risk mitigants for specific WWR transactions include increased margin requirements and offsetting or terminating transactions, among other mitigants.

Citi's WWR policy further uses ongoing product stress testing to identify potential general WWR using simulated macroeconomic scenarios. General WWR reports are reviewed on an ongoing basis by senior management to determine appropriate management and mitigation.

Impact of Citi Credit Rating Downgrade on Collateral Pledged

Certain OTC derivative instruments contain provisions that require Citi to either post additional collateral or immediately settle any outstanding liability balances upon the occurrence of a specified event related to the credit risk of Citi. These events, which are defined by the existing derivative contracts, are primarily downgrades in the credit ratings of Citi and its affiliates. In the event that each legal entity was downgraded a single notch across all three major rating agencies as of March 31, 2015, Citi would be required to post an additional $2.3 billion as either collateral or settlement of the OTC derivative transactions. Additionally, Citi would be required to segregate with third-party custodians collateral previously received from existing OTC derivative counterparties in the amount of $0.1 billion upon the single notch downgrade,

resulting in aggregate cash obligations and collateral requirements of approximately $2.4 billion.

For repo-style transactions in which Citi acts as agent on behalf of customers and indemnifies customers against loss (i.e., agented customer securities lending and repurchase agreement transactions), Citi would not be required to provide any collateral to the borrower of the securities nor to the lender, if Citi were to receive a credit rating downgrade. Nevertheless, in certain jurisdictions a Citi credit rating downgrade, default, or insolvency, could result in an early termination of such repo-style transactions, with Citi responsible for administering the resulting returns solely in its capacity as agent.

No eligible margin loan made by Citi requires the posting of additional collateral if it were to receive a credit rating downgrade.

For additional information on the impact of Citi credit rating downgrades refer to "*Market Risk—Funding and Liquidity Risk—Credit Ratings*" and Note 21, "*Derivatives Activities—Credit-Risk-Related Contingent Features in Derivatives*" in the Notes to the Consolidated Financial Statements in Citi's First Quarter 2015 Form 10-Q.

OTC Derivative Counterparty Credit Risk Disclosures

For information regarding counterparty credit risk related to OTC derivative exposures, including the impact of netting contracts and the offsetting of collateral held, see Note 21, "*Derivatives Activities*" in the Notes to Consolidated Financial Statements in Citi's First Quarter 2015 Form 10-Q.

The following table presents counterparty credit risk for OTC derivatives, as well as repo-style transactions and eligible margin loans, under both the internal models and supervisory methods as of March 31, 2015.

Table 10: Counterparty Credit Risk Exposures by Product

	March 31, 2015					
	Internal Models Method[1]		Supervisory Method[2]		Total Counterparty Credit Risk	
In millions of dollars	EAD	RWA	EAD	RWA	EAD	RWA[3]
OTC Derivatives	$ 82,975	$ 51,321	$ 26,102	$ 18,009	$ 109,077	$ 69,330
Repo-Style Transactions and Eligible Margin Loans	34,420	8,869	24,568	9,702	58,988	18,571
Total Exposure	**$ 117,395**	**$ 60,190**	**$ 50,670**	**$ 27,711**	**$ 168,065**	**$ 87,901**

(1) Internal Models Method (IMM) calculates EAD based on Citi's internal models and includes estimates for potential future exposure for OTC derivatives. Repo-style transactions and eligible margin loans calculated using the simple VaR methodology are included above.

(2) The Supervisory Method used for OTC derivatives is called the current exposure method (CEM) and includes an add-on for potential future exposure. The Supervisory Method used for repo-style transactions and eligible margin loans is called the (supervisory) collateral haircut approach.

(3) Risk-weighted assets for counterparty credit risk are included with wholesale exposures in Table 2 above.

Credit Derivative Notional Amounts

In addition to netting and margining arrangements, Citi uses credit derivatives to mitigate counterparty credit risk arising from OTC derivative contracts. As of March 31, 2015, the net notional amount of outstanding protection bought and sold was approximately $11.3 billion.

Citi does not currently use credit derivatives to mitigate counterparty credit risk arising from individual repo-style transactions or eligible margin loans. However, repo-style transactions or eligible margin loans may be included within the aggregate population of banking book transactions for which Citi buys or sells protection as part of its credit risk mitigation activities.

For information on the notional amounts of purchased and sold credit derivatives by product type, see Schedule HC-L, "*Derivatives and Off-Balance Sheet Items*" in Citi's FR Y-9C, "Consolidated Financial Statements for Holding Companies" for the period ended March 31, 2015.

Overview

As part of its risk management activities, Citi uses various risk mitigants to hedge portions of the credit risk in its portfolios, in addition to outright asset sales. Credit risk mitigation, including netting, collateral and other techniques, is important to Citi in the effective management of its credit risk exposures.

Generally, in consultation with legal counsel, Citi determines whether collateral documentation is legally enforceable and gives Citi the right to liquidate or take possession of collateral in a timely manner in the event of the default, insolvency, bankruptcy or other defined credit event of the obligor. Also in consultation with legal counsel, Citi approves relevant jurisdictions and counterparty types for netting purposes. Off-balance sheet netting and netting of the collateral against the exposure is permitted if Citi determines that it has these rights.

Credit Risk Mitigation by Exposure Type

OTC Derivative Contracts, Repo-Style Transactions and Eligible Margin Loans

Netting is generally permitted for OTC derivative contracts and repo-style transactions. In some cases, netting is also permitted for certain margin lending transactions.

For information on policies and processes for collateral valuation and management, as well as the notional amount of credit derivatives used for counterparty credit risk mitigation, see the "*Counterparty Credit Risk: OTC Derivative Contracts, Repo-Style Transactions and Eligible Margin Loans*" section above.

Retail Exposures

For information on policies and processes for collateral valuation and management for Citi's retail businesses, see the "*Retail Credit Risk Management*" section above.

Wholesale Banking Book Exposures

The main type of credit risk mitigants utilized for the wholesale banking book exposures are guarantees or other types of full support from parents or third parties, as well as collateral such as real estate or various asset types (securities, receivables, inventories, machinery, etc.).

Collateral Concentrations

The collateral obtained for Citi's banking book portfolios is generally well diversified across a wide range of assets such as financial assets (cash, securities, accounts receivable, etc.), real estate and physical assets (plant and equipment, ships, planes, etc.), with no or limited concentration within any one asset type.

Guarantors and Credit Derivative Counterparties and their Creditworthiness

The general purpose for hedging is compliance with various risk limits. A dedicated group within Citi's risk management coordinates risk mitigation for credit risk in the banking book, including monitoring effectiveness and compliance with managing the exposures to be within risk limits on a regular basis. Actions for mitigating accrual credit risk in the banking book are generally limited to purchasing single-name credit default swaps from third parties, and direct asset sales to third parties.

Eligible credit default swap counterparties serving as guarantors of credit risks in the banking book include commercial banks, investment banks or insurance companies that are rated BBB or better by S&P and Moody's with established ISDA agreements and trading limits in place.

Additionally, Citi Private Bank typically obtains personal guarantees from individuals and/or other guarantors.

Recognizing Credit Risk Mitigation

The table below presents the amount of wholesale exposures in the banking book that are covered by eligible guarantees, including eligible credit derivatives.

Table 11: Wholesale Banking Book Exposures Covered by Eligible Guarantees or Credit Derivatives[(1) (2)]

In millions of dollars		March 31, 2015
Exposure Type:		
Debt Securities	$	3,002
Loans		27,562
Unused Commitments and Guarantees		9,444
Other[(3)]		504
Total Exposures	**$**	**40,512**

(1) Wholesale banking book exposures are presented on an EAD basis.

(2) For Basel III regulatory capital calculations, the benefit of eligible guarantees and credit derivatives for wholesale banking book exposures is captured through PD substitution in the calculation of risk-weighted assets. For retail exposures, see footnote (4) to Table 7 above.

(3) Includes deposits with banks and other assets.

Overview

The regulatory capital framework for securitization exposures is a risk sensitive framework that focuses on credit risks that have been transferred and repackaged. A securitized transaction is a transaction where all or a portion of the credit risk of one or more financial assets is transferred to one or more third parties. In addition, the related credit risk of the underlying transferred financial assets is tranched. That is, the credit risk is separated into at least two levels of seniority of claims with each class having a different priority on the cash flows from the underlying pool of exposures.

Securitizations can either be traditional securitizations or synthetic securitizations, depending on how the credit risk associated with the underlying assets is transferred. If the credit risk is transferred to third parties through the use of credit derivatives or guarantees, the securitization is considered synthetic. Otherwise, the securitization is considered traditional. Furthermore, any securitization which has more than one underlying exposure and in which one or more of the underlying exposures are securitization exposures is a re-securitization exposure. Asset-backed securities (ABS) and collateralized debt obligations (CDOs) and collateralized loan obligations (CLOs) in which any of the underlying exposures in these structures are themselves securitization exposures (such as an ABS, CDO or CLO tranche(s)) are examples of re-securitizations.

Objectives

Citi plays a variety of roles in asset securitization transactions, including originator, sponsor and investor. More specifically, Citi acts as underwriter of asset-backed securities, depositor of the underlying assets into securitization vehicles, trustee to securitization vehicles and counterparty to securitization vehicles under derivative contracts. Citi serves as investor in securitization exposures through holdings of such exposures in the banking book. In addition, Citi serves as market maker in securitized products primarily through trading book activity by assisting clients in securitizing their financial assets. Citi may also provide administrative, asset management, underwriting, liquidity facilities and/or other services to the resulting securitization.

Citi provides financing through warehouse facilities for corporate loans for CLO issues; consumer assets for ABS issues; and whole mortgage loans for new residential mortgage backed securities (RMBS) and commercial mortgage backed securities (CMBS) issues. Citi also provides backstop liquidity facilities to asset-backed commercial paper conduits (ABCP Conduits) and Municipal Tender Option Bond programs. Citi, in its role as servicer, may create a securitization exposure(s) by providing servicer cash advances on residential mortgage loan securitizations.

Citi holds various securitization exposures in the banking book and the trading book. Citi invests in highly rated CMBS and RMBS in the investment portfolio. Citi also holds ABS owned by ABCP Conduits that are consolidated onto Citi's balance sheet. Citi holds securitization positions in the trading book through secondary market trading, including certain asset backed commercial paper issued by third party bank conduits. In some cases, these positions may be re-securitizations.

Citi is involved in synthetic securitizations which includes purchasing credit protection through credit default swaps with the CDO/CLO, owning a portion of the capital structure of the CDO/CLO in the form of both unfunded derivative positions (primarily "super-senior" exposures, as discussed below) and funded notes, entering into interest-rate swap and total return swap transactions with the CDO/CLO, lending to the CDO/CLO, and making a market in the funded notes. Citi has retained significant portions of the "super-senior" positions issued by certain CDOs. These positions are referred to as "super-senior" because they represent the most senior positions in the CDO and, at the time of structuring, were senior to tranches rated AAA by independent rating agencies. In a synthetic securitization, there is no change in the financial accounting treatment for the assets securitized.

Citi engages in re-securitization transactions in which debt securities are transferred to a variable interest entity (VIE) in exchange for new beneficial interests. Private-label re-securitizations are backed by either residential or commercial mortgages and are often structured on behalf of clients. Citi retains senior and subordinated beneficial interests in private-label re-securitization transactions. Citi also re-securitizes U.S. government-agency guaranteed mortgage-backed securities. Citi utilizes an enhanced approval process for re-securitizations which includes reviewing each transaction thorough its New Product Approval Committee.

Citi enters into these securitization arrangements for a variety of business purposes. In addition to providing a source of liquidity and less expensive funding, securitizing assets reduces credit exposure to the borrowers. Securitization arrangements offer investors access to specific cash flows and risks created through the securitization process. Securitization arrangements assist Citi and Citi's customers in monetizing their financial assets at more favorable rates than Citi or the customers could otherwise obtain. Citi uses securitization transactions to segregate the seller's credit risk from the securitized assets and the cash flows generated from those assets, which are to be used for the benefit of purchasers or lenders in the transaction. The segregation is achieved through the transfer of the securitized assets in a 'true sale' from the seller to a bankruptcy-remote special purpose entity (SPE), thereby providing legal isolation of the pool of assets from the default risk of the seller.

Risks

Securitization transactions can involve a number of risks including portfolio risk, seller's risk, and liquidity risk. Portfolio risk arises from the performance of the underlying asset pool (i.e., payment rates, dilution, write-offs/losses). Seller risk represents the portion of unsecured credit exposure in a transaction with the seller. This exposure principally arises from recourse for losses, dilution or yield, lack of cash control or a first priority perfected security interest, potential declines in amount of securitized asset collateral between settlement periods or other non-standard features. Certain securitization structures give rise to contingent liquidity risk, that is, the likelihood that liquidity must be provided unexpectedly, potentially at a time when it is already under stress. Liquidity risk can occur in asset-backed commercial paper conduits or in cases where liquidity backstop arrangements have been provided.

Citi's risk management organization plays an active role in the review and oversight of securitization exposure identification. The nature of identifying a securitization is primarily an economic substance test where Citi seeks to identify evidence of tranching of credit risks in a variety of ways. Securitization identification is subject to a robust review process with controls and oversight. Securitizations exposures can arise in various forms, including but not limited to the following types of exposures:

- asset- and mortgage-backed securities;
- loans, lines of credit, and financial standby letters of credit;
- credit derivatives (including nth-defaulting credit default swaps) and guarantees;
- credit enhancing interest only strips;
- assets sold with retained tranched recourse;
- single assets with tranched risk;
- OTC derivatives with securitization SPEs;
- implicit support; and
- credit enhancing representation and warranties.

Citi manages its securitization and re-securitization positions within an established risk management policy framework whereby each business and Citi's risk management monitors changes in positions and changes in the portfolio structure of securitization and re-securitization positions. Credit risk management is responsible for determining the overall risk appetite for securitization transactions, approving extension of credit and ensuring data capture associated with those extensions of credit are accurate and are within Citi's risk appetite and limits, and ensuring that the transactions meet Citi's standards for Basel III compliance. Market risk management is responsible for ensuring that securitization transactions that are booked in the trading book are consistent with business mandate and endorsing risk and reward balance. Securitization and re-securitization positions are subject to product and obligor limits to ensure diversification in Citi's portfolio. These limits include mezzanine re-securitization limits.

Citi employs several risk mitigation approaches to manage risk appetite for its securitization and re-securitization positions. Under the U.S. Basel III rules, a bank must demonstrate that it has truly transferred credit risk of the underlying exposures to one or more third parties to be able to recognize for risk-based capital purposes the use of a credit risk mitigant. The mitigant must meet the requirements of an eligible guarantee or eligible credit derivative. Failure to meet the operating requirements for a synthetic securitization prevents a bank from using the securitization framework and requires a bank to hold capital against the underlying exposures as if they have not been securitized. A bank must ensure that when transferring assets to an SPE that it can demonstrate that it holds sufficient residual capital in addition to the capital in the SPE to absorb losses in a stress situation.

Risk-Based Capital Approaches

Citi utilizes the "hierarchy of approaches" to compute regulatory capital on securitization transactions as required by the U.S. Basel III rules. If a securitization exposure is not required to be deducted from regulatory capital, Citi first calculates the risk-based capital requirement using the Supervisory Formula Approach (SFA). The SFA calculation is a models-driven approach based on complex mathematical formulas that considers the attributes of the both the securitization structure and the underlying exposures. SFA requires inputs such as PD and LGD on the underlying collateral. Citi utilizes approved SFA models for a variety of asset classes including credit card receivables, trade receivables, student loans, auto loans, commercial loans and other consumer asset classes within traditional and synthetic securitizations.

Where data is not sufficient to build an SFA model, Citi uses the Standardized Supervisory Formula Approach (SSFA). SSFA requires inputs including the following to calculate regulatory capital:

- Attachment Point: the point at which the collateral losses from underlying assets backing a tranche will have reached an amount that those losses will be applied to the tranche in the form of principal write-downs;
- Detachment Point: the point at which the tranche will be completely wiped out or written-down by losses from the collateral backing the tranche;
- Weighted Average Capital: the weighted average capital charge of the assets in the deal;
- Seriously Delinquent: the percentage of the collateral that are seriously delinquent in the deal (e.g., 90+ days past due, in foreclosure, in bankruptcy); and
- Calibration Parameter: a parameter that increases the riskiness of a tranche for re-securitizations.

A risk weight of 1,250% must be applied to a securitization exposure that does not qualify for the SFA and where Citi does not apply the SSFA, or which is not otherwise required to be deducted from regulatory capital.

Securitizations and VIEs
See the following references for certain information regarding securitizations and VIEs:

Consolidation Policy and Securitization Exposures

- See Note 20, "*Securitizations and Variable Interest Entities*" in the Notes to the Consolidated Financial Statements of Citi's First Quarter 2015 Form 10-Q.

Transfers of Financial Assets and Gain on Sale

- See Note 1, "*Summary of Significant Accounting Policies*" in the Notes to the Consolidated Financial Statements of Citi's 2014 Form 10-K.

Valuation of Retained or Purchased Interests

- See Note 22, "*Fair Value Measurement*" in the Notes to the Consolidated Financial Statements of Citi's First Quarter 2015 Form 10-Q.

Recognizing Liabilities to Provide Support to Securitizations

- See Note 24, "*Guarantees and Commitments*" in the Notes to the Consolidated Financial Statements in Citi's First Quarter 2015 Form 10-Q.
- See Note 25, "*Contingencies*" in the Notes to the Consolidated Financial Statements in Citi's First Quarter 2015 Form 10-Q.

The table below presents the total outstanding principal amount of assets securitized by Citi (excluding assets in consolidated securitization variable interest entities) for which Citi retains an exposure that is not subject to the market risk capital rules. Third-party assets held in Citi-sponsored vehicles are shown separately from securitized assets that were originated or purchased by Citi. This table also presents the total principal amount of outstanding assets intended to be securitized by Citi.

Table 12: Outstanding Securitization Exposures by Underlying Exposure Type

	As of March 31, 2015			
	Originator		Sponsor	
In millions of dollars	Traditional Securitizations	Synthetic Securitizations	Traditional Securitizations	Assets Pending Securitization
Commercial Real Estate Loans	$ 3,744	$ —	$ —	$ 1,746
Corporate Loans	—	12,448	—	172
Credit Card Receivables	196	—	—	—
Residential Mortgages	10,284	—	—	288
Other	5,066	—	4,974	—
Total	**$ 19,290**	**$ 12,448**	**$ 4,974**	**$ 2,206**

The table below sets forth the total principal amount of assets securitized by Citi during the three months ended March 31, 2015, excluding assets in consolidated securitization variable interest entities. Third-party assets securitized in Citi-sponsored vehicles are shown separately from securitized assets that were originated or purchased by Citi. Additionally, securitizations for which Citi retains an exposure that is not subject to the market risk capital rules are shown separately from securitizations for which Citi did not retain an exposure. This table also presents any gains (losses) on sale recognized during the three months ended March 31, 2015 related to Citi's securitization activity.

Table 13: Securitization Activity by Underlying Exposure Type

	For the three months ended March 31, 2015						
	Originator				Sponsor		
	Traditional Securitizations		Synthetic Securitizations		Traditional Securitizations		
In millions of dollars	Exposure Retained	Exposure Not Retained	Exposure Retained	Exposure Not Retained	Exposure Retained	Exposure Not Retained	Recognized Gain (Loss) on Sale
Commercial Real Estate Loans	$ —	$ 1,034	$ —	$ —	$ —	$ 2,197	$ 17
Corporate Loans	—	3	—	—	—	—	—
Credit Card Receivables	—	—	—	—	—	—	—
Residential Mortgages	—	341	—	—	—	—	(1)
Other	—	—	—	—	33	—	—
Total	**$ —**	**$ 1,378**	**$ —**	**$ —**	**$ 33**	**$ 2,197**	**$ 16**

The table below presents the amount of securitized assets that are past due as of March 31, 2015, and the amount of impairment losses recognized by Citi during the three months ended March 31, 2015.

Table 14: Impairment by Underlying Exposure Type

	As of March 31, 2015	For the Three Months Ended March 31, 2015
In millions of dollars	Past Due Securitized Assets[1]	Impairment Losses Recognized by Citi[2]
Commercial Real Estate Loans	$ 617	$ —
Corporate Loans	48	4
Credit Card Receivables	3	—
Residential Mortgages	1,833	—
Other	1,941	—
Total	**$ 4,442**	**$ 4**

(1) Represents the outstanding principal balance of securitized assets that are 90 days or more past due.
(2) Represents impairment losses recognized by Citi related to retained securitization exposures that are not subject to the market risk capital rules, and excludes changes in fair value recognized in earnings for retained securitization exposures that are classified as trading securities for U.S. GAAP purposes.

Tables 15 and 16 present Citi's banking book exposures subject to securitization treatment, presented on an EAD basis, under the U.S. Basel III rules.

Table 15: Securitization and Re-securitization Exposures by Risk Weight Band

	March 31, 2015							
	SFA Approach		SSFA Approach		1,250% Approach		Total	
In millions of dollars	Exposure	RWA	Exposure	RWA	Exposure	RWA	Exposure	RWA
Securitization Exposures Risk Weight Band								
0% ≤ 20%	$ 23,583	$ 3,967	$ 18,824	$ 3,766	$ —	$ —	$ 42,407	$ 7,733
> 20% ≤ 50%	9,780	2,072	12,831	3,944	—	—	22,611	6,016
> 50% ≤ 100%	1,266	1,212	775	510	—	—	2,041	1,722
> 100% ≤ 200%	135	227	1,612	2,663	—	—	1,747	2,890
> 200% ≤ 650%	28	147	345	1,070	—	—	373	1,217
> 650% < 1,250%	—	—	2	20	—	—	2	20
1,250%	122	1,528	589	7,359	215	2,686	926	11,573
Total Securitization Exposures	**$ 34,914**	**$ 9,153**	**$ 34,978**	**$ 19,332**	**$ 215**	**$ 2,686**	**$ 70,107**	**$ 31,171**
Re-securitization Exposures Risk Weight Band								
0% ≤ 20%	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —
> 20% ≤ 50%	—	—	—	—	—	—	—	—
> 50% ≤ 100%	4	4	11	11	—	—	15	15
> 100% ≤ 200%	—	—	—	—	—	—	—	—
> 200% ≤ 650%	—	—	32	158	—	—	32	158
> 650% < 1,250%	—	—	565	4,182	—	—	565	4,182
1,250%	—	—	427	5,343	12	157	439	5,500
Total Re-securitization Exposures[1]	**$ 4**	**$ 4**	**$ 1,035**	**$ 9,694**	**$ 12**	**$ 157**	**$ 1,051**	**$ 9,855**
Total	**$ 34,918**	**$ 9,157**	**$ 36,013**	**$ 29,026**	**$ 227**	**$ 2,843**	**$ 71,158**	**$ 41,026**

(1) During the three months ended March 31, 2015, there were no re-securitization exposures to which credit risk mitigation has been applied.

Table 16: Securitization Exposures by Collateral Type

	March 31, 2015			
	Exposure			
In millions of dollars	**On-Balance Sheet**	**Off-Balance Sheet**	**Total Exposure**	**Total RWA**
Auto Loans	$ 13,582	$ 1,963	$ 15,545	$ 3,585
Commercial Real Estate Loans	1,972	152	2,124	4,045
Corporate Loans	15,707	4,866	20,573	12,416
Credit Card Receivables	2,086	2,455	4,541	932
Residential Mortgages	9,544	110	9,654	8,295
Student Loans	7,300	—	7,300	2,569
Other	6,381	5,040	11,421	9,184
Total	**$ 56,572**	**$ 14,586**	**$ 71,158**	**$ 41,026**

Securitization Exposures Deducted from Regulatory Capital

As of March 31, 2015, no securitization exposures were deducted from Citi's regulatory capital.

Re-securitization Exposures Covered by Guarantees

As of March 31, 2015, no re-securitization exposures were covered by guarantees.

EQUITY EXPOSURES NOT SUBJECT TO THE MARKET RISK CAPITAL RULES

Overview

Citi holds equity positions to generate capital gains for its private equity subsidiaries. It can also hold positions as a result of debt to equity conversions, or to maintain strategic relationships. The equity positions are carried at fair value with certain non-marketable equity securities carried at cost or accounted for under the equity method.

The disclosures below are consistent with the definition of equity Citi has adopted for U.S. GAAP financial reporting purposes. For further information, see Note 1, "*Summary of Significant Accounting Policies*" in the Notes to the Consolidated Financial Statements of Citi's 2014 Form 10-K, and Note 13, "*Investments*" in the Notes to the Consolidated Financial Statements of Citi's First Quarter 2015 Form 10-Q.

Risk-Weighting Approaches

As required under the U.S. Basel III rules, Citi applies different approaches in calculating risk-weighted assets for equity exposures not subject to the market risk capital rules, depending upon whether or not the exposure is to an investment fund. Furthermore, three alternative approaches may be utilized in deriving risk-weighted assets for equity exposures to an investment fund, with the approach applied largely a function of the information available.

Under the Simple Risk Weight Approach the adjusted carrying value for each type of equity exposure is multiplied by a prescribed risk weight. The adjusted carrying value for an on-balance sheet equity exposure is the carrying value of the exposure. For an off-balance sheet commitment to acquire an equity exposure (an equity commitment) the effective notional amount of the exposure is multiplied by an applicable CCF based upon whether the commitment is conditional or unconditional, and for conditional equity commitments the original maturity thereof. The U.S. Basel III rules also permit Citi, subject to prior written approval from regulators, to calculate risk-weighted assets for equity exposures that are not equity exposures to investment funds by utilizing the Internal Models Approach. However, Citi does not currently utilize the Internal Models Approach for any of its equity exposures.

For equity exposures to investment funds, Citi applies the Full Look-Through Approach, the Simple Modified Look-Through Approach, or the Alternative Modified Look-Through Approach. In accordance with the Full Look-Through Approach, risk weights are applied on a proportional ownership share basis to each equity exposure held by the fund, as if Citi held the exposure directly. Under the Simple Modified Look-Through Approach, the highest risk weight applicable to any equity exposure the investment fund is permitted to hold under its prospectus, partnership agreement, or similar agreement is applied to the adjusted carrying value of Citi's equity exposure to the fund in deriving the amount of risk-weighted assets. With regard to the Alternative Modified Look-Through Approach, the adjusted carrying value of an equity exposure to an investment fund is assigned on a pro-rata basis to the different risk weight categories based on the investment limits in the fund's prospectus, partnership agreement, or similar contract that defines the fund's permissible investments. Under this approach it is assumed that the fund invests to the maximum extent permitted under its investment limits in the exposure type with the highest applicable risk weight and continues to make investments in order of the exposure type with the next highest applicable risk weight, until the maximum total investment is reached. The assignment of the pro-rata investment limits risk weights for all exposure types within the fund will not exceed 100 percent.

The following table presents Citi's equity exposures not subject to the Basel III market risk capital rule, using the Simple Risk Weight, the Full Look-Through, the Simple Modified Look-Through, and the Alternative Modified Look-Through Approaches in deriving risk-weighted assets as of March 31, 2015.

Table 17: Equity Exposures Not Subject to the Market Risk Capital Rules

	March 31, 2015				
In millions of dollars, except percentages	Risk Weight Category	Carrying Value[1]	Fair Value	Effective Risk Weight[2]	RWA[3]
Simple Risk Weight Approach:					
Equity Exposures Subject to a 0% Risk Weight	0%	$ 4,193	$ 4,193	0 %	$ —
Equity Exposures Subject to a 20% Risk Weight	20	1,223	1,223	20	245
Community Development Equity Exposures	100	2,061	2,063	100	2,243
Publicly Traded Equity Exposures[4]	300	655	700	103	672
Non-publicly Traded Equity Exposures[4]	400	8,568	8,685	100	8,590
Equity Exposures in Leveraged Investments Funds	600	109	110	600	819
Total Simple Risk Weight Approach		**$ 16,809**	**$ 16,974**	**74%**	**$ 12,569**
Equity Exposures to Investment Funds:					
Full Look-Through Approach	N/A	$ 9,059	$ 9,151	13 %	$ 1,182
Simple Modified Look-Through Approach	N/A	1,339	1,339	86	1,323
Alternative Modified Look-Through Approach	N/A	257	257	278	714
Total Equity Exposures to Investment Funds		**$ 10,655**	**$ 10,747**	**30%**	**$ 3,219**
Total Equity Exposures		**$ 27,464**	**$ 27,721**	**57%**	**$ 15,788**

(1) Total carrying value of approximately $27.5 billion consists of approximately $0.7 billion of publicly traded and approximately $26.8 billion of non-publicly traded equity exposures. Total carrying value excludes approximately $436 million of unfunded equity commitments.
(2) Equity exposures are presented based on exposure type, which in some cases will yield a blended effective risk weight.
(3) Unfunded equity commitments are included in the derivation of risk-weighted assets.
(4) Equity exposures within the 300% and 400% risk weight categories were, with the exception of ineffective hedge pairs, risk-weighted at 100% due to the aggregate amount of such exposures not exceeding the threshold for higher risk weighting treatment.

Realized Gains (Losses)

Total net realized gains arising from sales and liquidations of equity investments were $45 million for the three months ended March 31, 2015.

Cumulative Unrealized Gains (Losses)

Total net unrealized gains on available-for-sale equity investments recognized in *Accumulated other comprehensive income* were $32 million as of March 31, 2015.

Overview

Market risk is the risk of loss on a position that could result from movements in market prices. Although present in both Citi's primary business segments, Citicorp and Citi Holdings, Citi's market risk arises principally from trading and market making activities by *ICG's* equity markets and fixed income markets businesses within *Markets and Securities Services.*

The market risk disclosures discussed in this section provide quantitative information regarding Citi's market risk capital components, as well as qualitative information, such as that related to Citi's risk management policies, practices and internal models. For additional information on Citi's market risk management and policies, see "*Managing Global Risk—Market Risk*" in Citi's 2014 Form 10-K.

Basel III Covered Positions

As defined under the U.S. Basel III rules, covered positions include:

(1) Trading assets or trading liabilities (whether on- or off-balance sheet), as reported for regulatory purposes, that meet the following conditions:

(a) The position is a "trading position" or hedges another covered position, other than trading positions that are hedges of Citi's banking book exposures. Within this context, a trading position means a position that is held for the purpose of short-term resale or with the intent of benefitting from actual or expected short-term price movements, or to lock in profits.

AND

(b) The position is free of any restrictive covenants on its tradability, or the banking organization, such as Citi, is able to hedge the material risk elements of the position in a two-way market.

OR

(2) A foreign exchange or commodity position (other than any structural foreign currency positions chosen to be excluded and for which prior supervisory approval has been received), regardless of whether the position is a trading asset or trading liability.

Among the various types of exposures not considered to be a covered position are: (1) intangible assets, including any servicing asset such as mortgage servicing rights; (2) any hedge of a trading position that is deemed to be outside the scope of Citi's hedging strategy; (3) any position that, in form or substance, acts as a liquidity facility that provides support to asset-backed commercial paper; (4) any position that Citi holds with the intent to securitize; or (5) any direct real estate holding.

Accordingly, the characterization of an asset or liability as a "trading asset" or "trading liability" under U.S. GAAP does not determine whether such assets and liabilities are trading positions for Basel III purposes. The scope of positions or exposures recognized as trading assets or trading liabilities for U.S. GAAP purposes is generally broader than permissible trading positions under the U.S. Basel III rules. Positions or exposures excluded from market risk capital treatment are subject to the credit risk capital rules applicable to non-covered positions.

Citi has established policies and procedures for determining which of its U.S. GAAP trading assets, trading liabilities, and foreign exchange and commodity positions are covered positions under the U.S. Basel III rules, including the establishment of a firm-wide Basel III Boundary Governance Committee that meets quarterly and serves as a decision-making body on key trading book boundary strategies and reporting approaches. Specifically, the Basel III Boundary Governance Committee reviews the intent and ability to trade positions using a number of key metrics, including a review of the actual holding period of these positions.

Valuation and Accounting Policies and Methodologies

ASC 820-10, *Fair Value Measurement*, defines fair value, establishes a consistent framework for measuring fair value and requires disclosures in Citi's consolidated financial statements about fair value measurements. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Material covered positions under the U.S. Basel III rules are carried at fair value on Citi's consolidated balance sheet.

Determination of Fair Value

Citi generally uses quoted market prices, when available, to determine the fair value of trading securities, including material covered positions under the U.S. Basel III rules. In some cases where a market price is available, Citi nonetheless will make use of acceptable practical expedients (such as matrix pricing) to calculate fair value. Similarly, any exchange-traded derivatives entered into by Citi are generally measured at fair value using quoted market (i.e., exchange) prices.

If quoted market prices are not available, fair value is based upon internally developed valuation techniques that use, where possible, current market-based parameters, such as interest rates, currency rates, option volatilities, etc. Citi may also apply a price-based methodology, which utilizes, where available, quoted prices or other market information obtained from recent trading activity in positions with the same or similar characteristics to the position being valued.

For bonds and secondary market loans traded over the counter, including securitization and re-securitization positions, Citi generally determines fair value utilizing valuation techniques, including discounted cash flows, price-based and internal models, such as Black-Scholes and Monte Carlo simulation. Fair value estimates from these internal valuation techniques are verified, where possible, to prices obtained from independent vendors.

When measured by notional value, the majority of derivatives entered into by Citi are cleared through central clearing houses. When measured by total fair value, the majority of derivatives entered into by Citi are over-the-counter (OTC) and settled bilaterally with counterparties without the use of an organized exchange or central clearing house. OTC and cleared derivatives are valued using internal valuation techniques, as no quoted market prices exist for such instruments. The valuation techniques and inputs depend on the type of derivative and the nature of the underlying instrument. Citi generally determines the fair value of these instruments utilizing valuation techniques such as discounted cash flows and internal models, including Black-Scholes and Monte Carlo simulation. The fair value of derivative contracts reflect cash Citi has paid or received (for example, option premiums paid and received).

The key inputs depend upon the type of derivative and the nature of the underlying instrument and include interest rate yield curves, foreign-exchange rates, volatilities and correlation. Citi uses overnight indexed swap curves as fair value measurement inputs for the valuation of certain collateralized interest-rate related derivatives.

Market Valuation Adjustments

Liquidity adjustments are applied to ensure that the fair value reflects the liquidity, or illiquidity, of the market. The liquidity reserve may utilize the bid-offer spread for an instrument as one of the factors. Citi also applies market valuation adjustments to account for the size of the net open risk position on certain portfolios of financial instruments.

Counterparty credit-risk adjustments are applied to derivatives, such as over-the-counter uncollateralized derivatives, where the base valuation uses market parameters based on the relevant base interest rate curves. Not all counterparties have the same credit risk as that implied by the relevant base curve, so it is necessary to consider the market view of the credit risk of a counterparty in order to estimate the fair value of such an item.

Valuation Process

Individual business units are responsible for the fair value measurement of substantially all assets and liabilities held by Citi, including trading account assets and liabilities. Product Control within Citi Finance performs independent price verification procedures to evaluate those fair value measurements and has authority over the valuation of financial assets and liabilities.

Based on the observability of inputs used, Product Control classifies the inventory as Level 1, Level 2 or Level 3 of the fair value hierarchy under ASC 820-10. When a position involves one or more significant inputs that are not directly observable, additional price verification procedures are applied. These procedures may include reviewing relevant historical data, analyzing profit and loss, valuing each component of a structured trade individually, and benchmarking, among others.

In addition, the pricing models used in measuring fair value are governed by an independent control framework. Although the models are developed and tested by the individual business units, they are independently validated by Citi's Model Validation Group within Citi's independent risk management organization and reviewed by Citi Finance with respect to their impact on the price verification procedures. The purpose of this independent control framework is to assess model risk arising from models' theoretical soundness, calibration techniques where needed, and the appropriateness of the model for a specific product in a defined market. Valuation adjustments, if any, go through a similar independent review process as the valuation models. To ensure their continued applicability, models are independently reviewed annually. In addition, Citi's risk management organization approves and maintains a list of products permitted to be valued under each approved model for a given business.

For additional information on Citi's fair value accounting methodology and process, see Note 22, "*Fair Value Measurement*," in the Notes to Consolidated Financial Statements in Citi's First Quarter 2015 Form 10-Q.

Market Risk-Weighted Assets

Under the U.S. Basel III rules, Citi's market risk-weighted assets (RWA) are measured as the sum of the risk-weighted assets attributable to the following:

- Regulatory Value-at-Risk (VaR)
- Regulatory Stressed Value-at-Risk (SVaR)
- Incremental Risk Charge (IRC)
- Comprehensive Risk Measure (CRM)
- Standard Specific Risk Charge (SSRC)
- Securitization Charges
- De minimis Exposures Charge (covered positions not included in the VaR model)

Citi's Basel III market risk capital requirements, and related risk-weighted assets, reflect the application of Citi's internal models as well as prescribed standardized approaches with respect to covered positions, as appropriate. Citi's internal models are designed to capture all material risk factors. Any material risk factors that are identified through model validation (see "Model Review and Validation" below), are included as a RNIM "add-on" in accordance with the U.S. Basel III rules.

Citi's market risk capital requirements and resulting risk-weighted assets will vary from reporting period to reporting period and may be materially impacted by changes in the treatment of certain positions or portfolios, due to updated regulatory guidance, regulatory reviews or further refinements and enhancements to Citi's internal models. Where material, such changes are disclosed in Citi's Basel III Advanced Approaches Disclosures ("Pillar 3" Disclosures) and/or in Citi's Form 10-K or 10-Q, as appropriate, in the reporting period during which the changes were implemented.

Regulatory Value-at-Risk (VaR)

Regulatory VaR is the estimate of the potential decline in the value of a position or a portfolio under normal market conditions. Citi uses a three year look back period for correlations between risk factors and the greater of three years or, in most instances, effectively 30-day volatility. These market risk factors include material first and second-order risk sensitivities of various asset classes/ risk types (such as interest rate, credit spread, foreign exchange, equity, and commodity risks).

Citi uses a single, independently approved Monte Carlo simulation VaR model for both Regulatory VaR and Risk Management VaR. Such model incorporates the volatilities and correlations of 300,000 market factors, making use of 180,000 time series, with risk sensitivities updated daily and model parameters updated daily in some instances, and weekly for all others. The portfolio composition of Citi's Regulatory VaR is, however, materially different from Citi's Risk Management VaR. Certain positions that are included in Citi's Risk Management VaR are not covered positions and therefore are not eligible for market risk capital treatment under the U.S. Basel III rules. While Citi's confidence interval is 99% for both Risk Management VaR and Regulatory VaR, Citi uses a 1-day time horizon for Risk Management VaR and a 10-day time horizon for Regulatory VaR. For additional information on Citi's Risk Management VaR model, see "*Managing Global Risk—Market Risk—Price Risk—Price Risk—Trading Portfolios*" in Citi's First Quarter 2015 Form 10-Q.

For covered positions that are not captured in Regulatory VaR, Citi calculates market risk-weighted assets based on a de minimis risk add-on in accordance with the Basel III requirements, or in accordance with an alternative methodology that has been approved by the FRB and OCC.

The following table sets forth Citi's Regulatory VaR and related capital requirement, as well as risk-weighted assets as of March 31, 2015.

Table 18: Regulatory VaR Risk-Weighted Assets

In millions of dollars	As of March 31, 2015		
	Regulatory VaR[(1)]	**Regulatory VaR-Based Capital[(2)]**	**Regulatory VaR RWA[(3)]**
	$221	$663	$10,674

(1) 60-day average, for which each daily VaR is based on a 10-day time horizon.
(2) Regulatory VaR times a capital multiplier of 3.
(3) Regulatory VaR-Based Capital times 12.5 plus $2,392 million add-on for RNIM.

- Immaterial differences in calculations above may exist due to rounding.

Presented in the following table are Citi's period end and high, low and mean Regulatory VaR, as well as associated primary risk factors, as of and for the three months ended March 31, 2015.

Table 18.1: 10-Day Regulatory VaR by Risk Factors

In millions of dollars	As of March 31, 2015	Three Months Ended March 31, 2015		
Risk Factors		**High**	**Low**	**Mean**
Interest Rate	$ 120	$ 159	$ 87	$ 118
Credit Spread	202	291	184	216
Equity Price	52	56	8	21
Foreign Exchange	85	149	58	91
Commodity Price	63	108	54	71
Diversification Benefit[(2)]	(302)	NM	NM	(296)
Total VaR	**$ 220**	**$ 317**	**$ 166**	**$ 221**

- NM: Not meaningful

(1) Mean is based on a 60-day average used for VaR-based RWA.
(2) Diversification benefit is the result of correlation between risk factors and, due to this benefit, the total VaR on a given day will be lower than the sum of the VaRs relating to each individual risk factor. No diversification benefit can be inferred for the high and low VaRs related to each of the respective risk factors as they may come from different close of business dates.

The following table sets forth the period end and high, low and mean Regulatory VaR for each of Citi's material portfolios of covered positions, as of and for the three months ended March 31, 2015.

Table 18.2: 10-Day Regulatory VaR by Material Portfolios

In millions of dollars	As of March 31, 2015	Three Months Ended March 31, 2015		
Material Portfolios		**High**	**Low**	**Mean**
ICG	$ 211	$ 307	$ 166	$ 215
Other[(2)]	34	42	31	35
Diversification Benefit[(3)]	(25)	NM	NM	(29)
Total VaR	**$ 220**	**$ 317**	**$ 166**	**$ 221**

- NM: Not meaningful

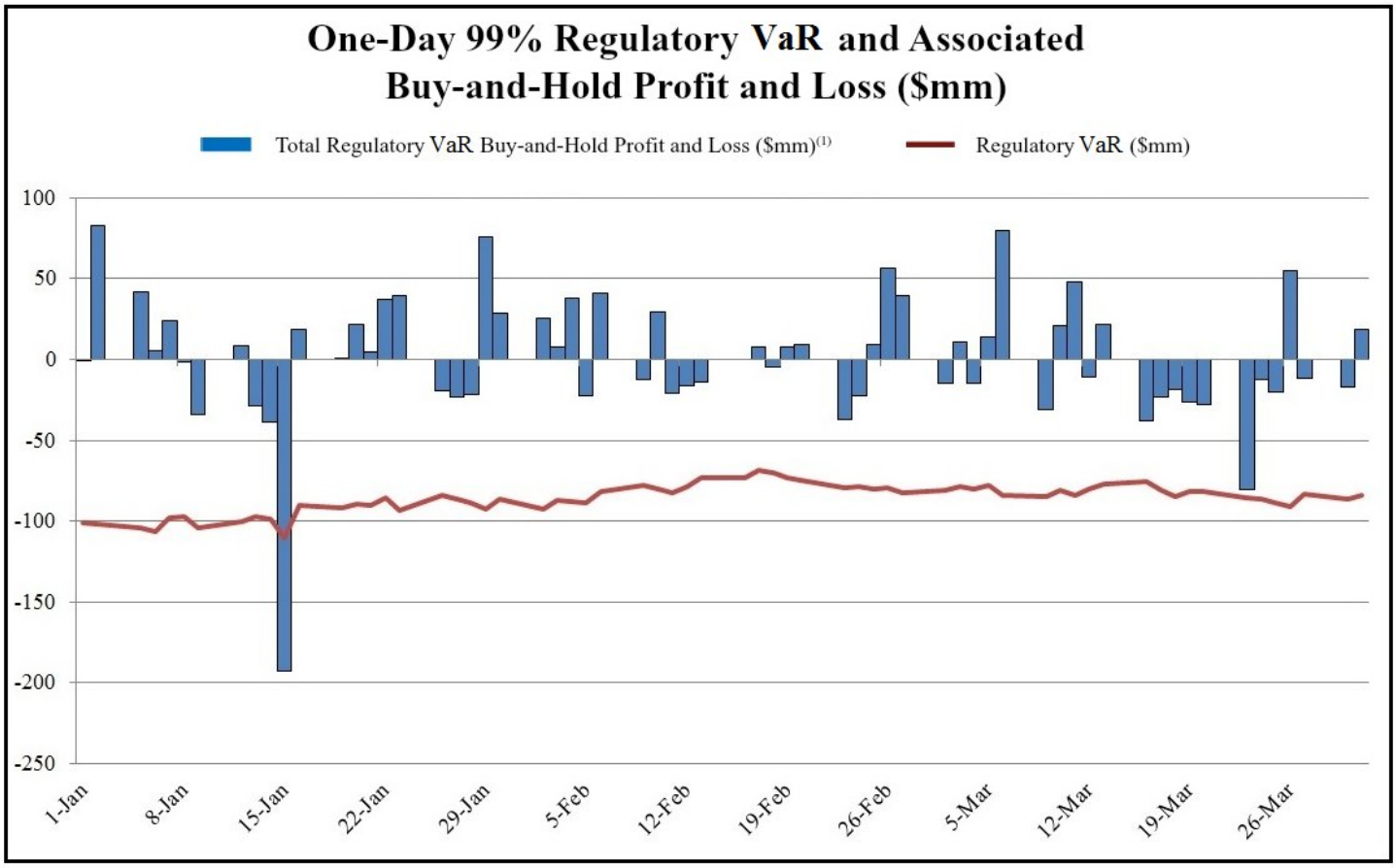
(1) 60-day average, for which each daily VaR is based on a 10-day time horizon.
(2) Primarily related to Corporate Treasury and Citi Holdings covered positions.
(3) Diversification benefit is the result of correlation between portfolios and, due to this benefit, the total VaR on a given day will be lower than the sum of the VaRs relating to each individual portfolio. No diversification benefit can be inferred for the high and low of respective material portfolios as they may come from different close of business dates.

Regulatory VaR Backtesting

In accordance with the U.S. Basel III rules, Citi is required to perform backtesting to evaluate the effectiveness of its VaR model and as a basis to determine its Regulatory VaR and Regulatory SVaR-based capital multiplier. For additional information on Regulatory SVaR, see "*Regulatory Stressed Value-at-Risk (SVaR)*" below. Regulatory VaR backtesting is the process in which the daily 1-day VaR, at a 99% confidence interval, is compared to the buy-and-hold profit and loss (e.g., the profit and loss impact if the portfolio is held constant at the end of the day and re-priced the following day). Citi's Regulatory VaR and Regulatory SVaR capital multipliers, which can range between 3 and 4, are based upon the number of backtesting exceptions that occur on a rolling 12-month period, as well as the discretion of the FRB and OCC. Based on a 99% confidence level, Citi would expect two to three days in any one year where buy-and-hold losses exceeded the Regulatory VaR. Given the conservative calibration of Citi's VaR model (as a result of taking the greater of short- and long-term volatilities and fat tail scaling of volatilities), Citi would expect fewer exceptions under normal and stable market conditions. Periods of unstable market conditions could increase the number of backtesting exceptions.

The graph below presents the daily buy-and-hold profit and loss associated with all of Citi's covered positions compared to Citi's 1-day Regulatory VaR from January 1, 2015 through March 31, 2015. As the graph indicates, for the three month period ending March 31, 2015, there was one backtesting exception for which trading losses exceeded the VaR estimate at the Citigroup level. This occurred on January 15, 2015, a day on which significant market movements and volatility followed the Swiss National Bank's announcement to remove the minimum exchange rate of the Swiss Franc per Euro.

Regulatory VaR Backtesting Results



(1) Buy-and-hold profit and loss represents the daily mark-to-market profit and loss attributable to price movements in covered positions from the close of the previous business day. Buy-and-hold revenue excludes realized trading revenue, net interest, fees and commissions, intra-day trading profit and loss, and changes in reserves.

Regulatory Stressed Value-at-Risk (SVaR)

Citi's Regulatory SVaR model methodology is the same as the Regulatory VaR methodology (99% confidence level and 10-day holding period), with the exception of the look back period. Specifically, the Regulatory SVaR uses model parameters such as volatilities and correlations calibrated to historical data from a continuous 12-month period that reflects significant financial stress appropriate to current portfolios. The Regulatory SVaR look back period is periodically calibrated using internal Citi methodologies and policies to determine the most severe stress period for Citi's current covered positions.

The following table sets forth Citi's Regulatory SVaR and related capital requirement, as well as risk-weighted assets as of March 31, 2015.

Table 19: Regulatory SVaR Risk-Weighted Assets

In millions of dollars	As of March 31, 2015		
	Regulatory SVaR[1]	Regulatory SVaR-Based Capital[2]	Regulatory SVaR RWA[3]
	$565	$1,694	$27,136

(1) 60-day average, for which each daily VaR is based on a 10-day time horizon.
(2) Regulatory SVaR times a capital multiplier of 3.
(3) Regulatory SVaR-Based Capital times 12.5 plus $5,965 million add-on for RNIM.

• Immaterial differences in calculations above may exist due to rounding.

The following table presents period end and high, low and mean Regulatory SVaR, for each of Citi's material portfolios of covered positions, as of and for the three months ended March 31, 2015.

Table 19.1: 10-Day Regulatory SVaR by Material Portfolio

In millions of dollars	As of March 31, 2015	Three Months Ended March 31, 2015		
Material Portfolio		**High**	**Low**	**Mean[1]**
ICG	$ 568	$ 986	$ 278	$ 528
Other[2]	105	113	76	101
Diversification Benefit[3]	(48)	NM	NM	(64)
Total SVaR	**$ 625**	**$ 1,026**	**$ 288**	**$ 565**

• NM: Not meaningful

(1) 60-day average, for which each daily VaR is based on a 10-day time horizon.
(2) Primarily related to Corporate Treasury and Citi Holdings covered positions.
(3) Diversification benefit is the result of correlation between portfolios and, due to this benefit, the total SVaR on a given day will be lower than the sum of the SVaRs relating to each individual portfolio. No diversification benefit can be inferred for the high and low of respective material portfolios as they may come from different close of business dates.

Incremental Risk Charge (IRC)

IRC represents a charge to cover the default and credit migration risks of non-securitized credit products. IRC is measured over a 1-year time horizon at a 99.9% confidence level under the assumption of constant positions. A constant position assumption means that Citi maintains the same set of positions throughout the 1-year time horizon (regardless of the maturity date of the positions) in order to model profit and loss distributions. Liquidity horizons establish the effective holding period of the assets and are defined as the time that would be required to reduce exposure, or hedge all material risks, in a stressed market environment.

Citi's IRC model is designed to capture market and issuer-specific concentrations, credit quality and liquidity horizons and recognizes the impact of correlations between default and credit migration events among issuers.

Set forth in the following table is Citi's IRC and IRC risk-weighted assets as of March 31, 2015.

Table 20: IRC Risk-Weighted Assets

In millions of dollars	As of March 31, 2015
IRC[1]	IRC RWA[2][3]
$130	$1,661

(1) IRC is calculated once per week.
(2) IRC-based RWA is calculated using the greater of the mean and period end IRC charge (see table 20.1 below).
(3) IRC RWA is the IRC times 12.5 plus $32 million add-on for RNIM.

• Immaterial differences in calculation above may exist due to rounding.

Presented in the following table is the period end and high, low and mean IRC for each of Citi's material portfolios of covered positions as of and for the three months ended March 31, 2015.

Table 20.1: IRC by Material Portfolio

In millions of dollars	As of March 31, 2015	Three Months Ended March 31, 2015		
Material Portfolio		**High**	**Low**	**Mean**
ICG	$ 135	$ 183	$ 92	$ 127
Other[1]	15	15	14	15
Diversification Benefit[2]	(20)	NM	NM	(18)
Total IRC	**$ 130**	**$ 160**	**$ 95**	**$ 124**

• NM: Not meaningful

(1) Primarily related to Citi Holdings covered positions.
(2) Diversification benefit is the result of correlation between portfolios and, due to this benefit, the total IRC on a given day will be lower than the sum of the IRCs relating to each individual portfolio. No diversification benefit can be inferred for the high and low of respective material portfolios as they may come from different close of business dates.

Comprehensive Risk Measure (CRM)

CRM is primarily comprised of correlation trading securitization positions within *ICG's Markets and Securities Services*.

Credit correlation products refer to portfolio-based tranche products and their hedges. The primary inputs to the valuation model used to price and risk manage these tranche products are credit default swap spreads and correlations between the individual credits within the portfolios. Correlation trading positions include both index and bespoke tranches, where index tranches mainly reference U.S. and European credit indices.

The calculation of the CRM under the U.S. Basel III rules has two components: (i) a model-based measure and (ii) a capital surcharge which is calculated as 8% of the greater of: (1) the sum of Citi's specific risk add-ons for each net long correlation trading position, or (2) the sum of Citi's specific risk add-ons for each net short correlation trading position (both of which are calculated after permitted matching and offsetting under the U.S. Basel III rules), which are included in the model.

The model-based measure of the CRM is an extension of the IRC model discussed above. Citi's CRM price risk model is based on a full revaluation of the portfolio inclusive of all material risk factors. Citi's CRM model uses a Monte Carlo simulation (like the IRC model); however, the CRM model includes additional risk factors that are only relevant for Citi's correlation trading portfolio.

Citi's CRM model is intended to capture all material price risk including, but not limited to, the risks associated with the contractual structure of cash flows of the position, the issuer, and the underlying exposures. Through the use of these market risk factors the model simulates default risk and credit migration risk over a 1-year time horizon with a 99.9% confidence interval, under the assumption of constant positions.

The following tables present Citi's CRM risk-weighted assets and market risk factors as of March 31, 2015, as well as the period end, high, low and mean CRM Charge, as of and for the three months ended March 31, 2015.

Table 21: CRM Risk-Weighted Assets

In millions of dollars	As of March 31, 2015		
CRM Charge[1]	CRM RWA[2]	8% CRM Surcharge[3]	Total CRM RWA[4]
$465	$5,812	$6,758	$12,819

(1) CRM Charge is calculated once per week.
(2) CRM-based RWA is calculated using the greater of the mean and period end CRM Charge (see Table 21.1 below).
(3) A CRM floor is based on the fair value of net short positions (inclusive of netting).
(4) Total CRM RWA = CRM Charge times 12.5 plus the 8% surcharge plus $250 million add-on for RNIM.

- Immaterial differences in calculations above may exist due to rounding.

Table 21.1: CRM Charge

In millions of dollars

As of March 31, 2015	Three Months Ended March 31, 2015		
CRM Charge	High	Low	Mean
$362	$699	$304	$465

Table 21.2: CRM Risk Factors

In millions of dollars	As of March 31, 2015	
Default Risk	$	241
Recovery Rate Risk		123
Credit Spread Risk[1]		6
Cross Gamma Risk		(2)
Correlation Risk		(6)
Total CRM[2]	**$**	**362**

(1) Credit spread risk includes credit migration risk.
(2) CRM is inclusive of diversification benefits across risk factors and are additive.

The following table presents the net market value of all correlation trading securitization positions included in the CRM model, inclusive of all hedges, as of March 31, 2015. Correlation trading securitization positions that are not included in the CRM model are included in Table 22 "Covered Trading Securitization and Re-Securitization Positions" below.

Table 21.3: Correlation Trading Securitization Positions (Included in CRM Model)

In millions of dollars	As of March 31, 2015	
Net Short Market Value	$	(54,566)
Net Long Market Value		62,840
Total Net Market Value	**$**	**8,274**

Standard Specific Risk Charge (SSRC)

Specific risk is the risk of loss from changes in the market value of a position that could result from factors other than broad market movements and includes event risk, default risk and idiosyncratic risk.

Standard specific risk charges include any debt or equity position which has not received a modeled-specific risk charge (i.e., Regulatory VaR, CRM, or IRC) or a non-modeled securitization charge. Based on the U.S. Basel III rules, standard specific risk charges are derived by applying a percentage of the market value, based on product type, time to maturity, and Citi's internal credit rating. All modeled specific risk charges are discussed in the relevant sections of these disclosures.

Securitization and Re-securitization Positions

For a description of Citi's involvement in securitization and re-securitization transactions, see "*Securitizations*" above.

The following table sets forth the net market value of Citi's non-modeled trading book securitization and re-securitization positions (i.e., excluding modeled credit correlation trading securitizations), by product type, as of March 31, 2015.

Table 22: Covered Trading Securitization and Re-securitization Positions (Non-CRM Modeled)

In millions of dollars	As of March 31, 2015		
Exposure Type	**On-Balance Sheet[1]**	**Off-Balance Sheet[2]**	**Total**
CMBS	$ 690	$ 1,000	$ 1,690
RMBS	2,430	180	2,610
CDOs/CLOs	1,400	100	1,500
Other ABS	410		410
Total Market Value	**$ 4,930**	**$ 1,280**	**$ 6,210**

(1) The net market value of cash securitization positions that received non-modeled securitization charges.

(2) The net market value of derivative positions that received non-modeled securitization charges.

De minimis Exposures Charge

As previously noted, a de minimis exposures charge is applied to covered positions that are not captured in Citi's VaR model. The sum of the absolute value of these positions is multiplied by 12.5 to arrive at the applicable RWA under the U.S. Basel III rules.

Market Risk Management

Overview

Citi manages the market risk of covered positions in its trading and non-trading portfolios under established standards, policies, and governance frameworks that were created or enhanced to ensure that Basel III market risk capital charges are only applied to covered positions and that non-covered trading book positions receive the appropriate credit risk capital charges. Citi's policies have been reviewed by the FRB and OCC. For additional information regarding Citi's market risk management generally, see "*Managing Global Risk—Market Risk—Market Risk Management*" in Citi's 2014 Form 10-K.

The market risk of Citi's trading portfolio of covered positions encompasses, among other things, price risk losses. Price risk losses arise from fluctuations in the market value of covered positions due to changes in interest rates, credit spreads, foreign exchange rates, equity and commodity prices, as well as changes in the implied volatility for option products referencing these markets. Citi's non-trading portfolio of covered positions also experiences fluctuations in market value resulting from changes in foreign exchange and commodity prices.

Market risk is calculated in accordance with established standards to ensure consistency across Citi's businesses and enable market risk sensitivities to be aggregated. The measurement used for covered trading positions and non-covered trading positions include:

- VaR
- Stress Testing
- Factor Sensitivities
- Internal Model Review and Validation

Citi requires that each business segment (Citicorp and Citi Holdings) establish, with approval from Citi's market risk management, a market risk limit framework for identified risk factors that clearly defines approved risk profiles and is within the parameters of Citi's overall risk tolerance and internal capital adequacy standards. These limits are monitored by Citi's independent market risk management organization, Citi's country and business Asset and Liability Committees and Citigroup's Asset and Liability Committee. Included in this limit framework are additional controls which detail trading mandates, permitted product lists, and a new product approval process for complex products. Ultimately, Citi's businesses are responsible for the market risks taken and for remaining within their defined limits, as well as ensuring that covered positions are managed in accordance with Citi's internal policies.

Citi's independent market risk management and Product Control within Finance periodically review covered positions to confirm both the realization of intent and ability to trade. Positions failing to meet the criteria of intent and ability to trade are reclassified as non-trading book positions and will be subject to the credit risk capital rules.

Securitization and Re-securitization Positions

Citi manages its securitization and re-securitization positions within an established risk management policy framework whereby each business and Citi's market risk management work collaboratively to monitor the covered trading book securitization positions, changes in positions, and changes in the portfolio structure. This includes, but is not limited to, the review of approved risk limits versus daily positions using risk measures such as market values, risk factor sensitivities and stress loss scenarios. Securitization due diligence analysis is completed in accordance with the requirements of the U.S. Basel III rules, including pre-trade analysis and supporting documentation within three days of the trade date. The analysis demonstrates a comprehensive understanding of the features of a securitization that would materially affect the performance of the position. On a quarterly basis, follow-up reviews are performed to evaluate and update the securitization risk characteristics as appropriate.

Citi manages the risk appetite for all covered securitization and re-securitization positions through a limit structure which is approved annually by market risk management. These limits measure market value of positions, risk factor sensitivities, VaR and SVaR on a daily basis. In addition, regulatory risk capital and risk-weighted assets for specific risk measures are calculated monthly and are subject to a defined set of controls and governance within market risk, regulatory risk and finance management. This includes, but is not limited to, a review of the exposure classification

and application of treatment type hierarchy which is used to verify compliance for securitization transactions under the U.S. Basel III rules.

Clarifications to interpretive questions are issued through a formal capital interpretive forum and are reported to senior management. Citi's risk management framework includes a weekly scenario analysis in which all underlying risk factors are stressed to determine portfolio sensitivity under stressed conditions.

Citi employs several risk mitigation approaches to manage risk appetite for its securitization and re-securitization positions. Counterparty credit risk positions are approved through credit risk management policies and procedures. Securitization and re-securitization positions are subject to product limits to ensure diversification in Citi's portfolio. These limits include mezzanine re-securitization position limits.

Citi also uses a variety of hedging strategies for its covered positions, including corporate index hedges, to mitigate systemic price and spread risks. Business trading desks make hedging decisions based on current market conditions in accordance with hedging strategies residing under Citi's market risk management policy framework. Citi's material hedging decisions are made in consultation with Citi's risk management organization and the Citigroup Executive Committee, as appropriate. Any hedging proposals outside the scope of previously approved products would require approval by Citi's New Product Approval Committee resident within *ICG*.

Model Review and Validation

Citi's market risk models are subject to ongoing independent review and annual validation by Citi's Model Validation Group and the Model Validation Review Committee (composed of senior quantitative risk management officers) within Citi's risk management organization, who provide senior independent oversight of model validation and assessment processes.

Generally, Citi's model review and model validation process involves reviewing the model framework, major assumptions and implementation of algorithms. In addition, as part of the model validation process, product specific backtesting on hypothetical portfolios is periodically completed and reviewed with the FRB and OCC. Furthermore, Citi performs backtesting against the actual change in market value of transactions on a quarterly basis at multiple levels of the organization (trading desk, *ICG* and company-wide), and shares the results with the FRB and OCC.

In the event of significant model changes, Citi also undertakes parallel model runs prior to implementation. In addition, the FRB and OCC periodically review and approve significant model and assumption changes.

Stress Testing

Citi performs stress testing on a regular basis to estimate the impact of extreme market movements. It is performed on individual positions, trading portfolios, as well as in aggregate inclusive of multiple trading portfolios. Citi's independent market risk management organization, after consultations with the businesses, develops both systemic and specific stress scenarios, reviews the output of periodic stress testing exercises, and uses the information to make judgments on the ongoing appropriateness of exposure levels and limits. Citi uses two complementary approaches to market risk stress testing across all major risk factors (i.e., equity, foreign exchange, commodity, interest rate and credit spreads): top-down systemic stresses and bottom-up business specific stresses. Systemic stresses are designed to quantify the potential impact of extreme market movements on a firm-wide basis, and are constructed using both historical periods of market stress and projections of adverse economic scenarios. Business specific stresses are designed to probe the risks of particular portfolios and market segments, especially those risks that are not fully captured in VaR and systemic stresses.

Overview

Operational risk is the risk of loss resulting from inadequate or failed internal processes, systems or human factors, or from external events, and includes reputation and franchise risk associated with business practices or market conduct in which Citi is involved.

Operational risk is inherent in Citigroup's global business activities, as well as the internal processes that support those business activities, and can result in losses arising from events related to the following, among others:

- fraud, theft and unauthorized activities;
- employment practices and workplace environment;
- clients, products and business practices;
- physical assets and infrastructure; and
- execution, delivery and process management.

Operational Risk Measurement and Stress Testing

Under the U.S. Basel III rules, Citi is required to apply the Advanced Measurement Approach (AMA) in deriving its operational risk capital.

Pursuant to the AMA, Citi employs units of measure which are defined by lines of business and event types (e.g., Trading and Sales–internal fraud, and Retail Banking–clients, products and business practices). Separately, loss severity and frequency are modeled independently. The loss severity is based on Citi's historical internal operational risk loss data, as well as industry loss data. Citi employs an industry event selection process, involving risk managers in the business and operational risk management to identify industry losses that are relevant to Citi based on line of business and operational risk exposure by event type. The mean frequency of losses is estimated from Citi's internal experience. The modeled losses across the units of measure are aggregated considering some correlation in losses across business and event types. The results are subsequently modified each quarter by applying a "qualitative adjustment factor" to reflect the current business environment and internal control factors. Citi uses insurance for the purposes of partially mitigating operational risk; however, such insurance does not have a material impact on Citi's operational risk capital.

Further, scenario analysis is used as a management tool to provide a forward-looking view of specified, identified operational risks. Scenario analysis is conducted by major global business as a systematic process of obtaining opinions from business managers and risk management experts to derive reasoned assessments of the likelihood and loss impact of plausible, high-severity operational risk losses. Scenario analysis results, however, are not used as a direct input into the AMA calculation.

For additional information on operational risk, including Citi's operational risk management, measurement and stress testing, see "*Managing Global Risk—Operational Risk*" in Citi's 2014 Form 10-K.

INTEREST RATE RISK: NON-TRADING ACTIVITIES

For information on Citi's interest rate risk related to non-trading activities, see "*Managing Global Risk—Market Risk—Price Risk—Price Risk—Non-Trading Portfolios*" in Citi's First Quarter 2015 Form 10-Q.

Summary Comparison of Accounting Assets and Total Leverage Exposure

The following table presents a reconciliation of Citigroup's total consolidated assets as reported in published financial statements to Total Leverage Exposure.

Table 23: Summary Comparison of Accounting Assets and Total Leverage Exposure

	In millions of dollars		March 31, 2015
1	Total consolidated assets as reported in published financial statements[(a)]	**$**	**1,853,124**
2	Adjustment for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation		**—**
3	Adjustment for fiduciary assets recognized on balance sheet but excluded from total leverage exposure		**—**
4	Adjustment for derivative exposures		**322,089**
5	Adjustment for repo-style transactions		**27,225**
6	Adjustment for off-balance sheet exposures (that is, conversion to credit equivalent amounts of off-balance sheet exposures)		**265,599**
7	Other adjustments[(b)]		**(51,981)**
8	Total leverage exposure	**$**	**2,416,056**

(a) Represents the daily average of on-balance sheet assets for the quarter. Total consolidated assets as of March 31, 2015 were $1,832 billion.
(b) Represents amounts deducted from Tier 1 Capital.

Supplementary Leverage Ratio

The following table sets forth Citi's Supplementary Leverage ratio and related components, as based on the U.S. Basel III rules, for the three months ended March 31, 2015.

Table 24: Supplementary Leverage Ratio and Related Components

	In millions of dollars		March 31, 2015
	On-balance sheet exposures		
1	On-balance sheet assets (excluding on-balance sheet assets for repo-style transactions and derivative exposures, but including cash collateral received in derivative transactions)	**$**	**1,537,710**
2	LESS: Amounts deducted from tier 1 capital		**(51,981)**
3	Total on-balance sheet exposures (excluding on-balance sheet assets for repo-style transactions and derivative exposures, but including cash collateral received in derivative transactions) (sum of lines 1 and 2)		**1,485,729**
	Derivative exposures		
4	Replacement cost for derivative exposures (that is, net of cash variation margin)	**$**	**78,012**
5	Add-on amounts for potential future exposure (PFE) for derivative exposures		**222,384**
6	Gross-up for cash collateral posted if deducted from the on-balance sheet assets, except for cash variation margin		**4,400**
7	LESS: Deductions of receivable assets for cash variation margin posted in derivative transactions, if included in on-balance sheet assets		**—**
8	LESS: Exempted CCP leg of client-cleared transactions		**(4,353)**
9	Effective notional principal amount of sold credit protection		**1,009,508**
10	LESS: Effective notional principal amount offsets and PFE adjustments for sold credit protection		**(913,583)**
11	Total derivative exposures (sum of lines 4 to 10)		**396,368**
	Repo-style transactions		
12	On-balance sheet assets for repo-style transactions, except include the gross value of receivables for reverse repurchase transactions. Exclude from this item the value of securities received in a security-for-security repo-style transaction where the securities lender has not sold or re-hypothecated the securities received. Include in this item the value of securities that qualified for sales treatment that must be reversed.	**$**	**294,501**
13	LESS: Reduction of the gross value of receivables in reverse repurchase transactions by cash payables in repurchase transactions under netting agreements		**(53,366)**
14	Counterparty credit risk for all repo-style transactions		**27,225**
15	Exposure for repo-style transactions where a banking organization acts as an agent		**—**
16	Total exposures for repo-style transactions (sum of lines 12 to 15)		**268,360**
	Other off-balance sheet exposures		
17	Off-balance sheet exposures at gross notional amounts	**$**	**1,001,039**
18	LESS: Adjustments for conversion to credit equivalent amounts		**(735,440)**
19	Off-balance sheet exposures (sum of lines 17 and 18)		**265,599**
	Capital and total leverage exposure		
20	Tier 1 capital	**$**	**168,021**
21	Total leverage exposure (sum of lines 3, 11, 16 and 19)	**$**	**2,416,056**
	Supplementary leverage ratio		
22	Supplementary leverage ratio		**6.95%**

Advanced Approaches banking organization is, in general, a U.S. banking organization with consolidated total assets of at least $250 billion or consolidated total on-balance sheet foreign exposures of at least $10 billion.

Black-Scholes is a mathematical methodology for valuing derivatives of financial securities such as equity or bond options that takes into account whether an option is in or out of the money, the volatility of the underlying exposure, the time to expiration of the option, whether the option is a put or a call and the current rate of return on a risk-free asset such as a Treasury bill.

Banking book refers to exposures not included in the trading book.

Central counterparty is a counterparty (for example, a clearing house) that facilitates trades between counterparties in one or more financial markets by either guaranteeing trades or novating contracts.

Confidence interval measures the probability that a population parameter will fall between two set values. The confidence interval can take any number of probabilities, with the most common being 95% or 99%.

Credit valuation adjustment is the fair value adjustment to reflect counterparty credit risk in valuation of OTC derivative contracts.

Event risk is the risk of loss on equity or hybrid equity positions as a result of a financial event, such as a company merger, acquisition, spin-off, or dissolution.

Exchange traded derivatives include derivatives executed directly on an organized exchange that provides pre-trade price transparency.

Fair value hierarchy is defined by ASC 820-10 as follows:

- Level 1 inputs as quoted prices for *identical* instruments in active markets;
- Level 2 inputs as quoted prices for *similar* instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs and significant value drivers are *observable* in active markets; and
- Level 3 inputs as valuations derived from valuation techniques in which one or more significant inputs or significant value drivers are *unobservable*.

Fat-tailed distribution is a probability distribution for which the likelihood of a large deviation from the mean is greater than would be implied by a normal distribution.

FICO score in the U.S., independent credit agencies rate an individual's risk for assuming debt based on the individual's credit history and assign every consumer a "FICO" credit score. These scores are continually updated by the agencies based upon an individual's credit actions (e.g., taking out a loan or missed or late payments).

Financial assets may be loans, commitments, guarantees, receivables, asset-backed securities, mortgage-backed securities, other debt securities, equity securities or credit derivatives.

Idiosyncratic risk is the risk of loss in the value of a position that arises from changes in risk factors unique to that position.

ISDA refers to International Swap Dealers Association.

LIBOR refers to London Interbank Offered Rate.

Monte Carlo simulation is a statistical technique, widely used in finance, engineering, and physics, for simulating outcomes of complex processes. Citi's use of Monte-Carlo simulation to calculate the potential loss of market value of a trading portfolio rests on measurements of the volatilities and correlations of the market rates that affect the market value of the portfolio and on the sensitivities of the market value of the portfolio to changes in market rates.

Netting set is a group of transactions with a single counterparty that are subject to a qualifying master netting agreement.

Over-the-counter derivatives include derivatives executed and settled bilaterally with counterparties without the use of an organized exchange or central clearing house.

Potential future exposure is an add-on for expected future credit exposure related to OTC derivative contracts and is based on the type and remaining maturity of the derivative contract.

Pillar 3 is a component of a mutually reinforcing three pillar capital framework established by the U.S. Basel II rules, and sets forth minimum disclosure requirements for banking organizations which are intended to improve transparency and strengthen market discipline. Although not specifically referred to as such, the disclosure requirements under the U.S. Basel III rules are founded upon and consistent with the former Pillar 3 disclosures.

Qualifying revolving exposure, generally, is an exposure which is revolving, is unsecured and unconditionally cancelable by the banking organization.

Retail exposure is a residential mortgage exposure, a qualifying revolving exposure, or another retail exposure.

Scaling factor is a number which scales, or multiplies, some quantity.

Segmentation for retail exposures is required under the U.S. Basel III rules and means the grouping of retail exposures in each retail subcategory into segments that have homogeneous risk characteristics.

Specific risk is the risk of loss from changes in the market value of a position that could result from factors other than broad market movements and includes event risk, default risk and other idiosyncratic risks of specific issuers of debt or equity securities.

Structural foreign currency position is a position that is not a trading position and that is: (1) subordinated debt, equity, or a minority interest in a consolidated subsidiary that is denominated in a foreign currency; (2) capital assigned to a foreign branch that is denominated in a foreign currency; (3) a position related to an unconsolidated subsidiary or another item that is denominated in a foreign currency and that is deducted from the banking organization's Tier 1 and Tier 2 Capital; or (4) a position designed to hedge a banking organization's capital ratios or earnings.

Synthetic securitization is a transaction in which all or a portion of the credit risk of one or more underlying exposures is retained or transferred to one or more third parties through the use of one or more credit derivatives or guarantees and the credit risk associated with the underlying exposures has been separated into at least two tranches reflecting different levels of seniority.

Systematic risk is a broad class of market risk that is differentiated from the specific risk of individual issuers of debt and equity securities. Examples of systematic risk include the risk of changes in equity indices, commodity prices, the Treasury yield curve, spot foreign exchange rates, and average credit spreads per rating and currency. In contrast, examples of specific risk include the risk of changes in the component of the spread of a specific bond or the price of a specific equity that are caused by factors idiosyncratic to the issuer of the security.

Total Leverage Exposure is the sum of the daily average of on-balance sheet assets for the quarter and the average of certain off-balance sheet exposures calculated as of the last day of each month in the quarter, less applicable Tier 1 Capital deductions.

Two-way market means a market where there are independent bona fide offers to buy and sell so that a price reasonably related to the last sales price or current bona fide competitive bid and offer quotations can be determined within one day and settled at that price within a relatively short timeframe conforming to trade custom.

U.S. GAAP refers to generally accepted accounting principles in the United States.

Wholesale exposure is a credit exposure to a company, natural person, sovereign, or governmental entity (other than a securitization exposure, retail exposure, pre-sold construction loan, unsettled transaction, or equity exposure).

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