

CITIGROUP INC
Form 10-Q
July 31, 2018

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-Q

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF
THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended June 30, 2018

Commission file number 1-9924

Citigroup Inc.

(Exact name of registrant as specified in its charter)

Delaware

52-1568099

(State or other jurisdiction of incorporation or organization)

(I.R.S. Employer Identification No.)

388 Greenwich Street, New York, NY

10013

(Address of principal executive offices)

(Zip code)

(212) 559-1000

(Registrant's telephone number, including area code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer <input checked="" type="checkbox"/>	Accelerated filer <input type="checkbox"/>	Non-accelerated filer <input type="checkbox"/> (Do not check if a smaller reporting company)	Smaller reporting company <input type="checkbox"/> Emerging growth company <input type="checkbox"/>
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If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. Yes ☐ No ☒

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

Number of shares of Citigroup Inc. common stock outstanding on June 30, 2018: 2,516,605,412

Available on the web at www.citigroup.com

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OVERVIEW

This Quarterly Report on Form 10-Q should be read in conjunction with Citigroup's Annual Report on Form 10-K for the year ended December 31, 2017 (2017 Annual Report on Form 10-K) and Citigroup's Quarterly Report on Form 10-Q for the quarter ended March 31, 2018 (First Quarter of 2018 Form 10-Q).

Additional information about Citigroup is available on Citi's website at www.citigroup.com. Citigroup's annual reports on Form 10-K, quarterly reports on Form 10-Q and proxy statements, as well as other filings with the U.S. Securities and Exchange Commission (SEC), are available free of charge through Citi's website by clicking on the "Investors" page and selecting "All SEC Filings." The SEC's website also contains current reports on Form 8-K, and other information regarding Citi at www.sec.gov.

Certain reclassifications, including a realignment of certain businesses, have been made to the prior periods' financial statements and disclosures to conform to the current period's presentation. For additional information on certain recent reclassifications, see Notes 1 and 3 to the Consolidated Financial Statements below and Notes 1 and 3 to the Consolidated Financial Statements in Citi's 2017 Annual Report on Form 10-K.

Throughout this report, "Citigroup," "Citi" and "the Company" refer to Citigroup Inc. and its consolidated subsidiaries.

Citigroup is managed pursuant to two business segments: Global Consumer Banking and Institutional Clients Group, with the remaining operations in Corporate/Other.

The following are the four regions in which Citigroup operates. The regional results are fully reflected in the segment results above.

(1) Latin America GCB consists of Citi's consumer banking business in Mexico.

(2) Asia GCB includes the results of operations of GCB activities in certain EMEA countries for all periods presented.

(3) North America includes the U.S., Canada and Puerto Rico, Latin America includes Mexico and Asia includes Japan.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

EXECUTIVE SUMMARY

Second Quarter of 2018—Solid Operating Results and Continued Momentum

As described further throughout this Executive Summary, Citi reported solid operating results in the second quarter of 2018, reflecting continued momentum across businesses and geographies, including in many of the areas where Citi has been making ongoing investments.

During the second quarter of 2018, Citi had revenue growth in the Institutional Clients Group (ICG) and across products and regions in Global Consumer Banking (GCB), with particular strength in international GCB, treasury and trade solutions, equity markets, securities services and the private bank. Citi also continued to demonstrate expense and credit discipline, resulting in positive operating leverage and an improvement in pretax earnings.

In addition, Citi continued to return capital to its shareholders. In the quarter, Citi returned \$3.1 billion in the form of common stock repurchases and dividends. Citi repurchased approximately 33 million common shares during the quarter and over 200 million over the last 12 months, resulting in an 8% reduction in outstanding common shares from the prior-year period. Despite the continued progress in returning capital to shareholders during the quarter, each of Citi's key regulatory capital metrics remained strong (see "Capital" below).

During the quarter, the Federal Reserve Board advised Citi that it did not object to the capital plan submitted by Citi as part of the 2018 Comprehensive Capital Analysis and Review (CCAR). Accordingly, Citi intends to return \$22.0 billion of capital to its common shareholders over the next four quarters, beginning in the third quarter of 2018 (for additional information, see "Equity Security Repurchases" and "Dividends" below).

While global economic growth has continued and the macroeconomic environment remains largely positive, there continue to be various economic, political and other risks and uncertainties that could impact Citi's businesses and future results. For a discussion of the risks and uncertainties that could impact Citi's businesses, results of operations and financial condition during the remainder of 2018, see each respective business's results of operations and "Forward-Looking Statements" below, as well as each respective business's results of operations and the "Managing Global Risk" and "Risk Factors" sections in Citi's 2017 Annual Report on Form 10-K.

Second Quarter of 2018 Summary Results

Citigroup

Citigroup reported net income of \$4.5 billion, or \$1.63 per share, compared to net income of \$3.9 billion, or \$1.28 per share, in the prior-year period. The 16% increase in net income was driven by higher revenues and a lower effective tax rate due to the impact of the Tax Cuts and Jobs Act (Tax

Reform), partially offset by higher cost of credit. Earnings per share increased 27% due to the growth in net income and the 8% reduction in average shares outstanding driven by the common stock repurchases.

Citigroup revenues of \$18.5 billion in the second quarter of 2018 increased 2%, driven by 3% aggregate growth in GCB and ICG, partially offset by a 20% decrease in Corporate/Other, primarily due to the continued wind-down of legacy assets.

Citigroup's end-of-period loans increased 4% to \$671 billion versus the prior-year period. Excluding the impact of foreign currency translation in U.S. dollars for reporting purposes (FX translation), Citigroup's end-of-period loans grew 5%, as 6% aggregate growth in GCB and ICG was partially offset by the continued wind-down of legacy assets in Corporate/Other (Citi's results of operations excluding the impact of FX translation are non-GAAP financial measures). Citigroup's end-of-period deposits increased 4% to \$997 billion versus the prior-year period. Excluding the impact of FX translation, Citigroup's deposits were also up 4%, driven by a 9% increase in ICG deposits, while GCB deposits were largely unchanged.

Expenses

Citigroup operating expenses of \$10.7 billion were largely unchanged versus the prior-year period, as the impact of higher volume-related expenses and ongoing investments were offset by efficiency savings and the wind-down of legacy assets. Year-over-year, ICG operating expenses were up 4% and GCB operating expenses increased 3%, while Corporate/Other operating expenses declined 40%, all versus the prior-year period.

Cost of Credit

Citi's total provisions for credit losses and for benefits and claims of \$1.8 billion increased 6% from the prior-year period. The increase was mostly driven by a net loss reserve build of \$87 million, compared to a net loan loss reserve release of \$16 million in the prior-year period. The increase reflected volume growth and seasoning in the North America and international cards portfolios, the absence of a prior-year release in Asia GCB and the wind-down of legacy assets in Corporate/Other.

Net credit losses of \$1.7 billion were largely unchanged versus the prior-year period. Consumer net credit losses increased 4% to \$1.7 billion, mostly reflecting volume growth and seasoning in the North America and international cards portfolios. The increase in consumer net credit losses was partially offset by the continued wind-down of legacy assets in Corporate/Other. Corporate net credit losses decreased from \$77 million in the prior-year period to a net recovery of \$2 million.

For additional information on Citi's consumer and corporate credit costs and allowance for loan losses, see each respective business's results of operations and "Credit Risk" below.

Capital

Citigroup's Common Equity Tier 1 (CET1) Capital and Tier 1 Capital ratios, on a fully implemented basis, were 12.1% and 13.8% as of June 30, 2018, respectively, compared to 13.1% and 14.7% as of June 30, 2017, both based on the Basel III Standardized Approach for determining risk-weighted assets. The decline in regulatory capital ratios reflected the return of capital to common shareholders and the previously disclosed approximate \$6 billion reduction in CET1 Capital in the fourth quarter of 2017 due to the impact of Tax Reform, partially offset by net income. Citigroup's Supplementary Leverage ratio as of June 30, 2018, on a fully implemented basis, was 6.6%, compared to 7.2% as of June 30, 2017. For additional information on Citi's capital ratios and related components, including the impact of Tax Reform on its capital ratios, see "Capital Resources" below.

Global Consumer Banking

GCB net income of \$1.3 billion increased 14%, as higher revenues across regions and a lower effective tax rate were partially offset by higher expenses and higher cost of credit. Operating expenses were \$4.7 billion, up 3%, as efficiency savings across regions were more than offset by higher volume-related expenses and continued investments, as well as a provision of approximately \$50 million for an industry-wide legal matter in North America GCB.

GCB revenues of \$8.3 billion increased 2% versus the prior-year period, and 3% excluding the impact of FX translation, driven by growth across all regions. North America GCB revenues increased 1% to \$5.0 billion, driven by higher revenues in retail banking and Citi retail services, partially offset by lower revenues in Citi-branded cards. Citi-branded cards revenues of \$2.1 billion were down 1% versus the prior-year period. Excluding the impact of the previously disclosed Hilton portfolio sale, Citi-branded card revenues increased 1%, as growth in interest-earning balances and a gain of approximately \$45 million related to the sale of Visa B shares were partially offset by the impact of additional partnership terms and repricing actions related to APR re-evaluations under the CARD Act. Citi retail services revenues of \$1.6 billion increased 1% versus the prior-year period, primarily reflecting continued loan growth. Retail banking revenues increased 4% from the prior-year period to \$1.3 billion. Excluding mortgage revenues, retail banking revenues of \$1.2 billion were up 9% from the prior-year period, driven by continued growth in deposit margins and investments, as well as increased commercial banking activity.

North America GCB average deposits of \$180 billion decreased 3% year-over-year, primarily driven by a reduction in money market balances, reflecting transfers to investments. North America GCB average retail loans of \$56 billion were largely unchanged year-over-year and assets under management of \$61 billion grew 8%. Average Citi-branded card loans of \$87 billion increased 4%, while Citi-branded card purchase sales of \$86 billion increased 7% versus the prior-year period. Average Citi retail services loans of \$47 billion increased 5% versus the prior-year period, while Citi retail services purchase sales of \$22 billion were up 5%. For additional information on the results of operations of North

America GCB for the second quarter of 2018, see "Global Consumer Banking—North America GCB" below.

International GCB revenues (consisting of Latin America GCB and Asia GCB (which includes the results of operations in certain EMEA countries)) increased 4% versus the prior-year period to \$3.2 billion. Excluding the impact of FX translation, international GCB revenues increased 6% versus the prior-year period. On this basis, Latin America GCB revenues increased 11% versus the prior-year period, reflecting growth in cards revenues as well as volume growth across retail loans and deposits. Asia GCB revenues increased 2%. Excluding a modest one-time gain in cards in the prior-year period, Asia GCB revenues increased 4% year-over-year, primarily reflecting an increase in wealth management and cards revenues. For additional information on the results of operations of Latin America GCB and Asia GCB for the second quarter of 2018, including the impact of FX translation, see "Global Consumer Banking—Latin America GCB" and "Global Consumer Banking—Asia GCB" below.

Year-over-year, international GCB average deposits of \$126 billion increased 3%, average retail loans of \$90 billion increased 3%, assets under management of \$102 billion increased 9%, average card loans of \$24 billion increased 2% and card purchase sales of \$26 billion increased 6%, all excluding the impact of FX translation.

Institutional Clients Group

ICG net income of \$3.2 billion increased 17%, driven by higher revenues, a lower effective tax rate and lower cost of credit, partially offset by higher operating expenses. ICG operating expenses increased 4% to \$5.5 billion, driven by an increase in compensation costs, volume-related expenses and investments, partially offset by efficiency savings. ICG revenues were \$9.7 billion in the second quarter of 2018, up 3% from the prior-year period, primarily driven by a 6% increase in Banking revenues, partially offset by a 1% decrease in Markets and securities services. The increase in Banking revenues included the impact of \$23 million of gains on loan hedges within corporate lending, compared to gains of \$9 million in the prior-year period.

Banking revenues of \$5.2 billion (excluding the impact of gains on loan hedges within corporate lending) increased 6%, driven by solid growth in treasury and trade solutions, private bank and corporate lending, partially offset by lower revenues in investment banking. Investment banking revenues of \$1.4 billion decreased 7% versus the prior-year period, as growth in advisory and equity underwriting was more than offset by a strong prior-year period comparison in debt underwriting. Advisory revenues increased 14% to \$361 million, equity underwriting revenues increased 8% to \$335 million and debt underwriting revenues decreased 20% to \$726 million, all versus the prior-year period.

Treasury and trade solutions revenues of \$2.3 billion increased 11% versus the prior-year period, reflecting volume growth and improved deposit spreads, with growth in both net interest and fee income. Private bank revenues increased 7% to \$848 million versus the prior-year period, driven by growth in clients, loans and investments, as well as improved deposit spreads. Corporate lending revenues increased 25% to \$612

million. Excluding the impact of gains on loan hedges, corporate lending revenues increased 22% versus the prior-year period, primarily driven by loan growth and lower hedging costs.

Markets and securities services revenues of \$4.5 billion decreased 1% from the prior-year period, as strong revenue growth in equity markets and securities services was more than offset by a decline in fixed income markets revenues. Fixed income markets revenues of \$3.1 billion decreased 6% from the prior-year period, driven by a more challenging market environment and a comparison to a strong prior-year period in G10 rates and securitized products. Equity markets revenues of \$864 million increased 19% from the prior-year period, with growth across all products, reflecting the benefit of continued higher market volatility as well as continued momentum with investor clients. Securities services revenues of \$665 million increased 12%, driven by continued growth in client volumes and higher net interest revenue. For additional information on the results of operations of ICG for the second quarter of 2018, see “Institutional Clients Group” below.

Corporate/Other

Corporate/Other net loss was \$13 million in the second quarter of 2018, compared to a net loss of \$14 million in the prior-year period. Operating expenses of \$599 million declined 40% from the prior-year period, largely reflecting the wind-down of legacy assets as well as lower legal and infrastructure costs.

Corporate/Other revenues were \$528 million, down 20% from the prior-year period, primarily reflecting the continued wind-down of legacy assets.

For additional information on the results of operations of Corporate/Other for the second quarter of 2018, see “Corporate/Other” below.

RESULTS OF OPERATIONS

SUMMARY OF SELECTED FINANCIAL DATA—PAGE 1

Citigroup Inc. and Consolidated Subsidiaries

In millions of dollars, except per-share amounts and ratios	Second Quarter			Six Months		
	2018	2017	% Change	2018	2017	% Change
Net interest revenue	\$11,665	\$11,258	4 %	\$22,837	\$22,213	3 %
Non-interest revenue	6,804	6,897	(1)	14,504	14,308	1
Revenues, net of interest expense	\$18,469	\$18,155	2 %	\$37,341	\$36,521	2 %
Operating expenses	10,712	10,760	—	21,637	21,483	1
Provisions for credit losses and for benefits and claims	1,812	1,717	6	3,669	3,379	9
Income from continuing operations before income taxes	\$5,945	\$5,678	5 %	\$12,035	\$11,659	3 %
Income taxes ⁽¹⁾	1,444	1,795	(20)	2,885	3,658	(21)
Income from continuing operations	\$4,501	\$3,883	16 %	\$9,150	\$8,001	14 %
Income (loss) from discontinued operations, net of taxes ⁽²⁾	15	21	(29)	8	3	NM
Net income before attribution of noncontrolling interests	\$4,516	\$3,904	16 %	\$9,158	\$8,004	14 %
Net income attributable to noncontrolling interests	26	32	(19)	48	42	14
Citigroup's net income	\$4,490	\$3,872	16 %	\$9,110	\$7,962	14 %
Less:						
Preferred dividends—Basic	\$318	\$320	(1)%	\$590	\$621	(5)%
Dividends and undistributed earnings allocated to employee restricted and deferred shares that contain nonforfeitable rights to dividends, applicable to basic EPS	49	48	2	90	103	(13)
Income allocated to unrestricted common shareholders for basic and diluted EPS	\$4,123	\$3,504	18 %	\$8,430	\$7,238	16 %
Earnings per share						
Basic						
Income from continuing operations	\$1.62	\$1.27	28 %	\$3.30	\$2.63	25 %
Net income	1.63	1.28	27	3.31	2.63	26
Diluted						
Income from continuing operations	\$1.62	\$1.27	28 %	\$3.30	\$2.63	25 %
Net income	1.63	1.28	27	3.31	2.63	26
Dividends declared per common share	0.32	0.16	100	0.64	0.32	100

Table continues on the next page, including footnotes.

SUMMARY OF SELECTED FINANCIAL DATA—PAGE 2

Citigroup Inc. and Consolidated Subsidiaries

In millions of dollars, except per-share amounts, ratios and direct staff At June 30:	Second Quarter		% Change	Six Months		% Change
	2018	2017		2018	2017	
Total assets	\$1,912,334	\$1,864,063	3 %			
Total deposits	996,730	958,743	4			
Long-term debt	236,822	225,179	5			
Citigroup common stockholders' equity ⁽¹⁾	181,059	210,766	(14)			
Total Citigroup stockholders' equity ⁽¹⁾	200,094	230,019	(13)			
Direct staff (in thousands)	205	214	(4)			
Performance metrics						
Return on average assets	0.94	%0.83	%	0.96	%0.87	%
Return on average common stockholders' equity ⁽¹⁾⁽³⁾	9.2	6.8		9.5	7.1	
Return on average total stockholders' equity ⁽¹⁾⁽³⁾	9.0	6.8		9.2	7.1	
Efficiency ratio (total operating expenses/total revenues)	58.0	59.3		57.9	58.8	
Basel III ratios—full implementation ⁽⁴⁾						
Common Equity Tier 1 Capital ⁽⁴⁾⁽⁵⁾	12.14	%13.06	%			
Tier 1 Capital ⁽⁴⁾⁽⁵⁾	13.77	14.74				
Total Capital ⁽⁴⁾⁽⁵⁾	16.31	16.93				
Supplementary Leverage ratio ⁽⁵⁾	6.60	7.24				
Citigroup common stockholders' equity to assets ⁽¹⁾	9.47	%11.31	%			
Total Citigroup stockholders' equity to assets ⁽¹⁾	10.46	12.34				
Dividend payout ratio ⁽⁶⁾	19.6	12.5		19.3	%12.2	%
Total payout ratio ⁽⁷⁾	74.9	62.6		73.1	60.7	
Book value per common share ⁽¹⁾	\$71.95	\$77.36	(7)%			
Tangible book value (TBV) per share ⁽⁸⁾⁽¹⁾	61.29	67.32	(9)			
Ratio of earnings to fixed charges and preferred stock dividends	1.93x	2.28x		2.01x	2.39x	

The second quarter and six months of 2018 reflect the impact of Tax Reform. For additional information on Tax (1) Reform, including the impact on Citi's fourth quarter and full-year 2017 results, see Citi's 2017 Annual Report on Form 10-K.

(2) See Note 2 to the Consolidated Financial Statements for additional information on Citi's discontinued operations.

The return on average common stockholders' equity is calculated using net income less preferred stock dividends (3) divided by average common stockholders' equity. The return on average total Citigroup stockholders' equity is calculated using net income divided by average Citigroup stockholders' equity.

Citi's reportable Common Equity Tier 1 (CET1) Capital and Tier 1 Capital ratios were the lower derived under the U.S. Basel III Standardized Approach and Citi's reportable Total Capital ratios were derived under the U.S. Basel (4) III Advanced Approaches for both periods presented. This reflects the U.S. Basel III requirement to report the lower of risk-based capital ratios under both the Standardized Approach and Advanced Approaches in accordance with the Collins Amendment of the Dodd-Frank Act.

(5) Citi's risk-based capital and leverage ratios as of June 30, 2017 are non-GAAP financial measures, which reflect full implementation of regulatory capital adjustments and deductions prior to the effective date of January 1, 2018.

(6) Dividends declared per common share as a percentage of net income per diluted share.

(7) Total common dividends declared plus common stock repurchases as a percentage of net income available to common shareholders. See "Consolidated Statement of Changes in Stockholders' Equity," Note 9 to the Consolidated

Financial Statements and “Equity Security Repurchases” below for the component details.

(8) For information on TBV, see “Capital Resources—Tangible Common Equity, Book Value Per Share, Tangible Book Value Per Share and Returns on Equity” below.

NM Not meaningful

SEGMENT AND BUSINESS—INCOME (LOSS) AND REVENUES
CITIGROUP INCOME

In millions of dollars	Second Quarter			Six Months		
	2018	2017	% Change	2018	2017	% Change
Income from continuing operations						
Global Consumer Banking						
North America	\$719	\$657	9 %	\$1,557	\$1,271	23 %
Latin America	200	141	42	383	276	39
Asia ⁽¹⁾	360	330	9	733	579	27
Total	\$1,279	\$1,128	13 %	\$2,673	\$2,126	26 %
Institutional Clients Group						
North America	\$1,028	\$1,088	(6) %	\$1,885	\$2,165	(13) %
EMEA	987	786	26	2,100	1,648	27
Latin America	514	341	51	1,005	823	22
Asia	708	565	25	1,576	1,155	36
Total	\$3,237	\$2,780	16 %	\$6,566	\$5,791	13 %
Corporate/Other	(15)	(25)	40	(89)	84	NM
Income from continuing operations	\$4,501	\$3,883	16 %	\$9,150	\$8,001	14 %
Discontinued operations	\$15	\$21	(29) %	\$8	\$3	NM
Net income attributable to noncontrolling interests	26	32	(19) %	48	42	14 %
Citigroup's net income	\$4,490	\$3,872	16 %	\$9,110	\$7,962	14 %

(1) Asia GCB includes the results of operations of GCB activities in certain EMEA countries for all periods presented.
NM Not meaningful

CITIGROUP REVENUES

	Second Quarter			Six Months			
In millions of dollars	2018	2017	% Change	2018	2017	% Change	
Global Consumer Banking							
North America	\$5,004	\$4,946	1	%	\$10,161	\$9,891	3
Latin America	1,381	1,308	6		2,728	2,475	10
Asia ⁽¹⁾	1,865	1,819	3		3,794	3,553	7
Total	\$8,250	\$8,073	2	%	\$16,683	\$15,919	5
Institutional Clients Group							
North America	\$3,511	\$3,646	(4)	)%	\$6,776	\$7,168	(5)
EMEA	3,043	2,881	6		6,210	5,735	8
Latin America	1,162	1,086	7		2,372	2,255	5
Asia	1,975	1,808	9		4,181	3,582	17
Total	\$9,691	\$9,421	3	%	\$19,539	\$18,740	4
Corporate/Other	528	661	(20)	)	1,119	1,862	(40)
Total Citigroup net revenues	\$18,469	\$18,155	2	%	\$37,341	\$36,521	2

(1) Asia GCB includes the results of operations of GCB activities in certain EMEA countries for all periods presented.

SEGMENT BALANCE SHEET⁽¹⁾

In millions of dollars	Global Consumer Banking	Institutional Clients Group	Corporate/Other and consolidating eliminations ⁽²⁾	Citigroup parent company- issued long-term debt and stockholders' equity ⁽³⁾	Total Citigroup consolidated
Assets					
Cash and deposits with banks	\$ 8,043	\$ 59,897	\$ 132,962	\$ —	\$ 200,902
Federal funds sold and securities borrowed or purchased under agreements to resell	143	265,140	243	—	265,526
Trading account assets	684	255,114	7,151	—	262,949
Investments	1,209	113,405	235,102	—	349,716
Loans, net of unearned income and allowance for loan losses	296,636	345,125	17,293	—	659,054
Other assets	36,796	102,526	34,865	—	174,187
Net inter-segment liquid assets ⁽⁴⁾	78,024	256,004	(334,028)	—	—
Total assets	\$ 421,535	\$ 1,397,211	\$ 93,588	\$ —	\$ 1,912,334
Liabilities and equity					
Total deposits	\$ 307,935	\$ 675,634	\$ 13,161	\$ —	\$ 996,730
Federal funds purchased and securities loaned or sold under agreements to repurchase	4,229	173,578	21	—	177,828
Trading account liabilities	174	140,213	358	—	140,745
Short-term borrowings	359	21,623	15,251	—	37,233
Long-term debt ⁽³⁾	1,839	40,356	46,026	148,601	236,822
Other liabilities	17,597	89,495	14,916	—	122,008
Net inter-segment funding (lending) ⁽³⁾	89,402	256,312	2,981	(348,695)	—
Total liabilities	\$ 421,535	\$ 1,397,211	\$ 92,714	\$ (200,094)	\$ 1,711,366
Total stockholders' equity ⁽⁵⁾	—	—	874	200,094	200,968
Total liabilities and equity	\$ 421,535	\$ 1,397,211	\$ 93,588	\$ —	\$ 1,912,334

The supplemental information presented in the table above reflects Citigroup's consolidated GAAP balance sheet (1) by reporting segment as of June 30, 2018. The respective segment information depicts the assets and liabilities managed by each segment as of such date.

(2) Consolidating eliminations for total Citigroup and Citigroup parent company assets and liabilities are recorded within Corporate/Other.

The total stockholders' equity and the majority of long-term debt of Citigroup reside in the Citigroup parent (3) company Consolidated Balance Sheet. Citigroup allocates stockholders' equity and long-term debt to its businesses through inter-segment allocations as shown above.

Represents the attribution of Citigroup's liquid assets (primarily consisting of cash, marketable equity securities, (4) and available-for-sale debt securities) to the various businesses based on Liquidity Coverage Ratio (LCR) assumptions.

(5) Corporate/Other equity represents noncontrolling interests.

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GLOBAL CONSUMER BANKING

Global Consumer Banking (GCB) consists of consumer banking businesses in North America, Latin America (consisting of Citi's consumer banking business in Mexico) and Asia. GCB provides traditional banking services to retail customers through retail banking, including commercial banking, and Citi-branded cards and Citi retail services (for additional information on these businesses, see "Citigroup Segments" above). GCB is focused on its priority markets in the U.S., Mexico and Asia with 2,428 branches in 19 countries and jurisdictions as of June 30, 2018. At June 30, 2018, GCB had approximately \$422 billion in assets and \$308 billion in deposits.

GCB's overall strategy is to leverage Citi's global footprint and be the pre-eminent bank for the emerging affluent and affluent consumers in large urban centers. In credit cards and in certain retail markets, Citi serves customers in a somewhat broader set of segments and geographies.

In millions of dollars except as otherwise noted	Second Quarter			Six Months		
	2018	2017	% Change	2018	2017	% Change
Net interest revenue	\$7,019	\$6,760	4 %	\$13,999	\$13,339	5 %
Non-interest revenue	1,231	1,313	(6)	2,684	2,580	4
Total revenues, net of interest expense	\$8,250	\$8,073	2 %	\$16,683	\$15,919	5 %
Total operating expenses	\$4,655	\$4,537	3 %	\$9,336	\$8,988	4 %
Net credit losses	\$1,726	\$1,615	7 %	\$3,462	\$3,218	8 %
Credit reserve build (release)	154	125	23	298	302	(1)
Provision (release) for unfunded lending commitments	3	(1)	NM	2	5	(60)
Provision for benefits and claims	22	23	(4)	48	52	(8)
Provisions for credit losses and for benefits and claims (LLR & PBC)	\$1,905	\$1,762	8 %	\$3,810	\$3,577	7 %
Income from continuing operations before taxes	\$1,690	\$1,774	(5)	\$3,537	\$3,354	5 %
Income taxes	411	646	(36)	864	1,228	(30)
Income from continuing operations	\$1,279	\$1,128	13 %	\$2,673	\$2,126	26 %
Noncontrolling interests	1	4	(75)	3	5	(40)
Net income	\$1,278	\$1,124	14 %	\$2,670	\$2,121	26 %
Balance Sheet data (in billions of dollars)						
Total EOP assets	\$422	\$418	1 %			
Average assets	417	414	1	\$420	\$412	2 %
Return on average assets	1.23	% 1.09	%	1.28	% 1.04	%
Efficiency ratio	56	56		56	56	
Average deposits	\$306	\$307	—	\$307	\$305	1
Net credit losses as a percentage of average loans	2.28	% 2.20	%	2.29	% 2.22	%
Revenue by business						
Retail banking	\$3,489	\$3,328	5 %	\$6,960	\$6,503	7 %
Cards ⁽¹⁾	4,761	4,745	—	9,723	9,416	3
Total	\$8,250	\$8,073	2 %	\$16,683	\$15,919	5 %
Income from continuing operations by business						
Retail banking	\$580	\$419	38 %	\$1,104	\$752	47 %
Cards ⁽¹⁾	699	709	(1)	1,569	1,374	14
Total	\$1,279	\$1,128	13 %	\$2,673	\$2,126	26 %

Table continues on the next page, including footnotes.

Foreign currency (FX) translation impact

Total revenue—as reported	\$8,250	\$8,073	2	%	\$16,683	\$15,919	5	%
Impact of FX translation ⁽²⁾	—	(51)	)		—	92		
Total revenues—ex-FX	\$8,250	\$8,022	3	%	\$16,683	\$16,011	4	%
Total operating expenses—as reported	\$4,655	\$4,537	3	%	\$9,336	\$8,988	4	%
Impact of FX translation ⁽²⁾	—	(20)	)		—	70		
Total operating expenses—ex-FX	\$4,655	\$4,517	3	%	\$9,336	\$9,058	3	%
Total provisions for LLR & PBC—as reported	\$1,905	\$1,762	8	%	\$3,810	\$3,577	7	%
Impact of FX translation ⁽²⁾	—	(15)	)		—	13		
Total provisions for LLR & PBC—ex-FX	\$1,905	\$1,747	9	%	\$3,810	\$3,590	6	%
Net income—as reported	\$1,278	\$1,124	14	%	\$2,670	\$2,121	26	%
Impact of FX translation ⁽²⁾	—	(9)	)		—	8		
Net income—ex-FX	\$1,278	\$1,115	15	%	\$2,670	\$2,129	25	%

(1) Includes both Citi-branded cards and Citi retail services.

(2) Reflects the impact of FX translation into U.S. dollars at the second quarter of 2018 and year-to-date 2018 average exchange rates for all periods presented.

(3) Presentation of this metric excluding FX translation is a non-GAAP financial measure.

NM Not meaningful

NORTH AMERICA GCB

North America GCB provides traditional retail banking, including commercial banking, and its Citi-branded cards and Citi retail services card products to retail customers and small to mid-size businesses, as applicable, in the U.S. North America GCB's U.S. cards product portfolio includes its proprietary portfolio (including the Citi Double Cash, Thank You and Value cards) and co-branded cards (including, among others, American Airlines and Costco) within Citi-branded cards as well as its co-brand and private label relationships (including, among others, Sears, The Home Depot, Best Buy and Macy's) within Citi retail services.

As of June 30, 2018, North America GCB's 693 retail bank branches are concentrated in the six key metropolitan areas of New York, Chicago, Miami, Washington, D.C., Los Angeles and San Francisco. Also as of June 30, 2018, North America GCB had approximately 9.1 million retail banking customer accounts, \$55.7 billion in retail banking loans and \$181.7 billion in deposits. In addition, North America GCB had approximately 119.2 million Citi-branded and Citi retail services credit card accounts with \$136.7 billion in outstanding card loan balances, including the newly acquired \$1.5 billion L.L.Bean portfolio.

In millions of dollars, except as otherwise noted	Second Quarter			Six Months			
	2018	2017	% Change	2018	2017	% Change	
Net interest revenue	\$4,780	\$4,632	3 %	\$9,530	\$9,249	3 %	
Non-interest revenue	224	314	(29)	631	642	(2)	
Total revenues, net of interest expense	\$5,004	\$4,946	1 %	\$10,161	\$9,891	3 %	
Total operating expenses	\$2,666	\$2,598	3 %	\$5,311	\$5,195	2 %	
Net credit losses	\$1,278	\$1,181	8 %	\$2,574	\$2,371	9 %	
Credit reserve build (release)	115	101	14	238	253	(6)	
Provision for unfunded lending commitments	2	2	—	(2)	9	NM	
Provision for benefits and claims	5	8	(38)	11	14	(21)	
Provisions for credit losses and for benefits and claims	\$1,400	\$1,292	8 %	\$2,821	\$2,647	7 %	
Income from continuing operations before taxes	\$938	\$1,056	(11)	\$2,029	\$2,049	(1)	%
Income taxes	219	399	(45)	472	778	(39)	
Income from continuing operations	\$719	\$657	9 %	\$1,557	\$1,271	23 %	
Noncontrolling interests	—	—	—	—	—	—	
Net income	\$719	\$657	9 %	\$1,557	\$1,271	23 %	
Balance Sheet data (in billions of dollars)							
Average assets	\$244	\$244	— %	\$246	\$245	— %	
Return on average assets	1.18	%1.08	%	1.28	%1.05	%	
Efficiency ratio	53	53		52	53		
Average deposits	\$179.9	\$185.1	(3)	\$180.4	\$184.9	(2)	
Net credit losses as a percentage of average loans	2.72	%2.58	%	2.74	%2.61	%	
Revenue by business							
Retail banking	\$1,348	\$1,293	4 %	\$2,655	\$2,550	4 %	
Citi-branded cards	2,062	2,079	(1)	4,294	4,175	3	
Citi retail services	1,594	1,574	1	3,212	3,166	1	
Total	\$5,004	\$4,946	1 %	\$10,161	\$9,891	3 %	
Income from continuing operations by business							
Retail banking	\$161	\$130	24 %	\$301	\$202	49 %	
Citi-branded cards	309	302	2	734	548	34	
Citi retail services	249	225	11	522	521	—	
Total	\$719	\$657	9 %	\$1,557	\$1,271	23 %	

NM Not meaningful

2Q18 vs. 2Q17

Net income increased 9% due to higher revenues and a lower effective tax rate due to the impact of Tax Reform, partially offset by higher expenses and higher cost of credit.

Revenues increased 1%, reflecting higher revenues in retail banking and Citi retail services, partially offset by lower revenues in Citi-branded cards.

Retail banking revenues increased 4%. Excluding mortgage revenues (decline of 25%), retail banking revenues were up 9%, driven by continued growth in deposit margins, growth in investments, with assets under management up 8%, and increased commercial banking activity. The decline in mortgage revenues was driven by lower origination activity and higher cost of funds reflecting the higher interest rate environment.

Cards revenues were largely unchanged. In Citi-branded cards, revenues decreased 1%. Excluding the impact of the Hilton portfolio sale (closed in the first quarter of 2018), Citi-branded cards revenues increased 1%, as the benefit of higher interest-earning balances and a gain of approximately \$45 million related to the sale of Visa B shares were partially offset by the impact of previously disclosed items, including partnership terms and repricing actions related to APR rate re-evaluations under the CARD Act. For the full year 2018, Citi expects the impact of these repricing actions to negatively impact revenues by approximately \$50 million. Average loans increased 4% and purchase sales increased 7%.

Citi retail services revenues increased 1%, primarily reflecting continued loan growth. Average loans and purchase sales both increased 5%.

Expenses increased 3%, including a provision of approximately \$50 million for an industry-wide legal matter.

Excluding the impact of this provision, expenses increased 1%, as higher volume-related expenses and investments were largely offset by efficiency savings.

Provisions increased 8% from the prior-year period, driven by higher net credit losses and a higher net loan loss reserve build.

Net credit losses increased 8% to \$1.3 billion, largely driven by higher net credit losses in Citi-branded cards (up 8% to \$657 million) and Citi retail services (up 11% to \$589 million). The increase in net credit losses primarily reflected volume growth and seasoning in both cards portfolios.

The net loan loss reserve build in the second quarter of 2018 was \$117 million (compared to a build of \$103 million in the prior-year period), primarily due to volume growth and seasoning in both cards portfolios.

For additional information on North America GCB's retail banking, including commercial banking, and its Citi-branded cards and Citi retail services portfolios, see "Credit Risk—Consumer Credit" below.

2018 YTD vs. 2017 YTD

Year-to-date, North America GCB has experienced similar trends to those described above. Net income increased 23%, driven by higher revenues and a lower effective tax rate due to the impact of Tax Reform, partially offset by higher expenses and higher cost of credit.

Revenues increased 3%, reflecting higher revenues across retail banking, Citi retail services and Citi-branded cards, which included the impact of the Hilton portfolio sale in the first quarter of 2018. Retail banking revenues increased 4%. Excluding mortgage revenues (decline of 22%), retail banking revenues increased 8%, driven by the same factors described above. Cards revenues increased 2%. In Citi-branded cards, revenues increased 3%, driven by the sale of the Hilton portfolio, which resulted in a gain of approximately \$150 million in the first quarter of 2018, partially offset by the loss of operating revenues. Excluding the impact of the Hilton portfolio sale, revenues increased 1%, driven by the same factors described above. Citi retail services revenues increased 1%, driven by the same factors described above. Expenses increased 2%, driven by the same factors described above.

Provisions increased 7%, as a 9% increase in net credit losses was partially offset by a 10% decline in the net loan loss reserve build.

LATIN AMERICA GCB

Latin America GCB provides traditional retail banking, including commercial banking, and its Citi-branded card products to retail customers and small to mid-size businesses in Mexico through Citibanamex, one of Mexico's largest banks.

At June 30, 2018, Latin America GCB had 1,462 retail branches in Mexico, with approximately 28.9 million retail banking customer accounts, \$20.1 billion in retail banking loans and \$28.4 billion in deposits. In addition, the business had approximately 5.7 million Citi-branded card accounts with \$5.4 billion in outstanding loan balances.

In millions of dollars, except as otherwise noted	Second Quarter			Six Months			% Change
	2018	2017	% Change	2018	2017		
Net interest revenue	\$1,013	\$967	5	% \$2,010	\$1,815	11	%
Non-interest revenue	368	341	8	718	660	9	
Total revenues, net of interest expense	\$1,381	\$1,308	6	% \$2,728	\$2,475	10	%
Total operating expenses	\$782	\$745	5	% \$1,541	\$1,412	9	%
Net credit losses	\$278	\$277	—	% \$556	\$530	5	%
Credit reserve build (release)	33	50	(34)	75	62	21	
Provision (release) for unfunded lending commitments	—	(1)	100	1	(1)	NM	
Provision for benefits and claims	17	15	13	37	38	(3)	
Provisions for credit losses and for benefits and claims (LLR & PBC)	\$328	\$341	(4)	% \$669	\$629	6	%
Income from continuing operations before taxes	\$271	\$222	22	% \$518	\$434	19	%
Income taxes	71	81	(12)	135	158	(15)	
Income from continuing operations	\$200	\$141	42	% \$383	\$276	39	%
Noncontrolling interests	—	2	(100)	—	3	(100)	
Net income	\$200	\$139	44	% \$383	\$273	40	%
Balance Sheet data (in billions of dollars)							
Average assets	\$43	\$45	(4)	% \$44	\$44	—	%
Return on average assets	1.87	% 1.24	%	1.76	% 1.25	%	
Efficiency ratio	57	57		56	57		
Average deposits	\$28.3	\$27.8	2	\$28.6	\$26.6	8	
Net credit losses as a percentage of average loans	4.37	% 4.36	%	4.33	% 4.38	%	
Revenue by business							
Retail banking	\$999	\$939	6	% \$1,965	\$1,789	10	%
Citi-branded cards	382	369	4	763	686	11	
Total	\$1,381	\$1,308	6	% \$2,728	\$2,475	10	%
Income from continuing operations by business							
Retail banking	\$155	\$91	70	% \$293	\$181	62	%
Citi-branded cards	45	50	(10)	90	95	(5)	
Total	\$200	\$141	42	% \$383	\$276	39	%

FX translation impact

Total revenues—as reported	\$1,381	\$1,308	6 %	\$2,728	\$2,475	10 %
Impact of FX translation ⁽¹⁾	—	(60)		—	18	
Total revenues—ex-FX	\$1,381	\$1,248	11 %	\$2,728	\$2,493	9 %
Total operating expenses—as reported	\$782	\$745	5 %	\$1,541	\$1,412	9 %
Impact of FX translation ⁽¹⁾	—	(29)		—	10	
Total operating expenses—ex-FX	\$782	\$716	9 %	\$1,541	\$1,422	8 %
Provisions for LLR & PBC—as reported	\$328	\$341	(4)%	\$669	\$629	6 %
Impact of FX translation ⁽¹⁾	—	(16)		—	6	
Provisions for LLR & PBC—ex-FX	\$328	\$325	1 %	\$669	\$635	5 %
Net income—as reported	\$200	\$139	44 %	\$383	\$273	40 %
Impact of FX translation ⁽¹⁾	—	(10)		—	2	
Net income—ex-FX	\$200	\$129	55 %	\$383	\$275	39 %

(1) Reflects the impact of FX translation into U.S. dollars at the second quarter of 2018 and year-to-date 2018 average exchange rates for all periods presented.

(2) Presentation of this metric excluding FX translation is a non-GAAP financial measure.

NM Not meaningful

The discussion of the results of operations for Latin America GCB below excludes the impact of FX translation for all periods presented. Presentations of the results of operations, excluding the impact of FX translation, are non-GAAP financial measures. For a reconciliation of certain of these metrics to the reported results, see the table above.

2Q18 vs. 2Q17

Net income increased 55%, reflecting higher revenues and a lower effective tax rate as a result of Tax Reform, partially offset by higher expenses and cost of credit.

Revenues increased 11%, driven by higher revenues in both retail banking and cards.

Retail banking revenues increased 12%, reflecting continued growth in volumes (average loans up 4%, average deposits up 6% and assets under management up 6%), largely driven by the commercial banking business, as well as improved deposit spreads, driven by higher interest rates. Cards revenues increased 9%, reflecting continued growth in purchase sales (up 11%) and full-rate revolving loans. Average cards loans grew 7%.

Expenses increased 9%, as volume-driven growth and ongoing investment spending were partially offset by efficiency savings.

Provisions increased 1%, as higher net credit losses were largely offset by a lower net loan loss reserve build. The net credit loss increase was primarily driven by volume growth and seasoning in cards.

For additional information on Latin America GCB's retail banking, including commercial banking, and its Citi-branded cards portfolios, see "Credit Risk—Consumer Credit" below.

2018 YTD vs. 2017 YTD

Year-to-date, Latin America GCB has experienced similar trends to those described above. Net income increased 39%, driven by the same factors described above.

Revenues increased 9%, reflecting higher revenues in retail banking and cards. Retail banking revenues increased 9%, driven by the same factors described above. Cards revenues increased 10%, driven by the same factors described above as well as a favorable comparison to the first quarter of 2017.

Expenses increased 8%, driven by the same factors described above.

Provisions increased 5%, driven by higher net credit losses and a higher net loan loss reserve build, due to volume growth and seasoning in cards.

ASIA GCB

Asia GCB provides traditional retail banking, including commercial banking, and its Citi-branded card products to retail customers and small to mid-size businesses, as applicable. During the second quarter of 2018, Asia GCB's most significant revenues in Asia were from Singapore, Hong Kong, Korea, India, Australia, Taiwan, Thailand, Philippines, Indonesia and Malaysia. Included within Asia GCB, traditional retail banking and Citi-branded card products are also provided to retail customers in certain EMEA countries, primarily Poland, Russia and the United Arab Emirates. At June 30, 2018, on a combined basis, the businesses had 273 retail branches, approximately 15.9 million retail banking customer accounts, \$69.3 billion in retail banking loans and \$97.8 billion in deposits. In addition, the businesses had approximately 15.3 million Citi-branded card accounts with \$18.8 billion in outstanding loan balances.

In millions of dollars, except as otherwise noted ⁽¹⁾	Second Quarter			Six Months			% Change
	2018	2017	% Change	2018	2017		
Net interest revenue	\$1,226	\$1,161	6 %	\$2,459	\$2,275	8 %	
Non-interest revenue	639	658	(3)	1,335	1,278	4 %	
Total revenues, net of interest expense	\$1,865	\$1,819	3 %	\$3,794	\$3,553	7 %	
Total operating expenses	\$1,207	\$1,194	1 %	\$2,484	\$2,381	4 %	
Net credit losses	\$170	\$157	8 %	\$332	\$317	5 %	
Credit reserve build (release)	6	(26)	NM	(15)	(13)	(15)	
Provision (release) for unfunded lending commitments	1	(2)	NM	3	(3)	NM	
Provisions for credit losses	\$177	\$129	37 %	\$320	\$301	6 %	
Income from continuing operations before taxes	\$481	\$496	(3)	\$990	\$871	14 %	
Income taxes	121	166	(27)	257	292	(12)	
Income from continuing operations	\$360	\$330	9 %	\$733	\$579	27 %	
Noncontrolling interests	1	2	(50)	3	2	50	
Net income	\$359	\$328	9 %	\$730	\$577	27 %	
Balance Sheet data (in billions of dollars)							
Average assets	\$130	\$125	4 %	\$131	\$124	6 %	
Return on average assets	1.11	% 1.05	%	1.12	% 0.94	%	
Efficiency ratio	65	66		65	67		
Average deposits	\$97.6	\$94.3	3 %	\$98.4	\$93.5	5 %	
Net credit losses as a percentage of average loans	0.77	% 0.74	%	0.75	% 0.76	%	
Revenue by business							
Retail banking	\$1,142	\$1,096	4 %	\$2,340	\$2,164	8 %	
Citi-branded cards	723	723	—	1,454	1,389	5 %	
Total	\$1,865	\$1,819	3 %	\$3,794	\$3,553	7 %	
Income from continuing operations by business							
Retail banking	\$264	\$198	33 %	\$510	\$369	38 %	
Citi-branded cards	96	132	(27)	223	210	6 %	
Total	\$360	\$330	9 %	\$733	\$579	27 %	

FX translation impact

Total revenues—as reported	\$1,865	\$1,819	3	%	\$3,794	\$3,553	7	%
Impact of FX translation ⁽²⁾	—	9			—	74		
Total revenues—ex-FX	\$1,865	\$1,828	2	%	\$3,794	\$3,627	5	%
Total operating expenses—as reported	\$1,207	\$1,194	1	%	\$2,484	\$2,381	4	%
Impact of FX translation ⁽²⁾	—	9			—	60		
Total operating expenses—ex-FX	\$1,207	\$1,203	—	%	\$2,484	\$2,441	2	%
Provisions for loan losses—as reported	\$177	\$129	37	%	\$320	\$301	6	%
Impact of FX translation ⁽²⁾	—	1			—	7		
Provisions for loan losses—ex-FX	\$177	\$130	36	%	\$320	\$308	4	%
Net income—as reported	\$359	\$328	9	%	\$730	\$577	27	%
Impact of FX translation ⁽²⁾	—	1			—	6		
Net income—ex-FX	\$359	\$329	9	%	\$730	\$583	25	%

(1) Asia GCB includes the results of operations of GCB activities in certain EMEA countries for all periods presented.

(2) Reflects the impact of FX translation into U.S. dollars at the second quarter of 2018 and year-to-date 2018 average exchange rates for all periods presented.

(3) Presentation of this metric excluding FX translation is a non-GAAP financial measure.

NM Not meaningful

The discussion of the results of operations for Asia GCB below excludes the impact of FX translation for all periods presented. Presentations of the results of operations, excluding the impact of FX translation, are non-GAAP financial measures. For a reconciliation of certain of these metrics to the reported results, see the table above.

2Q18 vs. 2Q17

Net income increased 9%, reflecting higher revenues and a lower effective tax rate as a result of Tax Reform, partially offset by higher cost of credit.

Revenues increased 2%. Excluding the benefit of a modest one-time gain in cards in the prior-year period, revenues increased 4%, driven by growth in retail banking and cards.

Retail banking revenues increased 4%, largely reflecting continued growth in in the wealth management franchise. While investment revenues declined in the second quarter of 2018 reflecting weaker market conditions, these were more than offset by revenue growth in FX products, insurance and deposits. In addition, assets under management grew 11%. Average deposits increased 2%. Retail lending revenues modestly improved (up 1%), as an increase in volumes (average loans up 3%) was largely offset by spread compression.

Cards revenues were largely unchanged. Excluding the benefit of the modest one-time gain, revenues increased 4%, driven by continued growth in average loans (up 1%) and purchase sales (up 5%).

Expenses were largely unchanged, as volume growth and ongoing investment spending were offset by efficiency savings.

Provisions increased 36%, primarily driven by a net loan loss reserve build compared to a net loan loss reserve release in the prior-year period. Overall credit quality continued to remain stable in the region.

For additional information on Asia GCB's retail banking, including commercial banking, and its Citi-branded cards portfolios, see "Credit Risk—Consumer Credit" below.

2018 YTD vs. 2017 YTD

Year-to-date, Asia GCB has experienced similar trends to

those described above. Net income increased 25% due to higher revenues and the lower effective tax rate, partially offset by higher expenses and a higher cost of credit.

Revenues increased 5%, primarily due to an increase in retail banking revenues (up 6%) and card revenues (up 2%).

The increase in both retail banking and cards revenues was driven by the same factors described above.

Expenses increased 2%, driven by the same factors described above.

Provisions were up 4%, primarily driven by modestly higher net credit losses related to volume growth and seasoning.

INSTITUTIONAL CLIENTS GROUP

Institutional Clients Group (ICG) includes Banking and Markets and securities services (for additional information on these businesses, see “Citigroup Segments” above). ICG provides corporate, institutional, public sector and high-net-worth clients around the world with a full range of wholesale banking products and services, including fixed income and equity sales and trading, foreign exchange, prime brokerage, derivative services, equity and fixed income research, corporate lending, investment banking and advisory services, private banking, cash management, trade finance and securities services. ICG transacts with clients in both cash instruments and derivatives, including fixed income, foreign currency, equity and commodity products.

ICG revenue is generated primarily from fees and spreads associated with these activities. ICG earns fee income for assisting clients with transactional services and clearing, providing brokerage and investment banking services and other such activities. Such fees are recognized at the point in time when Citigroup’s performance under the terms of a contractual arrangement is completed, which is typically at the trade/execution date or closing of a transaction.

Revenue generated from these activities is recorded in Commissions and fees and Investment banking. Revenue is also generated from assets under custody and administration, which is recognized as/when the associated promised service is satisfied, which normally occurs at the point in time the service is requested by the customer and provided by Citi. Revenue generated from these activities is primarily recorded in Administration and other fiduciary fees. For additional information on these various types of revenues, see Note 5 to the Consolidated Financial Statements.

In addition, as a market maker, ICG facilitates transactions, including holding product inventory to meet client demand, and earns the differential between the price at which it buys and sells the products. These price differentials and the unrealized gains and losses on the inventory are recorded in Principal transactions (for additional information on Principal transactions revenue, see Note 6 to the Consolidated Financial Statements). Other primarily includes mark-to-market gains and losses on certain credit derivatives, gains and losses on available-for-sale (AFS) debt securities, gains and losses on equity securities not held in trading accounts, and other non-recurring gains and losses. Interest income earned on assets held, less interest paid to customers on deposits and long- and short-term debt, is recorded as Net interest revenue.

The amount and types of Markets revenues are impacted by a variety of interrelated factors, including market liquidity; changes in market variables such as interest rates, foreign exchange rates, equity prices, commodity prices and credit spreads, as well as their implied volatilities; investor confidence; and other macroeconomic conditions. Assuming all other market conditions do not change, increases in client activity levels or bid/offer spreads generally result in increases in revenues. However, changes in market conditions can significantly impact client activity levels, bid/offer spreads and the fair value of product inventory. For example, a decrease in market liquidity may increase bid/offer spreads, decrease client activity levels and widen credit spreads on product inventory positions.

ICG’s management of the Markets businesses involves daily monitoring and evaluating of the above factors at the trading desk as well as the country level. ICG does not separately track the impact on total Markets revenues of the volume of transactions, bid/offer spreads, fair value changes of product inventory positions and economic hedges because, as noted above, these components are interrelated and are not deemed useful or necessary individually to manage the Markets businesses at an aggregate level.

In the Markets businesses, client revenues are those revenues directly attributable to client transactions at the time of inception, including commissions, interest or fees earned. Client revenues do not include the results of client facilitation activities (for example, holding product inventory in anticipation of client demand) or the results of certain economic hedging activities.

ICG’s international presence is supported by trading floors in approximately 80 countries and a proprietary network in 98 countries and jurisdictions. At June 30, 2018, ICG had approximately \$1.4 trillion of assets and \$676 billion of deposits, while two of its businesses—securities services and issuer services—managed approximately \$17.8 trillion of assets under custody compared to \$16.5 trillion at the end of the prior-year period.

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In millions of dollars, except as otherwise noted	Second Quarter			Six Months			% Change
	2018	2017	% Change	2018	2017		
Commissions and fees	\$1,127	\$1,106	2 %	\$2,340	\$2,130	10	%
Administration and other fiduciary fees	713	674	6	1,407	1,309	7	
Investment banking	1,246	1,243	—	2,231	2,353	(5))
Principal transactions	2,358	2,151	10	5,242	4,882	7	
Other	154	246	(37)	572	247	NM	
Total non-interest revenue	\$5,598	\$5,420	3 %	\$11,792	\$10,921	8	%
Net interest revenue (including dividends)	4,093	4,001	2	7,747	7,819	(1))
Total revenues, net of interest expense	\$9,691	\$9,421	3 %	\$19,539	\$18,740	4	%
Total operating expenses	\$5,458	\$5,227	4 %	\$10,961	\$10,365	6	%
Net credit losses	\$(1)	\$71	NM	\$104	\$96	8	%
Credit reserve build (release)	32	(15)	NM	(143)	(191)	25	
Provision (release) for unfunded lending commitments	(6)	31	NM	23	(23)	NM	
Provisions for credit losses	\$25	\$87	(71) %	\$(16)	\$(118)	86	%
Income from continuing operations before taxes	\$4,208	\$4,107	2 %	\$8,594	\$8,493	1	%
Income taxes	971	1,327	(27)	2,028	2,702	(25))
Income from continuing operations	\$3,237	\$2,780	16 %	\$6,566	\$5,791	13	%
Noncontrolling interests	12	18	(33)	27	33	(18))
Net income	\$3,225	\$2,762	17 %	\$6,539	\$5,758	14	%
EOP assets (in billions of dollars)	\$1,397	\$1,353	3 %				
Average assets (in billions of dollars)	1,406	1,360	3	\$1,397	\$1,339	4	%
Return on average assets	0.92	%0.81	%	0.94	%0.87	%	
Efficiency ratio	56	55		56	55		
Revenues by region							
North America	\$3,511	\$3,646	(4) %	\$6,776	\$7,168	(5)) %
EMEA	3,043	2,881	6	6,210	5,735	8	
Latin America	1,162	1,086	7	2,372	2,255	5	
Asia	1,975	1,808	9	4,181	3,582	17	
Total	\$9,691	\$9,421	3 %	\$19,539	\$18,740	4	%
Income from continuing operations by region							
North America	\$1,028	\$1,088	(6) %	\$1,885	\$2,165	(13)) %
EMEA	987	786	26	2,100	1,648	27	
Latin America	514	341	51	1,005	823	22	
Asia	708	565	25	1,576	1,155	36	
Total	\$3,237	\$2,780	16 %	\$6,566	\$5,791	13	%
Average loans by region (in billions of dollars)							
North America	\$165	\$150	10 %	\$162	\$148	9	%
EMEA	80	67	19	79	66	20	
Latin America	33	35	(6)	34	35	(3))
Asia	68	61	11	68	59	15	
Total	\$346	\$313	11 %	\$343	\$308	11	%
EOP deposits by business (in billions of dollars)							
Treasury and trade solutions	\$459	\$421	9 %				
All other ICG businesses	217	203	7				
Total	\$676	\$624	8 %				

NM Not meaningful

ICG Revenue Details—Excluding Gains (Losses) on Loan Hedges

In millions of dollars	Second Quarter			Six Months		% Change	
	2018	2017	% Change	2018	2017		
Investment banking revenue details							
Advisory	\$361	\$318	14 %	\$576	\$567	2 %	
Equity underwriting	335	309	8	551	559	(1)	
Debt underwriting	726	908	(20)	1,425	1,671	(15)	
Total investment banking	\$1,422	\$1,535	(7)%	\$2,552	\$2,797	(9)%	
Treasury and trade solutions	2,336	2,106	11	4,604	4,214	9	
Corporate lending—excluding gains (losses) on loan hedges ⁽¹⁾	589	481	22	1,110	919	21	
Private bank	848	793	7	1,752	1,542	14	
Total banking revenues (ex-gains (losses) on loan hedges)	\$5,195	\$4,915	6 %	\$10,018	\$9,472	6 %	
Corporate lending—gains (losses) on loan hedges ⁽¹⁾	\$23	\$9	NM	\$46	\$(106)	NM	
Total banking revenues (including gains (losses) on loan hedges)	\$5,218	\$4,924	6 %	\$10,064	\$9,366	7 %	
Fixed income markets	\$3,076	\$3,274	(6)%	\$6,494	\$6,952	(7)%	
Equity markets	864	725	19	1,967	1,527	29	
Securities services	665	594	12	1,306	1,146	14	
Other	(132)	\$(96)	(38)	(292)	\$(251)	(16)	
Total markets and securities services revenues	\$4,473	\$4,497	(1)%	\$9,475	\$9,374	1 %	
Total revenues, net of interest expense	\$9,691	\$9,421	3 %	\$19,539	\$18,740	4 %	
Commissions and fees	\$182	\$158	15 %	\$358	\$300	19 %	
Principal transactions ⁽²⁾	2,108	1,935	9	4,292	4,295	—	
Other	28	183	(85)	304	334	(9)	
Total non-interest revenue	\$2,318	\$2,276	2 %	\$4,954	\$4,929	1 %	
Net interest revenue	758	998	(24)	1,540	2,023	(24)	
Total fixed income markets	\$3,076	\$3,274	(6)%	\$6,494	\$6,952	(7)%	
Rates and currencies	\$2,235	\$2,254	(1)%	\$4,705	\$4,784	(2)%	
Spread products/other fixed income	841	1,020	(18)	1,789	2,168	(17)	
Total fixed income markets	\$3,076	\$3,274	(6)%	\$6,494	\$6,952	(7)%	
Commissions and fees	\$308	\$323	(5)%	\$669	\$649	3 %	
Principal transactions ⁽²⁾	101	(1)	NM	638	188	NM	
Other	20	(6)	NM	100	3	NM	
Total non-interest revenue	\$429	\$316	36 %	\$1,407	\$840	68 %	
Net interest revenue	435	409	6	560	687	(18)	
Total equity markets	\$864	\$725	19 %	\$1,967	\$1,527	29 %	

Credit derivatives are used to economically hedge a portion of the corporate loan portfolio that includes both accrual loans and loans at fair value. Gains (losses) on loan hedges include the mark-to-market on the credit

(1) derivatives and the mark-to-market on the loans in the portfolio that are at fair value. The fixed premium costs of these hedges are netted against the corporate lending revenues to reflect the cost of credit protection. Citigroup's results of operations excluding the impact of gains (losses) on loan hedges are non-GAAP financial measures.

(2) Excludes principal transactions revenues of ICG businesses other than Markets, primarily treasury and trade solutions and the private bank.

NM Not meaningful

2Q18 vs. 2Q17

Net income increased 17%, driven by higher revenues, a lower effective tax rate due to the impact of Tax Reform and lower cost of credit, partially offset by higher expenses.

Revenues increased 3%, driven by higher revenues in Banking (increase of 6%), partially offset by lower revenues in Markets and securities services (decrease of 1%). The increase in Banking revenues was driven by improved performance in treasury and trade solutions, the private bank and corporate lending, partially offset by investment banking. Markets and securities services revenues declined 1%, as an increase in equity markets revenues and securities services revenues was more than offset by a decrease in fixed income markets revenues. Citi expects Markets and securities services revenue will likely continue to reflect the overall market environment, including normal seasonal trends during the second half of 2018, as well as a comparison to the third quarter of 2017 that included a \$580 million gain on sale of a fixed income analytics business.

Within Banking:

Investment banking revenues declined 7%, as strength in advisory and equity underwriting was more than offset by a strong prior-year comparison in debt underwriting and a lower industry-wide market wallet. Advisory revenues increased 14%, reflecting strong performance in North America despite the impact from the decline in market wallet. Equity underwriting revenues increased 8%, driven by North America and Asia. Debt underwriting revenues declined 20%, primarily reflecting a decline in wallet share as well as the strong prior-year period comparison.

Treasury and trade solutions revenues increased 11%. Excluding the impact of FX translation, revenues increased 12%, reflecting strength in all regions, driven by growth across both net interest and fee income. Revenue growth in the cash business was primarily driven by continued growth in deposit balances and improved deposit spreads, as well as higher transaction volumes from both new and existing clients. Growth in the trade business was driven by an ongoing focus on high-quality loan growth, partially offset by an industry-wide tightening of loan spreads. Average deposit balances increased 6% (5% excluding the impact of FX translation). Average loans increased 5%, driven by strong loan growth in Asia and EMEA.

Corporate lending revenues increased 25%. Excluding the gains on loan hedges, revenues increased 22%, driven by EMEA. The increase in revenues was primarily due to higher loan volumes and lower hedging costs. Average loans increased 11% from the prior-year period.

Private bank revenues increased 7%, driven by North America and EMEA, reflecting growth in clients, loans and investments, as well as improved deposit spreads.

Within Markets and securities services:

Fixed income markets revenues decreased 6%, driven by lower revenues in North America as well as Asia. The decline in revenues was largely due to lower net interest revenue (a decrease of 24%) in both rates and currencies and spread products, mainly reflecting a change in the mix of trading positions in support of client activity as well as higher funding costs, given the higher interest rate environment. The decline in net interest revenue was partially offset by higher principal transaction revenues (an increase of 9%), driven by G10 FX and local markets rates and currencies.

Rates and currencies revenues decreased 1%, primarily due to lower G10 rates revenues, reflecting a more challenging environment, as well as a comparison to a strong prior-year period in EMEA. This decline was largely offset by an increase in G10 FX revenues that benefited from a continuation of volatility in the FX markets. G10 FX and local markets rates and currencies also benefited from strong corporate and investor client activity.

Spread products and other fixed income revenues decreased 18%, primarily due to lower revenues in securitized products in North America due to the more challenging market environment and strong prior-year period comparison,

partially offset by higher municipals revenues.

Equity markets revenues increased 19%, with growth across all products and regions, with particular strength in North America. The increase in revenues reflected the benefit of continued higher market volatility and increased investor and corporate client activity. Equity derivatives revenues increased across all regions, with particular strength in North America and Asia, benefiting from both overall market conditions and continued client momentum. The increase in equity markets revenues was also driven by growth in cash equities and higher balances in prime finance. Principal transactions revenues also increased, reflecting continued client facilitation gains driven by a favorable trading environment.

Securities services revenues increased 12%, reflecting growth in all regions. The increase in revenues was driven by higher fee revenues, reflecting growth in both client volumes and assets under custody, as well as higher net interest revenue driven by higher deposit volume and higher interest rates.

Expenses increased 4%, driven by an increase in compensation costs, volume-related expenses and investments, partially offset by efficiency savings.

Provisions decreased \$62 million to \$25 million, driven by lower net credit losses (\$72 million) and lower provisions for unfunded lending commitments (\$37 million), partially offset by a higher net loan loss reserve build (\$47 million). The improvement in cost of credit reflects a greater benefit from ratings upgrades as compared to the prior-year period, partially offset by volume-related reserve builds. The continued stability in commodity prices and macroeconomic

factors have resulted in modest cost of credit across the broader portfolio.

2018 YTD vs. 2017 YTD

Net income increased 14%, primarily driven by higher revenues and a lower effective tax rate due to the impact of Tax Reform, partially offset by higher expenses and higher credit costs.

Revenues increased 4%, reflecting higher revenues in both Banking (increase of 7%; increase of 6% excluding the gains (losses) on loan hedges) and higher revenues in Markets and securities services (increase of 1%).

Within Banking:

Investment banking revenues declined 9% due to a lower market wallet across all major products, particularly impacting debt underwriting revenues. Advisory revenues increased 2%, reflecting gains in wallet share despite a decline in overall market wallet. Equity underwriting revenues were modestly lower than the prior-year period. Debt underwriting revenues declined 15%, reflecting the lower market wallet and a decline in wallet share.

Treasury and trade solutions revenues increased 9%, reflecting growth across both net interest and fee income, driven by continued growth in deposit and loan volumes, improved deposit spreads and strong fee growth across most cash products.

Corporate lending revenues increased 42%. Excluding the impact of gains (losses) on loan hedges, revenues increased 21%, driven by higher loan volumes and lower hedging costs.

Private bank revenues increased 14%, driven by strong client activity across all regions. The increase in revenues primarily reflected higher deposit spreads, higher managed investments revenues, increased capital markets activity and higher loan volumes.

Within Markets and securities services:

Fixed income markets revenues declined 7%, primarily due to lower revenues in North America. Rates and currencies revenues decreased 2%, driven by lower G10 rates revenues due to lower client activity reflecting the more challenging environment, as well as the comparison to a strong prior-year period, particularly in EMEA. This decrease was partially offset by higher G10 FX revenues that benefited from the return of volatility in the FX markets, as well as strong corporate and investor client activity. Spread products and other fixed income revenues decreased 17%, driven by North America, largely due to lower investor client activity, reflecting the more challenging market environment, as well as a comparison to a strong prior-year period.

Equity markets revenues increased 29% with growth across products, reflecting strength in Asia, North America and EMEA, due to a more favorable operating environment with higher market volatility and increased investor client activity.

Securities services revenues increased 14%, primarily driven by growth in fee revenues, reflecting the growth in both client volumes and assets under custody, as well as higher net interest revenue in EMEA and Asia, driven by the higher deposit volumes and higher interest rates.

Expenses increased 6%, driven by the same factors described above.

Provisions increased \$102 million to a benefit of \$16 million, primarily due to lower releases in the current period (\$120 million compared to \$214 million in the prior-year period).

CORPORATE/OTHER

Corporate/Other includes certain unallocated costs of global staff functions (including finance, risk, human resources, legal and compliance), other corporate expenses and unallocated global operations and technology expenses, Corporate Treasury, certain North America legacy consumer loan portfolios, other legacy assets and discontinued operations (for additional information on Corporate/Other, see “Citigroup Segments” above). At June 30, 2018, Corporate/Other had \$93 billion in assets, largely unchanged year-over-year.

In millions of dollars	Second Quarter		% Change	Six Months		% Change
	2018	2017		2018	2017	
Net interest revenue	\$553	\$497	11 %	\$1,091	\$1,055	3 %
Non-interest revenue	(25)	164	NM	28	807	(97)
Total revenues, net of interest expense	\$528	\$661	(20) %	\$1,119	\$1,862	(40) %
Total operating expenses	\$599	\$996	(40) %	\$1,340	\$2,130	(37) %
Net credit losses	\$(21)	\$(24)	NM	\$5	\$105	(95) %
Credit reserve build (release)	(95)	(154)	38	(128)	(189)	32
Provision (release) for unfunded lending commitments	(1)	(2)	50	(1)	3	NM
Provision for benefits and claims	(1)	—	NM	(1)	1	NM
Provisions for credit losses and for benefits and claims	\$(118)	\$(132)	11 %	\$(125)	\$(80)	(56) %
Income (loss) from continuing operations before taxes	\$47	\$(203)	NM	\$(96)	\$(188)	49 %
Income taxes (benefits)	62	(178)	NM	(7)	(272)	97
Income (loss) from continuing operations	\$(15)	\$(25)	40 %	\$(89)	\$(84)	NM
Income (loss) from discontinued operations, net of taxes	15	21	(29) %	8	3	NM
Net income (loss) before attribution of noncontrolling interests	\$—	\$(4)	100 %	\$(81)	\$(87)	NM
Noncontrolling interests	13	10	30	18	4	NM
Net income (loss)	\$(13)	\$(14)	7 %	\$(99)	\$(83)	NM

NM Not meaningful

2Q18 vs. 2Q17

The net loss was \$13 million, compared to a net loss of \$14 million in the prior-year period. The net loss in the current period was largely driven by a higher effective tax rate.

Revenues decreased 20%, driven by the continued wind-down of legacy assets.

Expenses decreased 40%, primarily driven by the wind-down of legacy assets and lower legal and infrastructure costs.

Provisions increased \$14 million to a net benefit of \$118 million, as lower net credit losses were more than offset by a lower net loan loss reserve release. The decline in net credit losses reflected the impact of the continued wind-down in the legacy North America mortgage portfolio, including related net recoveries.

2018 YTD vs. 2017 YTD

The net loss was \$99 million, compared to net income of \$83 million in the prior-year period, reflecting lower revenues and a lower effective tax rate, partially offset by lower expenses and lower cost of credit.

Revenues decreased 40%, primarily driven by the same factors described above.

Expenses decreased 37%, driven by the same factors described above.

Provisions decreased \$45 million to a net benefit of \$125 million, driven by lower net credit losses, partially offset by a lower net loan loss reserve release. Net credit losses declined 95% to \$5 million, reflecting the impact of ongoing divestiture activity, including the continued wind-down in the legacy North America mortgage portfolio.

OFF-BALANCE SHEET ARRANGEMENTS

The table below shows where a discussion of Citi's various off-balance sheet arrangements in this Form 10-Q may be found. For additional information, see "Off-Balance Sheet Arrangements" and Notes 1, 21 and 26 to the Consolidated Financial Statements in Citigroup's 2017 Annual Report on Form 10-K.

Types of Off-Balance Sheet Arrangements Disclosures in this Form 10-Q

Variable interests and other obligations, including contingent obligations, arising from variable interests in nonconsolidated VIEs	See Note 18 to the Consolidated Financial Statements.
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Letters of credit, and lending and other commitments	See Note 22 to the Consolidated Financial Statements.
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Guarantees	See Note 22 to the Consolidated Financial Statements.
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CAPITAL RESOURCES

Overview

Capital is used principally to support assets in Citi's businesses and to absorb credit, market and operational losses. Citi primarily generates capital through earnings from its operating businesses. Citi may augment its capital through issuances of common stock, noncumulative perpetual preferred stock and equity issued through awards under employee benefit plans, among other issuances.

Further, Citi's capital levels may also be affected by changes in accounting and regulatory standards, as well as U.S. corporate tax laws and the impact of future events on Citi's business results, such as changes in interest and foreign exchange rates, as well as business and asset dispositions.

During the second quarter of 2018, Citi returned a total of \$3.1 billion of capital to common shareholders in the form of share repurchases (approximately 33 million common shares) and dividends.

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, management targets and all applicable regulatory standards and guidelines. Based on Citigroup's current regulatory capital requirements, as well as consideration of potential future changes to the U.S. Basel III rules, management currently believes that a targeted Common Equity Tier 1 Capital ratio of approximately 11.5% represents the amount necessary to prudently operate and invest in Citi's franchise, including when considering future growth plans, capital return projections and other factors that may impact Citi's businesses. However, management may revise Citigroup's targeted Common Equity Tier 1 Capital ratio in response to changing regulatory capital requirements as well as other relevant factors. For additional information regarding Citi's capital management, see "Capital Resources—Capital Management" in Citigroup's 2017 Annual Report on Form 10-K.

Stress Testing Component of Capital Planning

Citi is subject to an annual assessment by the Federal Reserve Board as to whether Citigroup has effective capital planning processes as well as sufficient regulatory capital to absorb losses during stressful economic and financial conditions, while also meeting obligations to creditors and counterparties and continuing to serve as a credit intermediary. This annual assessment includes two related programs: the Comprehensive Capital Analysis and Review (CCAR) and Dodd-Frank Act Stress Testing (DFAST). For additional information regarding the stress testing component of capital planning, see "Forward-Looking Statements" below and "Capital Resources—Current Regulatory Capital Standards—Stress Testing Component of Capital Planning" and "Risk Factors—Strategic Risks"

in Citigroup's 2017 Annual Report on Form 10-K. For additional information regarding a recent proposed rulemaking and other potential changes in Citi's regulatory capital requirements and future CCAR processes, see "Regulatory Capital Standards Developments" in the First Quarter of 2018 Form 10-Q.

Current Regulatory Capital Standards

Citi is subject to regulatory capital standards issued by the Federal Reserve Board, which constitute the U.S. Basel III rules. These rules establish an integrated capital adequacy framework, encompassing both risk-based capital ratios and leverage ratios. For additional information regarding the risk-based capital ratios, Tier 1 Leverage ratio and Supplementary Leverage ratio, see "Capital Resources—Current Regulatory Capital Standards" in Citigroup's 2017 Annual Report on Form 10-K.

GSIB Surcharge

The Federal Reserve Board also adopted a rule that imposes a risk-based capital surcharge upon U.S. GSIBs, including Citi. Citi's GSIB surcharge effective for 2018 remains unchanged from 2017 at 3.0%. For additional information regarding the identification of a GSIB and the methodology for annually determining the GSIB surcharge, see "Capital Resources—Current Regulatory Capital Standards—GSIB Surcharge" in Citigroup's 2017 Annual Report on

Form 10-K.

Transition Provisions

The U.S. Basel III rules contain several differing, largely multi-year transition provisions (i.e., “phase-ins” and “phase-outs”). Moreover, the GSIB surcharge, Capital Conservation Buffer, and any Countercyclical Capital Buffer (currently 0%), commenced phase-in on January 1, 2016, becoming fully effective on January 1, 2019. With the exception of the non-grandfathered trust preferred securities, which do not fully phase-out until January 1, 2022, and the capital buffers and GSIB surcharge, which do not fully phase-in until January 1, 2019, all other transition provisions are entirely reflected in Citi’s regulatory capital ratios beginning January 1, 2018. Accordingly, commencing with the first quarter of 2018, Citi is presenting a single set of regulatory capital components and ratios, reflecting current regulatory capital standards in effect throughout 2018. Citi previously disclosed its Basel III risk-based capital and leverage ratios and related components reflecting Basel III Transition Arrangements with respect to regulatory capital adjustments and deductions, as well as Full Implementation, in Citi’s 2017 Annual Report on Form 10-K and Quarterly Reports on Form 10-Q; however, beginning January 1, 2018, that distinction is no longer relevant.

For additional information regarding the transition provisions under the U.S. Basel III rules, including with respect to the GSIB surcharge, see “Capital Resources—

Current Regulatory Capital Standards—Transition Provisions” in Citigroup’s 2017 Annual Report on Form 10-K. For information regarding Citigroup’s capital resources reflecting Basel III Transition Arrangements as of December 31, 2017, see “Capital Resources—Current Regulatory Capital Standards—Citigroup’s Capital Resources Under Current Regulatory Standards” in Citigroup’s 2017 Annual Report on Form 10-K.

Citigroup’s Capital Resources

Citi is required to maintain stated minimum Common Equity Tier 1 Capital, Tier 1 Capital and Total Capital ratios of 4.5%, 6.0% and 8.0%, respectively.

Citi’s effective minimum Common Equity Tier 1 Capital, Tier 1 Capital and Total Capital ratios during 2018, inclusive of the 75% phase-in of both the 2.5% Capital Conservation Buffer and the 3.0% GSIB surcharge (all of which is to be composed of Common Equity Tier 1 Capital), are 8.625%, 10.125% and 12.125%, respectively. Citi’s effective minimum Common Equity Tier 1 Capital, Tier 1 Capital and Total Capital ratios during 2017, inclusive of the 50% phase-in of both the 2.5% Capital Conservation Buffer and the 3.0% GSIB surcharge (all of which is to be composed of Common Equity Tier 1 Capital), were 7.25%, 8.75% and 10.75%, respectively.

Citi currently estimates that its effective minimum Common Equity Tier 1 Capital, Tier 1 Capital and Total Capital ratio requirements during 2019, inclusive of the 2.5% Capital Conservation Buffer and the Countercyclical Capital Buffer at its current level of 0%, as well as a 3.0% GSIB surcharge, may be 10.0%, 11.5% and 13.5%, respectively. Furthermore, to be “well capitalized” under current federal bank regulatory agency definitions, a bank holding company must have a Tier 1 Capital ratio of at least 6.0%, a Total Capital ratio of at least 10.0%, and not be subject to a Federal Reserve Board directive to maintain higher capital levels.

Under the U.S. Basel III rules, Citi must comply with a 4.0% minimum Tier 1 Leverage ratio requirement. Effective January 1, 2018, Citi must also comply with an effective 5.0% minimum Supplementary Leverage ratio requirement. The following tables set forth the capital tiers, total risk-weighted assets and underlying risk components, risk-based capital ratios, quarterly adjusted average total assets, Total Leverage Exposure and leverage ratios for Citi as of June 30, 2018 and December 31, 2017.

Citigroup Capital Components and Ratios

In millions of dollars, except ratios	June 30, 2018		December 31, 2017	
	Advanced Approaches	Standardized Approach	Advanced Approaches	Standardized Approach
Common Equity Tier 1 Capital	\$142,868	\$142,868	\$142,822	\$142,822
Tier 1 Capital	162,002	162,002	162,377	162,377
Total Capital (Tier 1 Capital + Tier 2 Capital)	187,240	198,964	187,877	199,989
Total Risk-Weighted Assets	1,147,865	1,176,863	1,152,644	1,155,099
Credit Risk	\$769,279	\$1,112,883	\$767,102	\$1,089,372
Market Risk	63,087	63,980	65,003	65,727
Operational Risk	315,499	—	320,539	—
Common Equity Tier 1 Capital ratio ⁽¹⁾⁽²⁾	12.45	% 12.14	% 12.39	% 12.36
Tier 1 Capital ratio ⁽¹⁾⁽²⁾	14.11	13.77	14.09	14.06
Total Capital ratio ⁽¹⁾⁽²⁾	16.31	16.91	16.30	17.31
In millions of dollars, except ratios	June 30, 2018	December 31, 2017		
Quarterly Adjusted Average Total Assets ⁽³⁾	\$1,876,240	\$1,868,326		
Total Leverage Exposure ⁽⁴⁾	2,453,497	2,432,491		
Tier 1 Leverage ratio ⁽²⁾	8.63	% 8.69	%	
Supplementary Leverage ratio ⁽²⁾	6.60	6.68		

(1)

As of June 30, 2018 and December 31, 2017, Citi's reportable Common Equity Tier 1 Capital and Tier 1 Capital ratios were the lower derived under the Basel III Standardized Approach, whereas the reportable Total Capital ratio was the lower derived under the Basel III Advanced Approaches framework.

Citi's risk-based capital and leverage ratios and related components as of December 31, 2017 are non-GAAP

(2) financial measures, which reflect full implementation of regulatory capital adjustments and deductions prior to the effective date of January 1, 2018.

(3) Tier 1 Leverage ratio denominator.

(4) Supplementary Leverage ratio denominator.

As indicated in the table above, Citigroup's risk-based capital ratios at June 30, 2018 were in excess of the stated and effective minimum requirements under the U.S. Basel III rules. In addition, Citi was also "well capitalized" under current federal bank regulatory agency definitions as of June 30, 2018.

Common Equity Tier 1 Capital Ratio

Citi's Common Equity Tier 1 Capital ratio was 12.1% at June 30, 2018, compared to 12.1% at March 31, 2018 and 12.4% at December 31, 2017. The ratio remained unchanged from the first quarter of 2018, as quarterly net income of \$4.5 billion, as well as decreases in credit and market risk-weighted assets, were offset by adverse movements in Accumulated other comprehensive income (AOCI) and the return of \$3.1 billion of capital to common shareholders. Citi's Common Equity Tier 1 Capital ratio declined from year-end 2017 primarily due to the return of \$6.2 billion of capital to common shareholders, adverse net movements in AOCI, and an increase in credit risk-weighted assets, partially offset by year-to-date net income of \$9.1 billion.

Components of Citigroup Capital

In millions of dollars	June 30, 2018	December 31, 2017
Common Equity Tier 1 Capital		
Citigroup common stockholders' equity ⁽¹⁾	\$ 181,243	\$ 181,671
Add: Qualifying noncontrolling interests	145	153
Regulatory Capital Adjustments and Deductions:		
Less: Accumulated net unrealized losses on cash flow hedges, net of tax ⁽²⁾	(1,021)	(698)
Less: Cumulative unrealized net loss related to changes in fair value of financial liabilities attributable to own creditworthiness, net of tax ⁽³⁾	(162)	(721)
Less: Intangible assets:		
Goodwill, net of related DTLs ⁽⁴⁾	21,809	22,052
Identifiable intangible assets other than MSRs, net of related DTLs	4,461	4,401
Less: Defined benefit pension plan net assets	882	896
Less: DTAs arising from net operating loss, foreign tax credit and general business credit carry-forwards ⁽⁵⁾	12,551	13,072
Total Common Equity Tier 1 Capital (Standardized Approach and Advanced Approaches)	\$ 142,868	\$ 142,822
Additional Tier 1 Capital		
Qualifying noncumulative perpetual preferred stock ⁽¹⁾	\$ 18,851	\$ 19,069
Qualifying trust preferred securities ⁽⁶⁾	1,380	1,377
Qualifying noncontrolling interests	62	61
Regulatory Capital Deductions:		
Less: Permitted ownership interests in covered funds ⁽⁷⁾	1,109	900
Less: Minimum regulatory capital requirements of insurance underwriting subsidiaries ⁽⁸⁾	50	52
Total Additional Tier 1 Capital (Standardized Approach and Advanced Approaches)	\$ 19,134	\$ 19,555
Total Tier 1 Capital (Common Equity Tier 1 Capital + Additional Tier 1 Capital) (Standardized Approach and Advanced Approaches)	\$ 162,002	\$ 162,377
Tier 2 Capital		
Qualifying subordinated debt	\$ 23,234	\$ 23,673
Qualifying trust preferred securities ⁽⁹⁾	326	329
Qualifying noncontrolling interests	49	50
Eligible allowance for credit losses ⁽¹⁰⁾	13,403	13,612
Regulatory Capital Deduction:		
Less: Minimum regulatory capital requirements of insurance underwriting subsidiaries ⁽⁸⁾	50	52
Total Tier 2 Capital (Standardized Approach)	\$ 36,962	\$ 37,612
Total Capital (Tier 1 Capital + Tier 2 Capital) (Standardized Approach)	\$ 198,964	\$ 199,989
Adjustment for excess of eligible credit reserves over expected credit losses ⁽¹⁰⁾	\$(11,724)	\$(12,112)
Total Tier 2 Capital (Advanced Approaches)	\$ 25,238	\$ 25,500
Total Capital (Tier 1 Capital + Tier 2 Capital) (Advanced Approaches)	\$ 187,240	\$ 187,877

Issuance costs of \$184 million related to noncumulative perpetual preferred stock outstanding at June 30, 2018 and December 31, 2017 are excluded from common stockholders' equity and netted against such preferred stock in accordance with Federal Reserve Board regulatory reporting requirements, which differ from those under U.S. GAAP.

(1) Common Equity Tier 1 Capital is adjusted for accumulated net unrealized gains (losses) on cash flow hedges included in AOCI that relate to the hedging of items not recognized at fair value on the balance sheet.

(2) The cumulative impact of changes in Citigroup's own creditworthiness in valuing liabilities for which the fair value option has been elected, and own-credit valuation adjustments on derivatives, are excluded from Common Equity

Tier 1 Capital, in accordance with the U.S. Basel III rules.

(4) Includes goodwill “embedded” in the valuation of significant common stock investments in unconsolidated financial institutions.

Footnotes continue on the following page.

- Of Citi's \$22.9 billion of net DTAs at June 30, 2018, \$11.2 billion were includable in Common Equity Tier 1 Capital pursuant to the U.S. Basel III rules, while \$11.7 billion were excluded. Excluded from Citi's Common Equity Tier 1 Capital as of June 30, 2018 was \$12.6 billion of net DTAs arising from net operating loss, foreign tax credit and general business credit carry-forwards, which was reduced by \$0.9 billion of net DTLs primarily associated with goodwill and certain other intangible assets. Separately, under the U.S. Basel III rules, goodwill
- (5) and these other intangible assets are deducted net of associated DTLs in arriving at Common Equity Tier 1 Capital. DTAs arising from net operating loss, foreign tax credit and general business credit carry-forwards are required to be entirely deducted from Common Equity Tier 1 Capital under the U.S. Basel III rules. Commencing on December 31, 2017, Citi's DTAs arising from temporary differences were less than the 10% limitation under the U.S. Basel III rules and therefore not subject to deduction from Common Equity Tier 1 Capital, but are subject to risk-weighting at 250%.
- (6) Represents Citigroup Capital XIII trust preferred securities, which are permanently grandfathered as Tier 1 Capital under the U.S. Basel III rules.
- Banking entities are required to be in compliance with the Volcker Rule of the Dodd-Frank Act, which prohibits conducting certain proprietary investment activities and limits their ownership of, and relationships with, covered
- (7) funds. Accordingly, Citi is required by the Volcker Rule to deduct from Tier 1 Capital all permitted ownership interests in covered funds that were acquired after December 31, 2013.
- (8) 50% of the minimum regulatory capital requirements of insurance underwriting subsidiaries must be deducted from each of Tier 1 Capital and Tier 2 Capital.
- (9) Represents the amount of non-grandfathered trust preferred securities eligible for inclusion in Tier 2 Capital under the U.S. Basel III rules, which will be fully phased-out of Tier 2 Capital by January 1, 2022.
- Under the Standardized Approach, the allowance for credit losses is eligible for inclusion in Tier 2 Capital up to 1.25% of credit risk-weighted assets, with any excess allowance for credit losses being deducted in arriving at credit risk-weighted assets, which differs from the Advanced Approaches framework, in which eligible credit reserves that exceed expected credit losses are eligible for inclusion in Tier 2 Capital to the extent the excess
- (10) reserves do not exceed 0.6% of credit risk-weighted assets. The total amount of eligible credit reserves in excess of expected credit losses that were eligible for inclusion in Tier 2 Capital, subject to limitation, under the Advanced Approaches framework was \$1.7 billion and \$1.5 billion at June 30, 2018 and December 31, 2017, respectively.

Citigroup Capital Rollforward

In millions of dollars	Three Months Ended June 30, 2018	Six Months Ended June 30, 2018
Common Equity Tier 1 Capital, beginning of period	\$144,128	\$142,822
Net income	4,490	9,110
Common and preferred stock dividends declared	(1,142)	(2,240)
Net increase in treasury stock	(2,298)	(4,104)
Net change in common stock and additional paid-in capital	127	(282)
Net increase in foreign currency translation adjustment net of hedges, net of tax	(2,867)	(1,747)
Net increase in unrealized losses on debt securities AFS, net of tax	(498)	(1,559)
Net decrease in defined benefit plans liability adjustment, net of tax	301	389
Net change in adjustment related to changes in fair value of financial liabilities attributable to own creditworthiness, net of tax	(18)	(113)
Net decrease in ASC 815—excluded Component of Fair Value Hedges	(28)	(32)
Net decrease in goodwill, net of related DTLs	673	243
Net increase in identifiable intangible assets other than MSRs, net of related DTLs	(252)	(60)
Net change in defined benefit pension plan net assets	(11)	14
Net decrease in DTAs arising from net operating loss, foreign tax credit and general business credit carry-forwards	260	521
Other	3	(94)
Net change in Common Equity Tier 1 Capital	\$(1,260)	\$46
Common Equity Tier 1 Capital, end of period (Standardized Approach and Advanced Approaches)	\$142,868	\$142,868
Additional Tier 1 Capital, beginning of period	\$19,362	\$19,555
Net decrease in qualifying perpetual preferred stock	(121)	(218)
Net increase in qualifying trust preferred securities	1	3
Net increase in permitted ownership interests in covered funds	(112)	(209)
Other	4	3
Net decrease in Additional Tier 1 Capital	\$(228)	\$(421)
Tier 1 Capital, end of period (Standardized Approach and Advanced Approaches)	\$162,002	\$162,002
Tier 2 Capital, beginning of period (Standardized Approach)	\$37,402	\$37,612
Net decrease in qualifying subordinated debt	(196)	(439)
Net decrease in eligible allowance for credit losses	(235)	(209)
Other	(9)	(2)
Net decrease in Tier 2 Capital (Standardized Approach)	\$(440)	\$(650)
Tier 2 Capital, end of period (Standardized Approach)	\$36,962	\$36,962
Total Capital, end of period (Standardized Approach)	\$198,964	\$198,964
Tier 2 Capital, beginning of period (Advanced Approaches)	\$25,178	\$25,500
Net decrease in qualifying subordinated debt	(196)	(439)
Net increase in excess of eligible credit reserves over expected credit losses	265	179
Other	(9)	(2)
Net change in Tier 2 Capital (Advanced Approaches)	\$60	\$(262)
Tier 2 Capital, end of period (Advanced Approaches)	\$25,238	\$25,238
Total Capital, end of period (Advanced Approaches)	\$187,240	\$187,240

Citigroup Risk-Weighted Assets Rollforward (Basel III Standardized Approach)

In millions of dollars	Three Months Ended June 30, 2018	Six Months Ended June 30, 2018
Total Risk-Weighted Assets, beginning of period	\$1,195,981	\$1,155,099
Changes in Credit Risk-Weighted Assets		
Net change in general credit risk exposures ⁽¹⁾	1,238	(15)
Net change in repo-style transactions ⁽²⁾	(6,392	)1,861
Net change in securitization exposures	(981	)846
Net increase in equity exposures	662	1,540
Net increase in over-the-counter (OTC) derivatives ⁽³⁾	291	10,723
Net change in other exposures ⁽⁴⁾	(5,634	)2,319
Net change in off-balance sheet exposures ⁽⁵⁾	(1,903	)6,237
Net change in Credit Risk-Weighted Assets	\$(12,719	)\$23,511
Changes in Market Risk-Weighted Assets		
Net change in risk levels ⁽⁶⁾	\$(1,302	)\$5,930
Net decrease due to model and methodology updates ⁽⁷⁾	(5,097	) (7,677)
Net decrease in Market Risk-Weighted Assets	\$(6,399	)\$(1,747)
Total Risk-Weighted Assets, end of period	\$1,176,863	\$1,176,863

General credit risk exposures include cash and balances due from depository institutions, securities, and loans and (1) leases. General credit risk exposures increased during the three months ended June 30, 2018 primarily due to growth in corporate loans held-for-sale.

(2) Repo-style transactions include repurchase and reverse repurchase transactions as well as securities borrowing and securities lending transactions.

(3) OTC derivatives increased during the six months ended June 30, 2018 primarily due to increased notional amounts for bilateral trades resulting from increased seasonal business activity.

Other exposures include cleared transactions, unsettled transactions and other assets. Other exposures decreased during the three months ended June 30, 2018 primarily due to decreases in default fund contributions and notional (4) amounts for centrally cleared exposures, as well as a decrease in DTAs arising from temporary differences. Other exposures increased during the six months ended June 30, 2018 primarily due to additional DTAs arising from temporary differences, which are subject to risk-weighting at 250%.

Off-balance sheet exposures decreased during the three months ended June 30, 2018 primarily due to the risk-weighting benefits of purchased credit protection, as well as a decline in corporate loan commitments.

(5) Off-balance sheet exposures increased during the six months ended June 30, 2018 primarily due to an increase in commitments to extend credit that will drive future corporate loan growth.

Risk levels decreased during the three months ended June 30, 2018 primarily due to a decrease in positions subject (6) to standard specific risk charges. Risk levels increased during the six months ended June 30, 2018 primarily due to increases in exposure levels subject to Stressed Value at Risk and Value at Risk.

Risk-weighted assets declined during the three and six months ended June 30, 2018 primarily due to changes in (7) model inputs regarding volatility and the correlation between market risk factors. Further contributing to the six-month decline were methodology changes for standard specific risk charges.

Citigroup Risk-Weighted Assets Rollforward (Basel III Advanced Approaches)

In millions of dollars	Three Months Ended June 30, 2018	Six Months Ended June 30, 2018
Total Risk-Weighted Assets, beginning of period	\$1,178,127	\$1,152,644
Changes in Credit Risk-Weighted Assets		
Net decrease in retail exposures ⁽¹⁾	(7,106)	(16,511)
Net change in wholesale exposures ⁽²⁾	(1,013)	8,275
Net change in repo-style transactions ⁽³⁾	(2,893)	1,296
Net change in securitization exposures	(956)	1,024
Net increase in equity exposures	529	1,558
Net change in over-the-counter (OTC) derivatives ⁽⁴⁾	(1,104)	1,943
Net change in derivatives CVA ⁽⁵⁾	(3,922)	3,198
Net change in other exposures ⁽⁶⁾	(3,744)	1,452
Net decrease in supervisory 6% multiplier ⁽⁷⁾	(978)	(58)
Net change in Credit Risk-Weighted Assets	\$(21,187)	\$2,177
Changes in Market Risk-Weighted Assets		
Net change in risk levels ⁽⁸⁾	\$(1,393)	\$5,761
Net decrease due to model and methodology updates ⁽⁹⁾	(5,097)	(7,677)
Net decrease in Market Risk-Weighted Assets	\$(6,490)	\$(1,916)
Net decrease in Operational Risk-Weighted Assets ⁽¹⁰⁾	\$(2,585)	\$(5,040)
Total Risk-Weighted Assets, end of period	\$1,147,865	\$1,147,865

Retail exposures decreased during the three months ended June 30, 2018 primarily due to residential mortgage loan sales and repayments, as well as updates to model parameters. Retail exposures decreased during the six months ended June 30, 2018 primarily due to reductions in qualifying revolving (cards) exposures attributable to seasonal holiday spending repayments, as well as residential mortgage loan sales and repayments.

(1) Wholesale exposures increased during the six months ended June 30, 2018 primarily due to increases in commercial loans and loan commitments.

(2) Repo-style transactions include repurchase and reverse repurchase transactions as well as securities borrowing and securities lending transactions.

(3) OTC derivatives increased during the six months ended June 30, 2018 primarily due to increases in potential future exposure and fair value.

(4) Derivatives CVA decreased during the three months ended June 30, 2018 primarily due to decreases in exposures.

(5) Derivatives CVA increased during the six months ended June 30, 2018 primarily due to increased exposures and changes in credit spreads.

Other exposures include cleared transactions, unsettled transactions, assets other than those reportable in specific exposure categories and non-material portfolios. Other exposures decreased during the three months ended

(6) June 30, 2018 primarily due to a decrease in DTAs arising from temporary differences, as well as a decrease in default fund contributions. Other exposures increased during the six months ended June 30, 2018 primarily due to additional DTAs arising from temporary differences, which are subject to risk-weighting at 250%.

(7) Supervisory 6% multiplier does not apply to derivatives CVA.

Risk levels decreased during the three months ended June 30, 2018 primarily due to a decrease in positions subject (8) to standard specific risk charges. Risk levels increased during the six months ended June 30, 2018 primarily due to increases in exposure levels subject to Stressed Value at Risk and Value at Risk.

(9) Risk-weighted assets declined during the three and six months ended June 30, 2018 primarily due to changes in model inputs regarding volatility and the correlation between market risk factors. Further contributing to the

six-month decline were methodology changes for standard specific risk charges.

- (10) Operational risk-weighted assets decreased during the three and six months ended June 30, 2018 primarily due to changes in operational loss severity and frequency.

As set forth in the table above, total risk-weighted assets under the Basel III Standardized Approach increased from year-end 2017 primarily due to higher credit risk-weighted assets, partially offset by a decrease in market risk-weighted assets. The increase in credit risk-weighted assets was primarily due to increased OTC derivative trade activity and an increase in corporate loan commitments.

Total risk-weighted assets under the Basel III Advanced Approaches decreased from year-end 2017, as lower operational and market risk-weighted assets were partially offset by an increase in credit risk-weighted assets. The decline in operational risk-weighted assets was primarily due to changes in operational loss severity and frequency. The decline in market risk-weighted assets was primarily due to changes in model inputs regarding volatility and the correlation between market risk factors, as

well as methodology changes for standard specific risk charges, partially offset by exposure levels subject to Stressed Value at Risk and Value at Risk. The increase in credit risk-weighted assets was primarily due to increases in commercial loans and loan commitments, changes in OTC derivative trade activity and portfolio credit quality, and additional temporary difference DTAs subject to risk weighting, partially offset by a decline in retail exposures due to reductions in qualifying revolving (cards) exposures attributable to seasonal holiday spending repayments as well as residential mortgage loan sales and repayments.

Supplementary Leverage Ratio

As set forth in the table below, Citigroup's Supplementary Leverage ratio was 6.6% for the second quarter of 2018, compared to 6.7% for the first quarter of 2018 and 6.7% for the fourth quarter of 2017. The decline in the ratio quarter-over-quarter was principally driven by the return of capital to common shareholders, detrimental net movements in AOCI, and an increase in Total Leverage Exposure primarily due to growth in average on-balance sheet assets, partially offset by quarterly net income of \$4.5 billion. The ratio decreased from the fourth quarter of 2017, principally

driven by the return of capital to common shareholders, detrimental net movements in AOCI, and an increase in Total Leverage Exposure primarily due to growth in off-balance sheet commitments, partially offset by year-to-date net income.

The following table sets forth Citi's Supplementary Leverage ratio and related components for the three months ended June 30, 2018 and December 31, 2017.

Citigroup Basel III Supplementary Leverage Ratio and Related Components

In millions of dollars, except ratios	June 30, 2018	December 31, 2017
Tier 1 Capital	\$ 162,002	\$ 162,377
Total Leverage Exposure (TLE)		
On-balance sheet assets ⁽¹⁾	\$ 1,917,102	\$ 1,909,699
Certain off-balance sheet exposures: ⁽²⁾		
Potential future exposure on derivative contracts	189,465	191,555
Effective notional of sold credit derivatives, net ⁽³⁾	54,456	59,207
Counterparty credit risk for repo-style transactions ⁽⁴⁾	25,732	27,005
Unconditionally cancellable commitments	67,896	67,644
Other off-balance sheet exposures	239,708	218,754
Total of certain off-balance sheet exposures	\$ 577,257	\$ 564,165
Less: Tier 1 Capital deductions	40,862	41,373
Total Leverage Exposure	\$ 2,453,497	\$ 2,432,491
Supplementary Leverage ratio	6.60	% 6.68 %

(1) Represents the daily average of on-balance sheet assets for the quarter.

(2) Represents the average of certain off-balance sheet exposures calculated as of the last day of each month in the quarter.

(3) Under the U.S. Basel III rules, banking organizations are required to include in TLE the effective notional amount of sold credit derivatives, with netting of exposures permitted if certain conditions are met.

(4) Repo-style transactions include repurchase and reverse repurchase transactions as well as securities borrowing and securities lending transactions.

Capital Resources of Citigroup's Subsidiary U.S. Depository Institutions

Citigroup's subsidiary U.S. depository institutions are also subject to regulatory capital standards issued by their respective primary federal bank regulatory agencies, which are similar to the standards of the Federal Reserve Board. During 2018, Citi's primary subsidiary U.S. depository institution, Citibank, N.A. (Citibank), is subject to effective minimum Common Equity Tier 1 Capital, Tier 1 Capital and Total Capital ratios, inclusive of the 75% phase-in of the 2.5% Capital Conservation Buffer, of 6.375%, 7.875% and 9.875%, respectively. Citibank's effective minimum Common Equity Tier 1 Capital, Tier 1 Capital and Total Capital ratios during 2017, inclusive of the 50% phase-in of

the 2.5% Capital Conservation Buffer, were 5.75%, 7.25% and 9.25%, respectively. Citibank is required to maintain stated minimum Common Equity Tier 1 Capital, Tier 1 Capital and Total Capital ratios of 4.5%, 6% and 8%, respectively.

The following tables set forth the capital tiers, total risk-weighted assets and underlying risk components, risk-based capital ratios, quarterly adjusted average total assets, Total Leverage Exposure and leverage ratios for Citibank, Citi's primary subsidiary U.S. depository institution, as of June 30, 2018 and December 31, 2017.

Citibank Capital Components and Ratios

In millions of dollars, except ratios	June 30, 2018		December 31, 2017	
	Advanced Approaches	Standardized Approach	Advanced Approaches	Standardized Approach
Common Equity Tier 1 Capital	\$128,820	\$128,820	\$122,848	\$122,848
Tier 1 Capital	130,928	130,928	124,952	124,952
Total Capital (Tier 1 Capital + Tier 2 Capital) ⁽¹⁾	144,418	154,654	138,008	148,946
Total Risk-Weighted Assets	948,803	1,033,050	965,435	1,024,502
Credit Risk	\$667,530	\$994,787	\$674,659	\$980,324
Market Risk	37,869	38,263	43,300	44,178
Operational Risk	243,404	—	247,476	—
Common Equity Tier 1 Capital ratio ⁽²⁾⁽³⁾⁽⁴⁾	13.58	% 12.47	% 12.72	% 11.99
Tier 1 Capital ratio ⁽²⁾⁽³⁾⁽⁴⁾	13.80	12.67	12.94	12.20
Total Capital ratio ⁽²⁾⁽³⁾⁽⁴⁾	15.22	14.97	14.29	14.54
In millions of dollars, except ratios	June 30, 2018	December 31, 2017		
Quarterly Adjusted Average Total Assets ⁽⁵⁾	\$1,375,919	\$1,401,187		
Total Leverage Exposure ⁽⁶⁾	1,893,607	1,900,641		
Tier 1 Leverage ratio ⁽²⁾⁽⁴⁾	9.52	% 8.92	%	
Supplementary Leverage ratio ⁽²⁾⁽⁴⁾	6.91	6.57		

Under the Advanced Approaches framework, eligible credit reserves that exceed expected credit losses are eligible for inclusion in Tier 2 Capital to the extent the excess reserves do not exceed 0.6% of credit risk-weighted assets, (1) which differs from the Standardized Approach in which the allowance for credit losses is eligible for inclusion in Tier 2 Capital up to 1.25% of credit risk-weighted assets, with any excess allowance for credit losses being deducted in arriving at credit risk-weighted assets.

Citibank's risk-based capital and leverage ratios and related components as of December 31, 2017 are non-GAAP (2) financial measures, which reflect full implementation of regulatory capital adjustments and deductions prior to the effective date of January 1, 2018.

As of June 30, 2018, Citibank's reportable Common Equity Tier 1 Capital, Tier 1 Capital and Total Capital ratios were the lower derived under the Basel III Standardized Approach. As of December 31, 2017, Citibank's reportable (3) Common Equity Tier 1 Capital and Tier 1 Capital ratios were the lower derived under the Basel III Standardized Approach, whereas the reportable Total Capital ratio was the lower derived under the Basel III Advanced Approaches framework.

- Citibank must maintain minimum Common Equity Tier 1 Capital, Tier 1 Capital, Total Capital and Tier 1 Leverage ratios of 6.5%, 8.0%, 10.0% and 5.0%, respectively, to be considered “well capitalized” under the revised Prompt Corrective Action (PCA) regulations applicable to insured depository institutions as established by the U.S. Basel III rules. Effective January 1, 2018, Citibank must also maintain a minimum Supplementary Leverage ratio of 6.0% to be considered “well capitalized.” For additional information, see “Capital Resources—Current Regulatory Capital Standards—Prompt Corrective Action Framework” in Citigroup’s 2017 Annual Report on Form 10-K.
- (4) Basel III rules. Effective January 1, 2018, Citibank must also maintain a minimum Supplementary Leverage ratio of 6.0% to be considered “well capitalized.” For additional information, see “Capital Resources—Current Regulatory Capital Standards—Prompt Corrective Action Framework” in Citigroup’s 2017 Annual Report on Form 10-K.
 - (5) Tier 1 Leverage ratio denominator.
 - (6) Supplementary Leverage ratio denominator.

As indicated in the table above, Citibank’s capital ratios at June 30, 2018 were in excess of the stated and effective minimum requirements under the U.S. Basel III

rules. In addition, Citibank was also “well capitalized” as of June 30, 2018 under the revised PCA regulations.

Impact of Changes on Citigroup and Citibank Capital Ratios

The following tables present the estimated sensitivity of Citigroup's and Citibank's capital ratios to changes of \$100 million in Common Equity Tier 1 Capital, Tier 1 Capital and Total Capital (numerator), and changes of \$1 billion in Advanced Approaches and Standardized Approach risk-weighted assets and quarterly adjusted average total assets, as well as Total Leverage Exposure (denominator), as of June 30, 2018. This information is provided for the purpose

of analyzing the impact that a change in Citigroup's or Citibank's financial position or results of operations could have on these ratios. These sensitivities only consider a single change to either a component of capital, risk-weighted assets, quarterly adjusted average total assets or Total Leverage Exposure. Accordingly, an event that affects more than one factor may have a larger basis point impact than is reflected in these tables.

Impact of Changes on Citigroup and Citibank Risk-Based Capital Ratios

In basis points	Common Equity Tier 1 Capital ratio		Tier 1 Capital ratio		Total Capital ratio	
	Impact of \$100 million change in Common Equity Tier 1 Capital	Impact of \$1 billion change in risk-weighted assets	Impact of \$100 million change in Tier 1 Capital	Impact of \$1 billion change in risk-weighted assets	Impact of \$100 million change in Total Capital	Impact of \$1 billion change in risk-weighted assets
Citigroup						
Advanced Approaches	0.9	1.1	0.9	1.2	0.9	1.4
Standardized Approach	0.8	1.0	0.8	1.2	0.8	1.4
Citibank						
Advanced Approaches	1.1	1.4	1.1	1.5	1.1	1.6
Standardized Approach	1.0	1.2	1.0	1.2	1.0	1.5

Impact of Changes on Citigroup and Citibank Leverage Ratios

In basis points	Tier 1 Leverage ratio		Supplementary Leverage ratio	
	Impact of \$100 million change in Tier 1 Capital	Impact of \$1 billion change in quarterly adjusted average total assets	Impact of \$100 million change in Tier 1 Capital	Impact of \$1 billion change in Total Leverage Exposure
Citigroup	0.5	0.5	0.4	0.3
Citibank	0.7	0.7	0.5	0.4

Citigroup Broker-Dealer Subsidiaries

At June 30, 2018, Citigroup Global Markets Inc., a U.S. broker-dealer registered with the SEC that is an indirect wholly owned subsidiary of Citigroup, had net capital, computed in accordance with the SEC's net capital rule, of \$10.2 billion, which exceeded the minimum requirement by \$7.8 billion.

Moreover, Citigroup Global Markets Limited, a broker-dealer registered with the United Kingdom's Prudential Regulation Authority (PRA) that is also an indirect wholly owned subsidiary of Citigroup, had total capital of \$20.8 billion at June 30, 2018, which exceeded the PRA's minimum regulatory capital requirements.

In addition, certain of Citi's other broker-dealer subsidiaries are subject to regulation in the countries in which they do business, including requirements to maintain specified levels of net capital or its equivalent. Citigroup's other broker-dealer subsidiaries were in compliance with their regulatory capital requirements at June 30, 2018.

Regulatory Capital Standards Developments

Revisions to the Securitization Framework

In May 2018, the Basel Committee on Banking Supervision (Basel Committee) issued two standards: one which establishes criteria for identifying “simple, transparent, and comparable” (STC) short-term securitizations, and another which provides for an alternative, and potentially preferential, regulatory capital treatment for short-term securitizations identified as STC. The Basel Committee had previously issued criteria solely for identifying STC securitizations in July 2015, and also previously issued an alternative regulatory capital treatment for STC securitizations in July 2016. The May 2018 standards, however, introduce identification criteria and regulatory capital treatments that are uniquely tailored to short-term securitizations, with a focus on exposures related to asset-backed commercial paper conduits.

The U.S. banking agencies may establish specific regulatory capital treatment for STC short-term securitizations in the future, based upon the revisions adopted by the Basel Committee.

Revised Assessment Framework for Global Systemically Important Banks

In July 2018, the Basel Committee issued a standard which revises the framework for assessing the global systemic importance of banks, beginning with the 2021 assessment. The current framework employed by the Basel Committee as to the identification of GSIBs and the assessment of a surcharge is based primarily on quantitative measurement indicators underlying five equally weighted broad categories of systemic importance: (i) size, (ii) interconnectedness, (iii) crossjurisdictional activity, (iv) substitutability/financial institution infrastructure, and (v) complexity. With the exception of size, each of the other categories is composed of multiple indicators, amounting to 12 indicators in total. The standard, which reflects the results of the Basel Committee’s planned initial review, sets forth several modifications to its GSIB framework, including the introduction within the substitutability/financial institution infrastructure category of a trading volume indicator, accompanied by an equivalent reduction in the current weighting of the existing underwriting indicator. However, because the Basel Committee did not proceed with its proposed removal of the existing cap on the substitutability/financial institution infrastructure category, the revisions to these two indicators would not impact Citi. Moreover, the Basel Committee’s requirement to expand the scope of consolidation to include exposures of insurance subsidiaries within the size, interconnectedness, and complexity categories would raise the global aggregate of these respective measures of systemic importance to which all GSIBs are subject. As a result, it is estimated that Citi would benefit on a relative basis vis-a-vis certain other GSIBs, given that its insurance subsidiaries are presently consolidated under U.S. generally accepted accounting principles and for regulatory purposes.

In contrast, a U.S. bank holding company that is designated a GSIB under the Federal Reserve Board’s rule is required, on an annual basis, to calculate a surcharge using two methods, and is subject to the higher of the resulting two surcharges. The first method (“method 1”) is based on the same five broad categories of systemic importance resident under the Basel Committee’s framework to identify a GSIB and derive a surcharge. Under the second method (“method 2”), the substitutability category is replaced with a quantitative measure intended to assess the extent of a GSIB’s reliance on short-term wholesale funding.

Accordingly, if the Federal Reserve Board were to adopt the Basel Committee’s revisions with respect to the U.S. GSIB framework, Citi’s estimated method 1 GSIB surcharge and method 2 GSIB surcharge would remain unchanged. Although method 2 remains Citi’s binding constraint for the GSIB surcharge, Citi’s method 1 GSIB surcharge will be used to determine certain of Citi’s Total Loss-Absorbing Capacity requirements in the future.

Tangible Common Equity, Book Value Per Share, Tangible Book Value Per Share and Returns on Equity

Tangible common equity (TCE), as defined by Citi, represents common stockholders' equity less goodwill and identifiable intangible assets (other than MSRs). Other companies may calculate TCE in a different manner. TCE, tangible book value per share and returns on average TCE are non-GAAP financial measures.

In millions of dollars or shares, except per share amounts	June 30, 2018	December 31, 2017
Total Citigroup stockholders' equity	\$200,094	\$200,740
Less: Preferred stock	19,035	19,253
Common stockholders' equity	\$181,059	\$181,487
Less:		
Goodwill	22,058	22,256
Identifiable intangible assets (other than MSRs)	4,729	4,588
Goodwill and identifiable intangible assets (other than MSRs) related to assets held-for-sale (HFS)	32	32
Tangible common equity (TCE)	\$154,240	\$154,611
Common shares outstanding (CSO)	2,516.6	2,569.9
Book value per share (common equity/CSO)	\$71.95	\$70.62
Tangible book value per share (TCE/CSO)	61.29	60.16

In millions of dollars	Three Months Ended June 30, 2018	Three Months Ended June 30, 2017	Six Months Ended June 30, 2018	Six Months Ended June 30, 2017
Net income available to common shareholders	\$4,172	\$3,552	\$8,520	\$7,341
Average common stockholders' equity ⁽¹⁾	\$181,229	\$209,693	\$176,670	\$208,298
Average TCE	\$154,921	\$182,404	\$154,818	\$181,276
Return on average common stockholders' equity	9.2	%6.8	%9.7	%7.1
Return on average TCE (ROTCE) ⁽²⁾	10.8	7.8	11.1	8.2

(1) Average common stockholders' equity for the 2018 periods include the \$22.6 billion impact from Tax Reform recorded at the end of the fourth quarter of 2017.

(2) ROTCE represents annualized net income available to common shareholders as a percentage of average TCE.

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For additional information regarding certain credit risk, market risk and other quantitative and qualitative (1) information, refer to Citi's Pillar 3 Basel III Advanced Approaches Disclosures, as required by the rules of the Federal Reserve Board, on Citi's Investor Relations website.

MANAGING GLOBAL RISK

For Citi, effective risk management is of primary importance to its overall operations. Accordingly, Citi's risk management process has been designed to identify, 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 mission and value proposition, the key principles that guide it and Citi's risk appetite.

For more information on Citi's management of global risk, including its three lines of defense, see "Managing Global Risk" in Citi's 2017 Annual Report on Form 10-K.

CREDIT RISK

For additional information on credit risk, including Citi's credit risk management, measurement and stress testing, see "Credit Risk" and "Risk Factors" in Citi's 2017 Annual Report on Form 10-K.

CONSUMER CREDIT

Citi provides traditional retail banking, including commercial banking, and credit card products in 19 countries and jurisdictions through North America GCB, Latin America GCB and Asia GCB. The retail banking products include consumer mortgages, home equity, personal and commercial loans and lines of credit and similar related products with a focus on lending to prime customers. Citi uses its risk appetite

framework to define its lending parameters. In addition, Citi uses proprietary scoring models for new customer approvals. As stated in "Global Consumer Banking" above, GCB's overall strategy is to leverage Citi's global footprint and be the pre-eminent bank for the affluent and emerging affluent consumers in large urban centers. In credit cards and in certain retail markets, Citi serves customers in a somewhat broader set of segments and geographies. GCB's commercial banking business focuses on small to mid-sized businesses.

Consumer Credit Portfolio

The following table shows Citi's quarterly end-of-period consumer loans⁽¹⁾

In billions of dollars	2Q'17	3Q'17	4Q'17	1Q'18	2Q'18
Retail banking:					
Mortgages	\$81.4	\$81.4	\$81.7	\$82.1	\$80.5
Commercial banking	34.8	35.5	36.3	36.8	36.5
Personal and other	27.2	27.3	27.9	28.5	28.1
Total retail banking	\$143.4	\$144.2	\$145.9	\$147.4	\$145.1
Cards:					
Citi-branded cards	\$109.9	\$110.7	\$115.7	\$110.6	\$112.3
Citi retail services	45.2	45.9	49.2	46.0	48.6
Total cards	\$155.1	\$156.6	\$164.9	\$156.6	\$160.9
Total GCB	\$298.5	\$300.8	\$310.8	\$304.0	\$306.0
GCB regional distribution:					
North America	62	% 62	% 63	% 61	% 63
Latin America	9	9	8	9	8
Asia ⁽²⁾	29	29	29	30	29
Total GCB	100	% 100	% 100	% 100	% 100
Corporate/Other ⁽³⁾	\$26.8	\$24.8	\$22.9	\$21.1	\$17.6
Total consumer loans	\$325.3	\$325.6	\$333.7	\$325.1	\$323.6

- (1) End-of-period loans include interest and fees on credit cards.
- (2) Asia includes loans and leases in certain EMEA countries for all periods presented.
- (3) Primarily consists of legacy assets, principally North America consumer mortgages.

For information on changes to Citi's end-of-period consumer loans, see "Liquidity Risk—Loans" below.

Overall Consumer Credit Trends

The following charts show the quarterly trends in delinquencies and net credit losses across both retail banking, including commercial banking, and cards for total GCB and by region.

Global Consumer Banking

North America GCB

North America GCB provides mortgages, home equity loans, personal loans and commercial banking products through Citi's retail banking network and card products through Citi-branded cards and Citi retail services businesses. The retail bank is concentrated in six major metropolitan cities in the United States (for additional information on the U.S. retail bank, see "North America GCB" above).

As of June 30, 2018, approximately 71% of North America GCB consumer loans consisted of Citi-branded and Citi retail services cards, which generally drives the overall credit performance of North America GCB (for additional information on North America GCB's cards portfolios, including delinquency and net credit loss rates, see "Credit Card Trends" below).

As shown in the chart above, quarter-over-quarter net credit loss and 90+ days past due delinquency rates decreased, primarily due to seasonality in both cards portfolios. Year-over-year, net credit loss and delinquency rates increased, driven by seasoning in both cards portfolios, as well as an increase in net flow rates in later delinquency buckets in Citi retail services.

Latin America GCB

Latin America GCB operates in Mexico through Citibanamex, one of Mexico's largest banks, and provides credit cards, consumer mortgages, personal loans and commercial banking products. Latin America GCB serves a more mass market segment in Mexico and focuses on developing multi-product relationships with customers.

As set forth in the chart above, the 90+ days past due delinquency rate increased quarter-over-quarter, primarily driven by seasonality in the cards portfolio. The increase in the quarter-over-quarter net credit loss rate was driven by the commercial portfolio. On a year-over-year basis, both loss and delinquency rates were broadly stable.

Asia⁽¹⁾ GCB

(1) Asia includes GCB activities in certain EMEA countries for all periods presented.

Asia GCB operates in 17 countries in Asia and EMEA and provides credit cards, consumer mortgages, personal loans and commercial banking products.

As shown in the chart above, 90+ days past due delinquency and net credit loss rates were largely stable in Asia GCB quarter-over-quarter and year-over-year as of the second quarter of 2018. This stability reflects the strong credit profiles in Asia GCB's target customer segments. In addition, regulatory changes in many markets in Asia over the past few years have resulted in stable portfolio credit quality.

For additional information on cost of credit, loan delinquency and other information for Citi's consumer loan portfolios, see each respective business's results of operations above and Note 13 to the Consolidated Financial Statements.

Credit Card Trends

The following charts show the quarterly trends in delinquencies and net credit losses for total GCB cards, Citi's North America Citi-branded cards and Citi retail services portfolios as well as for Citi's Latin America and Asia Citi-branded cards portfolios.

Global Cards

North America Citi-Branded Cards

North America GCB's Citi-branded cards portfolio issues proprietary and co-branded cards. As shown in the chart above, the net credit loss rate was stable quarter-over-quarter while the 90+ days past due delinquency rate decreased primarily due to seasonality. Year-over-year increases in loss and delinquency rates were driven by portfolio seasoning.

North America Citi Retail Services

Citi retail services partners directly with more than 20 retailers and dealers to offer private-label and co-branded consumer and commercial cards. Citi retail services' target market is focused on select industry segments such as home improvement, specialty retail, consumer electronics and fuel. Citi retail services continually evaluates opportunities to add partners within target industries that have strong loyalty, lending or payment programs and growth potential. As shown in the chart above, Citi retail services' delinquency and net credit loss rates decreased quarter-over-quarter mainly due to seasonality. The delinquency and net credit loss rates increased year-over-year, primarily due to an increase in net flow rates in later delinquency buckets and seasoning.

Latin America Citi-Branded Cards

Latin America GCB issues proprietary and co-branded cards. As set forth in the chart above, quarter-over-quarter, the net credit loss rate decreased, while the 90+ days past due delinquency rate increased, both primarily due to seasonality. The net credit loss and delinquency rates increased year-over-year primarily due to portfolio seasoning.

Asia Citi-Branded Cards⁽¹⁾

(1) Asia includes loans and leases in certain EMEA countries for all periods presented.

Asia GCB issues proprietary and co-branded cards. As set forth in the chart above, 90+ days past due delinquency rates have remained broadly stable, driven by the mature and well-diversified cards portfolios. The increase in both the quarter-over-quarter and year-over-year loss rates was primarily driven by the conversion of an acquired portfolio in Australia.

For additional information on cost of credit, delinquency and other information for Citi's cards portfolios, see each respective business's results of operations above and Note 13 to the Consolidated Financial Statements.

North America Cards FICO Distribution

The following tables show the current FICO score distributions for Citi's North America Citi-branded cards and Citi retail services portfolios based on end-of-period receivables. FICO scores are updated monthly for substantially all of the portfolio and on a quarterly basis for the remaining portfolio.

Citi-Branded

FICO distribution	June 30, 2018	March 31, 2018	June 30, 2017
> 760	43 %	41 %	43 %
680 - 760	40	42	42
< 680	17	17	15
Total	100 %	100 %	100 %

Citi Retail Services

FICO distribution	June 30, 2018	March 31, 2018	June 30, 2017
> 760	24 %	22 %	23 %
680 - 760	43	43	43
< 680	33	35	34
Total	100 %	100 %	100 %

The percentage of loans outstanding with borrowers with FICO scores greater than 760 increased sequentially due to seasonality in both cards portfolios and the impact of the L.L.Bean portfolio acquisition in Citi retail services. The portfolios continued to demonstrate strong underlying credit quality. For additional information on FICO scores, see Note 13 to the Consolidated Financial Statements.

North America Consumer Mortgage Lending

Citi's North America consumer mortgage portfolio consists of both residential first mortgages and home equity loans. The following table shows the outstanding quarterly end-of-period loans for Citi's North America residential first mortgage and home equity loan portfolios:

In billions of dollars 2Q'17 3Q'17 4Q'17 1Q'18 2Q'18

GCB:

Residential firsts	\$40.2	\$40.1	\$40.1	\$40.1	\$40.3
Home equity	4.1	4.1	4.2	4.1	4.1
Total GCB	\$44.3	\$44.2	\$44.3	\$44.2	\$44.4

Corporate/Other:

Residential firsts	\$11.0	\$10.1	\$9.3	\$8.1	\$7.6
Home equity	12.4	11.5	10.6	9.9	8.8
Total Corporate/Other	\$23.4	\$21.6	\$19.9	\$18.0	\$16.4

Total Citigroup—North America	\$67.7	\$65.8	\$64.2	\$62.2	\$60.8
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For additional information on delinquency and net credit loss trends in Citi's consumer mortgage portfolio, see "Additional Consumer Credit Details" below.

Home Equity Loans—Revolving HELOCs

As set forth in the table above, Citi had \$12.9 billion of home equity loans as of June 30, 2018, of which \$2.8 billion were fixed-rate home equity loans and \$10.1 billion were extended under home equity lines of credit (Revolving HELOCs). Fixed-rate home equity loans are fully amortizing. Revolving HELOCs allow for amounts to be drawn for a period of time with the payment of interest only until the end of the draw period, when the outstanding amount is converted to an amortizing loan, or "reset" (the interest-only payment feature during the revolving period is standard for this product across the industry). Upon reset, these borrowers will be required to pay both interest, usually at a variable rate, and principal that amortizes typically over 20 years, rather than the standard 30-year amortization. Of the Revolving HELOCs at June 30, 2018, \$6.4 billion had reset (compared to \$6.6 billion at March 31, 2018) and \$3.7 billion were still within their revolving period and had not reset (compared to \$4.1 billion at March 31, 2018). The following chart indicates the FICO and combined loan-to-value (CLTV) characteristics of Citi's Revolving HELOCs portfolio and the year in which they reset:

North America Home Equity Lines of Credit Amortization – Citigroup

Total ENR by Reset Year

In billions of dollars as of June 30, 2018

Note: Totals may not sum due to rounding.

Approximately 63% of Citi's total Revolving HELOCs portfolio had reset as of June 30, 2018 (compared to 62% as of March 31, 2018). Of the remaining Revolving HELOCs portfolio, approximately 10% will commence amortization during the remainder of 2018. Citi's customers with Revolving HELOCs that reset could experience "payment shock" due to the higher required payments on the loans. Citi currently estimates that the monthly loan payment for its Revolving HELOCs that reset during the remainder of 2018 could increase on average by approximately \$266, or 99%. Increases in interest rates could further increase these payments given the variable nature of the interest rates on these loans post-reset. Borrowers' high loan-to-value positions, as well as the cost and availability of refinancing options, could limit borrowers' ability to refinance their Revolving HELOCs as these loans begin to reset.

Approximately 5.3% of the Revolving HELOCs that have reset as of June 30, 2018 were 30+ days past due, compared to 3.6% of the total outstanding home equity loan portfolio (amortizing and non-amortizing). This compared to 5.4% and 3.6%, respectively, as of March 31, 2018. As newly amortizing loans continue to season, the delinquency rate of Citi's total home equity loan portfolio could increase. In addition, resets to date have generally occurred during a period of historically low interest rates, which Citi believes has likely reduced the overall "payment shock" to the borrower.

Citi monitors this reset risk closely and will continue to consider any potential impact in determining its allowance for loan loss reserves. In addition, management continues to review and take additional actions to offset potential reset risk, such as a borrower outreach program to provide reset risk education and proactively working with high-risk borrowers through a specialized single point of contact unit.

Additional Consumer Credit Details

Consumer Loan Delinquency Amounts and Ratios

In millions of dollars, except EOP loan amounts in billions	EOP loans ⁽¹⁾		90+ days past due ⁽²⁾		30–89 days past due ⁽²⁾		
	June 30, 2018	June 30, 2018	March 31, 2018	June 30, 2017	June 30, 2018	March 31, 2018	June 30, 2017
Global Consumer Banking ⁽³⁾⁽⁴⁾							
Total	\$ 306.0	\$2,345	\$2,379	\$2,183	\$2,558	\$2,710	\$2,498
Ratio		0.77	%0.78	%0.73	%0.84	%0.89	%0.84
Retail banking							
Total	\$ 145.1	\$500	\$493	\$477	\$754	\$830	\$747
Ratio		0.35	%0.34	%0.33	%0.52	%0.57	%0.52
North America	55.7	179	184	155	252	227	191
Ratio		0.33	%0.34	%0.28	%0.46	%0.41	%0.35
Latin America	20.1	132	128	150	183	248	216
Ratio		0.66	%0.60	%0.71	%0.91	%1.17	%1.03
Asia ⁽⁵⁾	69.3	189	181	172	319	355	340
Ratio		0.27	%0.26	%0.26	%0.46	%0.50	%0.51
Cards							
Total	\$ 160.9	\$1,845	\$1,886	\$1,706	\$1,804	\$1,880	\$1,751
Ratio		1.15	%1.20	%1.10	%1.12	%1.20	%1.13
North America—Citi-branded	88.1	712	731	659	627	669	619
Ratio		0.81	%0.85	%0.77	%0.71	%0.78	%0.72
North America—Citi retail services	48.6	781	797	693	761	791	730
Ratio		1.61	%1.73	%1.53	%1.57	%1.72	%1.62
Latin America	5.4	160	160	161	156	160	151
Ratio		2.96	%2.81	%2.93	%2.89	%2.81	%2.75
Asia ⁽⁵⁾	18.8	192	198	193	260	260	251
Ratio		1.02	%1.03	%1.03	%1.38	%1.35	%1.34
Corporate/Other—Consumer							
Total	\$ 17.6	\$415	\$478	\$601	\$355	\$393	\$554
Ratio		2.49	%2.38	%2.37	%2.13	%1.96	%2.18
International	—	—	32	63	—	44	44
Ratio		—	1.88	%3.50	%—	2.59	%2.44
North America	17.6	415	446	538	355	349	510
Ratio		2.49	%2.42	%2.28	%2.13	%1.90	%2.16
Total Citigroup	\$ 323.6	\$2,760	\$2,857	\$2,784	\$2,913	\$3,103	\$3,052
Ratio		0.86	%0.88	%0.86	%0.90	%0.96	%0.94

(1)End-of-period (EOP) loans include interest and fees on credit cards.

(2)The ratios of 90+ days past due and 30–89 days past due are calculated based on EOP loans, net of unearned income.

The 90+ days past due balances for North America—Citi-branded and North America—Citi retail services are generally (3)still accruing interest. Citigroup’s policy is generally to accrue interest on credit card loans until 180 days past due, unless notification of bankruptcy filing has been received earlier.

(4)The 90+ days past due and 30–89 days past due and related ratios for GCB North America exclude U.S. mortgage loans that are guaranteed by U.S. government-sponsored entities since the potential loss predominantly resides within the U.S. government-sponsored entities. The amounts excluded for loans 90+ days past due and (EOP loans)

were \$244 million (\$0.7 billion), \$272 million (\$0.7 billion) and \$295 million (\$0.8 billion) at June 30, 2018, March 31, 2018 and June 30, 2017, respectively. The amounts excluded for loans 30–89 days past due (EOP loans have the same adjustment as above) were \$87 million, \$92 million and \$84 million at June 30, 2018, March 31, 2018 and June 30, 2017, respectively.

(5) Asia includes delinquencies and loans in certain EMEA countries for all periods presented.

The 90+ days past due and 30–89 days past due and related ratios for Corporate/Other—North America consumer exclude U.S. mortgage loans that are guaranteed by U.S. government-sponsored entities since the potential loss predominantly resides within the U.S. government-sponsored entities. The amounts excluded for loans 90+ days

(6) past due (and EOP loans) were \$0.4 billion (\$0.9 billion), \$0.5 billion (\$0.9 billion) and \$0.7 billion (\$1.3 billion) at June 30, 2018, March 31, 2018 and June 30, 2017, respectively. The amounts excluded for loans 30–89 days past due (EOP loans have the same adjustment as above) for each period were \$0.1 billion, \$0.1 billion and \$0.2 billion at June 30, 2018, March 31, 2018 and June 30, 2017, respectively.

Consumer Loan Net Credit Losses and Ratios

In millions of dollars, except average loan amounts in billions	Average loans ⁽¹⁾	Net credit losses ⁽²⁾⁽³⁾			
	2Q18	2Q18	1Q18	2Q17	
Global Consumer Banking					
Total	\$ 303.1	\$ 1,726	\$ 1,736	\$ 1,615	
Ratio		2.28	% 2.30	% 2.20	%
Retail banking					
Total	\$ 145.6	\$ 228	\$ 232	\$ 244	
Ratio		0.63	% 0.64	% 0.69	%
North America	55.6	32	43	39	
Ratio		0.23	% 0.31	% 0.28	%
Latin America	20.1	138	132	151	
Ratio		2.75	% 2.59	% 3.00	%
Asia ⁽⁴⁾	69.9	58	57	54	
Ratio		0.33	% 0.33	% 0.33	%
Cards					
Total	\$ 157.5	\$ 1,498	\$ 1,504	\$ 1,371	
Ratio		3.81	% 3.83	% 3.63	%
North America—Citi-branded	86.6	657	651	611	
Ratio		3.04	% 3.04	% 2.94	%
North America—Citi retail services	46.6	589	602	531	
Ratio		5.07	% 5.18	% 4.79	%
Latin America	5.4	140	146	126	
Ratio		10.40	% 10.57	% 9.54	%
Asia ⁽⁴⁾	18.9	112	105	103	
Ratio		2.38	% 2.17	% 2.25	%
Corporate/Other—Consumer					
Total	\$ 19.5	\$(20)	\$ 35	\$ 18	
Ratio		(0.41)	% 0.64	% 0.26	%
International	1.1	19	23	24	
Ratio		6.93	% 5.49	% 5.07	%
North America	18.4	(39)	12	(6)	
Ratio		(0.85)	% 0.24	% 0.09	%
Other		—	—	—	
Total Citigroup	\$ 322.6	\$ 1,706	\$ 1,771	\$ 1,633	
Ratio		2.12	% 2.19	% 2.04	%

(1) Average loans include interest and fees on credit cards.

(2) The ratios of net credit losses are calculated based on average loans, net of unearned income.

In October 2016, Citi entered into an agreement to sell Citi's Brazil consumer banking business. The sale was completed at the end of the fourth quarter 2017. As a result of HFS accounting treatment, approximately \$34 million of net credit losses (NCLs) were recorded as a reduction in revenue (Other revenue) during the second quarter of 2017. Accordingly, these NCLs are not included in this table. Loans classified as HFS are excluded from this table as they are recorded in Other assets.

(4) Asia includes NCLs and average loans in certain EMEA countries for all periods presented.

CORPORATE CREDIT

Consistent with its overall strategy, Citi's corporate clients are typically large, multinational corporations that value the depth and breadth of Citi's global network. Citi aims to establish relationships with these clients that encompass multiple products, consistent with client needs, including cash management and trade services, foreign exchange, lending, capital markets and M&A advisory.

Corporate Credit Portfolio

The following table sets forth Citi's corporate credit portfolio within ICG (excluding private bank), before consideration of collateral or hedges, by remaining tenor for the periods indicated:

In billions of dollars	At June 30, 2018				March 31, 2018				December 31, 2017			
	Greater				Greater				Greater			
	Due	than	Greater	Total	Due	than	Greater	Total	Due	than	Greater	Total
	within	1 year	than	exposure	within	1 year	than	exposure	within	1 year	than	exposure
	1 year	but	5 years		1 year	but	5 years		1 year	but	5 years	
	5 years	within			5 years	within			5 years	within		
Direct outstandings (on-balance sheet) ⁽¹⁾	\$ 133	\$ 103	\$ 19	\$ 255	\$ 135	\$ 101	\$ 21	\$ 257	\$ 127	\$ 96	\$ 22	\$ 245
Unfunded lending commitments (off-balance sheet) ⁽²⁾	127	235	20	382	121	238	23	382	111	222	20	353
Total exposure	\$ 260	\$ 338	\$ 39	\$ 637	\$ 256	\$ 339	\$ 44	\$ 639	\$ 238	\$ 318	\$ 42	\$ 598

(1) Includes drawn loans, overdrafts, bankers' acceptances and leases.

(2) Includes unused commitments to lend, letters of credit and financial guarantees.

Portfolio Mix—Geography, Counterparty and Industry

Citi's corporate credit portfolio is diverse across geography and counterparty. The following table shows the percentage of this portfolio by region based on Citi's internal management geography:

	June 30,	March 31,	December 31,
	2018	2018	2017
North America	54 %	53 %	54 %
EMEA	27	28	27
Asia	12	12	12
Latin America	7	7	7
Total	100 %	100 %	100 %

The maintenance of accurate and consistent risk ratings across the corporate credit portfolio facilitates the comparison of credit exposure across all lines of business, geographic regions and products. Counterparty risk ratings reflect an estimated probability of default for a counterparty and are derived primarily through the use of validated statistical models, scorecard models and external agency ratings (under defined circumstances), in combination with consideration of factors specific to the obligor or market, such as management experience, competitive position,

regulatory environment and commodity prices. Facility risk ratings are assigned that reflect the probability of default of

the obligor and factors that affect the loss-given-default of the facility, such as support or collateral. Internal obligor ratings that generally correspond to BBB and above are considered investment grade, while those below are considered non-investment grade.

Citigroup also has incorporated environmental factors like climate risk assessment and reporting criteria for certain obligors, as necessary. Factors evaluated include consideration of climate risk to an obligor's business and physical assets and, when relevant, consideration of cost-effective options to reduce greenhouse gas emissions.

The following table presents the corporate credit portfolio by facility risk rating as a percentage of the total corporate credit portfolio:

	Total exposure			
	June 30,	March 31,	December 31,	
	2018	2018	2017	
AAA/AA/A	49 %	48 %	49 %	%
BBB	34	34	34	
BB/B	16	17	16	
CCC or below	1	1	1	
Total	100 %	100 %	100 %	%

Note: Total exposure includes direct outstandings and unfunded lending commitments.

Citi's corporate credit portfolio is also diversified by industry. The following table shows the allocation of Citi's total corporate credit portfolio by industry:

	Total exposure			
	June 30,	March 31,	December 31,	
	2018	2018	2017	
Transportation and industrial	22 %	22 %	22 %	%
Consumer retail and health	16	17	16	
Technology, media and telecom	13	13	12	
Power, chemicals, metals and mining	10	10	10	
Energy and commodities	8	8	8	
Banks/broker-dealers/finance companies	8	8	8	
Real estate	7	7	8	
Public sector	5	5	5	
Insurance and special purpose entities	4	5	5	
Hedge funds	4	4	4	
Other industries	3	1	2	
Total	100 %	100 %	100 %	%

Credit Risk Mitigation

As part of its overall risk management activities, Citigroup uses credit derivatives and other risk mitigants to hedge portions of the credit risk in its corporate credit portfolio, in addition to outright asset sales. The results of the mark-to-market and any realized gains or losses on credit derivatives are reflected primarily in Other revenue in the Consolidated Statement of Income.

At June 30, 2018, March 31, 2018 and December 31, 2017, \$27.4 billion, \$17.0 billion and \$16.3 billion, respectively, of the corporate credit portfolio was economically hedged. Citigroup's expected loss model used in the calculation of its loan loss reserve does not include the favorable impact of credit derivatives and other mitigants that are marked to market. In addition, the reported amounts of direct outstandings and unfunded lending commitments in the tables above do not reflect the impact of these hedging transactions. The credit protection was economically hedging underlying corporate credit portfolio exposures with the following risk rating distribution:

Rating of Hedged Exposure

	June 30, 2018	March 31, 2018	December 31, 2017	
AAA/AA/A	34 %	26 %	23 %	
BBB	46	43	43	
BB/B	18	28	31	
CCC or below	2	3	3	
Total	100 %	100 %	100 %	

The credit protection was economically hedging underlying corporate credit portfolio exposures with the following industry distribution:

Industry of Hedged Exposure

	June 30, 2018	March 31, 2018	December 31, 2017	
Transportation and industrial	25 %	28 %	27 %	
Consumer retail and health	15	9	10	
Technology, media and telecom	15	14	12	
Power, chemicals, metals and mining	14	13	14	
Energy and commodities	11	12	15	
Public sector	7	11	12	
Insurance and special purpose entities	5	4	2	
Banks/broker-dealers	4	6	6	
Other industries	4	3	2	
Total	100 %	100 %	100 %	

ADDITIONAL CONSUMER AND CORPORATE CREDIT DETAILS

Loans Outstanding

	2nd Qtr. 2018	1st Qtr. 2018	4th Qtr. 2017	3rd Qtr. 2017	2nd Qtr. 2017	
In millions of dollars						
Consumer loans						
In U.S. offices						
Mortgage and real estate ⁽¹⁾	\$61,692	\$63,412	\$65,467	\$67,131	\$69,022	
Installment, revolving credit and other	3,759	3,306	3,398	3,191	3,190	
Cards	135,968	131,081	139,006	131,476	130,181	
Commercial and industrial	7,459	7,493	7,840	7,619	7,404	
Total	\$208,878	\$205,292	\$215,711	\$209,417	\$209,797	
In offices outside the U.S.						
Mortgage and real estate ⁽¹⁾	\$43,056	\$44,833	\$44,081	\$43,723	\$43,821	
Installment, revolving credit and other	27,254	27,651	26,556	26,153	26,480	
Cards	24,712	25,993	26,257	25,443	25,376	
Commercial and industrial	18,966	20,526	20,238	20,015	18,956	
Lease financing	55	62	76	77	81	
Total	\$114,043	\$119,065	\$117,208	\$115,411	\$114,714	
Total consumer loans	\$322,921	\$324,357	\$332,919	\$324,828	\$324,511	
Unearned income ⁽²⁾	711	727	737	748	750	
Consumer loans, net of unearned income	\$323,632	\$325,084	\$333,656	\$325,576	\$325,261	
Corporate loans						
In U.S. offices						
Commercial and industrial	\$53,260	\$54,005	\$51,319	\$51,679	\$50,341	
Financial institutions	42,867	40,472	39,128	37,203	36,953	
Mortgage and real estate ⁽¹⁾	46,310	45,581	44,683	43,274	42,041	
Installment, revolving credit and other	32,663	32,866	33,181	32,464	31,611	
Lease financing	1,445	1,463	1,470	1,493	1,467	
Total	\$176,545	\$174,387	\$169,781	\$166,113	\$162,413	
In offices outside the U.S.						
Commercial and industrial	\$98,068	\$101,368	\$93,750	\$93,107	\$91,131	
Financial institutions	38,312	35,659	35,273	33,050	34,844	
Mortgage and real estate ⁽¹⁾	7,261	7,543	7,309	6,383	6,783	
Installment, revolving credit and other	22,755	23,338	22,638	23,830	19,200	
Lease financing	139	167	190	216	234	
Governments and official institutions	5,270	6,170	5,200	5,628	5,518	
Total	\$171,805	\$174,245	\$164,360	\$162,214	\$157,710	
Total corporate loans	\$348,350	\$348,632	\$334,141	\$328,327	\$320,123	
Unearned income ⁽³⁾	(802)	(778)	(763)	(720)	(689)	
Corporate loans, net of unearned income	\$347,548	\$347,854	\$333,378	\$327,607	\$319,434	
Total loans—net of unearned income	\$671,180	\$672,938	\$667,034	\$653,183	\$644,695	
Allowance for loan losses—on drawn exposures	(12,126)	(12,354)	(12,355)	(12,366)	(12,025)	
Total loans—net of unearned income and allowance for credit losses	\$659,054	\$660,584	\$654,679	\$640,817	\$632,670	
Allowance for loan losses as a percentage of total loans—net of unearned income ⁽⁴⁾	1.81	% 1.85	% 1.87	% 1.91	% 1.88	%
Allowance for consumer loan losses as a percentage of total consumer loans—net of unearned income ⁽⁴⁾	3.03	% 3.09	% 2.96	% 3.04	% 2.93	%

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Allowance for corporate loan losses as a percentage of total corporate loans—net of unearned income	0.68	%0.67	%0.76	%0.77	%0.80	%
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(1) Loans secured primarily by real estate.

(2) Unearned income on consumer loans primarily represents unamortized origination fees and costs, premiums and discounts.

(3) Unearned income on corporate loans primarily represents interest received in advance, but not yet earned, on loans originated on a discounted basis.

(4) All periods exclude loans that are carried at fair value.

Details of Credit Loss Experience

	2nd Qtr. 2018	1st Qtr. 2018	4th Qtr. 2017	3rd Qtr. 2017	2nd Qtr. 2017	
In millions of dollars						
Allowance for loan losses at beginning of period	\$12,354	\$12,355	\$12,366	\$12,025	\$12,030	
Provision for loan losses						
Consumer	\$1,764	\$1,881	\$1,785	\$2,142	\$1,620	
Corporate	31	(78)	231	4	46	
Total	\$1,795	\$1,803	\$2,016	\$2,146	\$1,666	
Gross credit losses						
Consumer						
In U.S. offices	\$1,490	\$1,542	\$1,426	\$1,429	\$1,437	
In offices outside the U.S.	599	615	611	642	597	
Corporate						
In U.S. offices	5	65	21	15	72	
In offices outside the U.S.	15	74	221	34	24	
Total	\$2,109	\$2,296	\$2,279	\$2,120	\$2,130	
Credit recoveries ⁽¹⁾						
Consumer						
In U.S. offices	\$255	\$238	\$228	\$167	\$266	
In offices outside the U.S.	128	148	151	170	135	
Corporate						
In U.S. offices	5	13	4	2	15	
In offices outside the U.S.	17	30	16	4	4	
Total	\$405	\$429	\$399	\$343	\$420	
Net credit losses						
In U.S. offices	\$1,235	\$1,356	\$1,215	\$1,275	\$1,228	
In offices outside the U.S.	469	511	665	502	482	
Total	\$1,704	\$1,867	\$1,880	\$1,777	\$1,710	
Other—net ⁽²⁾⁽³⁾⁽⁴⁾⁽⁵⁾⁽⁶⁾⁽⁷⁾	\$(319)	\$63	\$(147)	\$(28)	\$39	
Allowance for loan losses at end of period	\$12,126	\$12,354	\$12,355	\$12,366	\$12,025	
Allowance for loan losses as a percentage of total loans ⁽⁸⁾	1.81	% 1.85	% 1.87	% 1.91	% 1.88	%
Allowance for unfunded lending commitments ⁽⁹⁾	\$1,278	\$1,290	\$1,258	\$1,232	\$1,406	
Total allowance for loan losses and unfunded lending commitments	\$13,404	\$13,644	\$13,613	\$13,598	\$13,431	
Net consumer credit losses	\$1,706	\$1,771	\$1,658	\$1,734	\$1,633	
As a percentage of average consumer loans	2.12	% 2.19	% 2.02	% 2.11	% 2.04	%
Net corporate credit losses (recoveries)	\$(2)	\$96	\$222	\$43	\$77	
As a percentage of average corporate loans	—	% 0.11	% 0.27	% 0.05	% 0.10	%
Allowance by type at end of period ⁽¹⁰⁾						
Consumer	\$9,796	\$10,039	\$9,869	\$9,892	\$9,515	
Corporate	2,330	2,315	2,486	2,474	2,510	
Total	\$12,126	\$12,354	\$12,355	\$12,366	\$12,025	

(1) Recoveries have been reduced by certain collection costs that are incurred only if collection efforts are successful.

(2) Includes all adjustments to the allowance for credit losses, such as changes in the allowance from acquisitions, dispositions, securitizations, FX translation, purchase accounting adjustments, etc.

The second quarter of 2018 includes a reduction of approximately \$137 million related to the sale or transfer to HFS of various loan portfolios, including a reduction of \$33 million related to the transfer of a real estate loan

(3) portfolio to HFS. Additionally, the second quarter includes a decrease of approximately \$164 million related to FX translation.

(4) The first quarter of 2018 includes a reduction of approximately \$55 million related to the sale or transfer to held-for-sale (HFS) of various loan portfolios, including a reduction of \$53 million related to the transfer of a real estate loan portfolio to HFS. Additionally, the first quarter includes an increase of approximately \$118 million related to FX translation.

(5) The fourth quarter of 2017 includes a reduction of approximately \$47 million related to the sale or transfer to HFS of various loan portfolios, including a reduction of \$22 million related to the transfer of a real estate loan portfolio to HFS. Additionally, the fourth quarter includes a decrease of approximately \$106 million related to FX translation.

- (6) The third quarter of 2017 includes a reduction of approximately \$34 million related to the sale or transfer to HFS of various loan portfolios, including a reduction of \$28 million related to the transfer of a real estate loan portfolio to HFS. Additionally, the third quarter includes an increase of approximately \$7 million related to FX translation.

- (7) The second quarter of 2017 includes a reduction of approximately \$19 million related to the sale or transfer to HFS of various loan portfolios, including a reduction of \$19 million related to the transfer of a real estate loan portfolio to HFS. Additionally, the second quarter includes an increase of approximately \$50 million related to FX translation.

- (8) June 30, 2018, March 31, 2018, December 31, 2017, September 30, 2017 and June 30, 2017 exclude \$3.0 billion, \$4.5 billion, \$4.9 billion, \$4.3 billion and \$4.2 billion, respectively, of loans which are carried at fair value.

- (9) Represents additional credit reserves recorded as Other liabilities on the Consolidated Balance Sheet.

- Allowance for loan losses represents management's best estimate of probable losses inherent in the portfolio, as well as probable losses related to large individually evaluated impaired loans and troubled debt restructurings. See (10) "Significant Accounting Policies and Significant Estimates" and Note 1 to the Consolidated Financial Statements in Citi's 2017 Annual Report on Form 10-K. Attribution of the allowance is made for analytical purposes only and the entire allowance is available to absorb probable credit losses inherent in the overall portfolio.

Allowance for Loan Losses

The following tables detail information on Citi's allowance for loan losses, loans and coverage ratios:

In billions of dollars	June 30, 2018			
	Allowance for loan losses	Loans, net of unearned income	Allowance as a percentage of loans ⁽¹⁾	
North America cards ⁽²⁾	\$6.3	\$ 136.7	4.6	%
North America mortgages ⁽³⁾	0.5	60.8	0.8	
North America other	0.3	12.6	2.4	
International cards	1.3	24.1	5.4	
International other ⁽⁴⁾	1.4	89.4	1.6	
Total consumer	\$9.8	\$ 323.6	3.0	%
Total corporate	2.3	347.6	0.7	
Total Citigroup	\$12.1	\$ 671.2	1.8	%

- (1) Allowance as a percentage of loans excludes loans that are carried at fair value.

- (2) Includes both Citi-branded cards and Citi retail services. The \$6.3 billion of loan loss reserves represented approximately 15 months of coincident net credit loss coverage.

- Of the \$0.5 billion, approximately \$0.4 billion was allocated to North America mortgages in Corporate/Other. Of the \$0.5 billion, approximately \$0.2 billion and \$0.3 billion are determined in accordance with ASC 450-20 and ASC 310-10-35 (troubled debt restructurings), respectively. Of the \$60.8 billion in loans, approximately \$57.8 billion and \$2.9 billion of the loans are evaluated in accordance with ASC 450-20 and ASC 310-10-35 (troubled debt restructurings), respectively. For additional information, see Note 14 to the Consolidated Financial Statements.

- (4) Includes mortgages and other retail loans.

In billions of dollars	December 31, 2017			
	Allowance for loan losses	Loans, net of unearned income	Allowance as a percentage of loans ⁽¹⁾	

North America cards ⁽²⁾	\$6.1	\$ 139.7	4.4	%
North America mortgages ⁽³⁾	0.7	64.2	1.1	
North America other	0.3	13.0	2.3	
International cards	1.3	25.7	5.1	
International other ⁽⁴⁾	1.5	91.1	1.6	
Total consumer	\$9.9	\$ 333.7	3.0	%
Total corporate	2.5	333.3	0.8	
Total Citigroup	\$12.4	\$ 667.0	1.9	%

(1) Allowance as a percentage of loans excludes loans that are carried at fair value.

(2) Includes both Citi-branded cards and Citi retail services. The \$6.1 billion of loan loss reserves represented approximately 16 months of coincident net credit loss coverage.

Of the \$0.7 billion, approximately \$0.6 billion was allocated to North America mortgages in Corporate/Other. Of the \$0.7 billion, approximately \$0.2 billion and \$0.5 billion are determined in accordance with ASC 450-20 and ASC 310-10-35 (troubled debt restructurings), respectively. Of the \$64.2 billion in loans, approximately \$60.4 billion and \$3.7 billion of the loans are evaluated in accordance with ASC 450-20 and ASC 310-10-35 (troubled debt restructurings), respectively. For additional information, see Note 14 to the Consolidated Financial Statements.

(4) Includes mortgages and other retail loans.

Non-Accrual Loans and Assets and Renegotiated Loans

There is a certain amount of overlap among non-accrual loans and assets and renegotiated loans. The following summary provides a general description of each category:

Non-Accrual Loans and Assets:

• Corporate and consumer (including commercial banking) non-accrual status is based on the determination that payment of interest or principal is doubtful.

A corporate loan may be classified as non-accrual and still be performing under the terms of the loan structure.

• Payments received on corporate non-accrual loans are generally applied to loan principal and not reflected as interest income. Approximately 68%, 65% and 74% of Citi's corporate non-accrual loans were performing at June 30, 2018, March 31, 2018 and December 31, 2017, respectively.

• Consumer non-accrual status is generally based on aging, i.e., the borrower has fallen behind on payments.

Consumer mortgage loans, other than Federal Housing Administration (FHA) insured loans, are classified as non-accrual within 60 days of notification that the borrower has filed for bankruptcy. In addition, home equity loans are classified as non-accrual if the related residential first mortgage loan is 90 days or more past due.

North America Citi-branded cards and Citi retail services are not included because, under industry standards, credit card loans accrue interest until such loans are charged off, which typically occurs at 180 days of contractual delinquency.

Renegotiated Loans:

• Includes both corporate and consumer loans whose terms have been modified in a troubled debt restructuring (TDR).

• Includes both accrual and non-accrual TDRs.

Non-Accrual Loans

The table below summarizes Citigroup's non-accrual loans as of the periods indicated. Non-accrual loans may still be current on interest payments. In situations where Citi reasonably expects that only a portion of the principal owed will ultimately be collected, all payments received are reflected as a reduction of principal and not as interest income. For all other non-accrual loans, cash interest receipts are generally recorded as revenue.

	Jun. 30, 2018	Mar. 31, 2018	Dec. 31, 2017	Sept. 30, 2017	Jun. 30, 2017
In millions of dollars					
Corporate non-accrual loans ⁽¹⁾					
North America	\$784	\$817	\$784	\$915	\$944
EMEA	391	561	849	681	727
Latin America	204	263	280	312	281
Asia	244	27	29	146	146
Total corporate non-accrual loans	\$1,623	\$1,668	\$1,942	\$2,054	\$2,098
Consumer non-accrual loans ⁽¹⁾					
North America	\$1,373	\$1,500	\$1,650	\$1,721	\$1,754
Latin America	726	791	756	791	793
Asia ⁽²⁾	284	284	284	271	301
Total consumer non-accrual loans	\$2,383	\$2,575	\$2,690	\$2,783	\$2,848
Total non-accrual loans	\$4,006	\$4,243	\$4,632	\$4,837	\$4,946

Excludes purchased distressed loans, as they are generally accreting interest. The carrying value of these loans was (1) \$149 million at June 30, 2018, \$126 million at March 31, 2018, \$167 million at December 31, 2017, \$177 million at September 30, 2017 and \$183 million at June 30, 2017.

(2) Asia GCB includes balances in certain EMEA countries for all periods presented.

The changes in Citigroup's non-accrual loans were as follows:

	Three Months Ended June 30, 2018			Three Months Ended June 30, 2017		
In millions of dollars	Corporate	Consumer	Total	Corporate	Consumer	Total
Non-accrual loans at beginning of period	\$1,668	\$2,575	\$4,243	\$2,339	\$2,955	\$5,294
Additions	628	791	1,419	311	697	1,008
Sales and transfers to HFS	(8)	(68)	(76)	(46)	(82)	(128)
Returned to performing	(36)	(146)	(182)	(3)	(166)	(169)
Paydowns/settlements	(613)	(327)	(940)	(464)	(285)	(749)
Charge-offs	(14)	(372)	(386)	(15)	(318)	(333)
Other	(2)	(70)	(72)	(24)	47	23
Ending balance	\$1,623	\$2,383	\$4,006	\$2,098	\$2,848	\$4,946

In millions of dollars	Six Months Ended June 30, 2018			Six Months Ended June 30, 2017		
	Corporate	Consumer	Total	Corporate	Consumer	Total
Non-accrual loans at beginning of period	\$1,942	\$ 2,690	\$4,632	\$2,421	\$ 3,158	\$5,579
Additions	1,453	1,652	3,105	564	1,521	2,085
Sales and transfers to held-for-sale	(28)	(153)	(181)	(82)	(216)	(298)
Returned to performing	(104)	(354)	(458)	(40)	(329)	(369)
Paydowns/settlements	(1,497)	(597)	(2,094)	(647)	(565)	(1,212)
Charge-offs	(120)	(826)	(946)	(69)	(842)	(911)
Other	(23)	(29)	(52)	(49)	121	72
Ending balance	\$1,623	\$ 2,383	\$4,006	\$2,098	\$ 2,848	\$4,946

The table below summarizes Citigroup's other real estate owned (OREO) assets as of the periods indicated. This represents the carrying value of all real estate property acquired by foreclosure or other legal proceedings when Citi has taken possession of the collateral:

In millions of dollars	Jun. 30, 2018	Mar. 31, 2018	Dec. 31, 2017	Sept. 30, 2017	Jun. 30, 2017
OREO					
North America	\$66	\$70	\$89	\$97	\$128
EMEA	1	—	2	1	1
Latin America	24	29	35	30	31
Asia	10	15	18	15	8
Total OREO	\$101	\$114	\$144	\$143	\$168
Non-accrual assets					
Corporate non-accrual loans	\$1,623	\$1,668	\$1,942	\$2,054	\$2,098
Consumer non-accrual loans	2,383	2,575	2,690	2,783	2,848
Non-accrual loans (NAL)	\$4,006	\$4,243	\$4,632	\$4,837	\$4,946
OREO	\$101	\$114	\$144	\$143	\$168
Non-accrual assets (NAA)	\$4,107	\$4,357	\$4,776	\$4,980	\$5,114
NAL as a percentage of total loans	0.60	%0.63	%0.69	%0.74	%0.77
NAA as a percentage of total assets	0.21	0.23	0.26	0.26	0.27
Allowance for loan losses as a percentage of NAL ⁽¹⁾	303	291	267	256	243

The allowance for loan losses includes the allowance for Citi's credit card portfolios and purchased distressed loans, (1) while the non-accrual loans exclude credit card balances (with the exception of certain international portfolios) and purchased distressed loans as these continue to accrue interest until charge-off.

Renegotiated Loans

The following table presents Citi's loans modified in TDRs:

	Jun. 30, 2018	Dec. 31, 2017
In millions of dollars		
Corporate renegotiated loans ⁽¹⁾		
In U.S. offices		
Commercial and industrial ⁽²⁾	\$205	\$225
Mortgage and real estate	78	90
Financial institutions	25	33
Other	37	45
Total	\$345	\$393
In offices outside the U.S.		
Commercial and industrial ⁽²⁾	\$235	\$392
Mortgage and real estate	9	11
Financial institutions	9	15
Other	—	7
Total	\$253	\$425
Total corporate renegotiated loans	\$598	\$818
Consumer renegotiated loans ⁽³⁾⁽⁴⁾⁽⁵⁾		
In U.S. offices		
Mortgage and real estate ⁽⁶⁾	\$2,919	\$3,709
Cards	1,273	1,246
Installment and other	101	169
Total	\$4,293	\$5,124
In offices outside the U.S.		
Mortgage and real estate	\$322	\$345
Cards	522	541
Installment and other	414	427
Total	\$1,258	\$1,313
Total consumer renegotiated loans	\$5,551	\$6,437

(1) Includes \$489 million and \$715 million of non-accrual loans included in the non-accrual loans table above at June 30, 2018 and December 31, 2017, respectively. The remaining loans are accruing interest.

(2) In addition to modifications reflected as TDRs at June 30, 2018, Citi also modified \$18 million of commercial loans risk rated "Substandard Non-Performing" or worse (asset category defined by banking regulators) in offices outside the U.S. These modifications were not considered TDRs because the modifications did not involve a concession.

(3) Includes \$1,160 million and \$1,376 million of non-accrual loans included in the non-accrual loans table above at June 30, 2018 and December 31, 2017, respectively. The remaining loans are accruing interest.

(4) Includes \$22 million and \$26 million of commercial real estate loans at June 30, 2018 and December 31, 2017, respectively.

(5) Includes \$110 million and \$165 million of other commercial loans at June 30, 2018 and December 31, 2017, respectively.

(6) Reduction in the six months ended June 30, 2018 compared with December 31, 2017 includes \$641 million related to TDRs sold or transferred to HFS.

LIQUIDITY RISK

For additional information on funding and liquidity at Citigroup, including its objectives, management and measurement, see “Liquidity Risk” and “Risk Factors” in Citi’s 2017 Annual Report on Form 10-K.

High-Quality Liquid Assets (HQLA)

	Citibank			Non-Bank and Other			Total		
In billions of dollars	Jun. 30, 2018	Mar. 31, 2018	Jun. 30, 2017	Jun. 30, 2018	Mar. 31, 2018	Jun. 30, 2017	Jun. 30, 2018	Mar. 31, 2018	Jun. 30, 2017
Available cash	\$97.3	\$94.9	\$87.0	\$27.4	\$24.9	\$28.1	\$124.7	\$119.9	\$115.1
U.S. sovereign	101.4	114.6	111.4	28.7	28.9	24.4	130.1	143.4	135.8
U.S. agency/agency MBS	59.5	74.3	59.6	6.7	5.6	0.8	66.2	79.9	60.4
Foreign government debt ⁽¹⁾	73.5	69.2	95.7	10.9	12.9	15.9	84.4	82.1	111.6
Other investment grade	0.1	0.3	0.3	1.0	1.3	1.1	1.2	1.6	1.5
Total HQLA (AVG)	\$331.8	\$353.3	\$354.0	\$74.8	\$73.6	\$70.3	\$406.6	\$426.9	\$424.4

Note: The amounts set forth in the table above are presented on an average basis and reflect assets, including, as discussed below, HQLA held at Citigroup’s operating entities, which are eligible for inclusion in the calculation of Citigroup’s consolidated HQLA, pursuant to the U.S. LCR rules. For securities, the amounts represent the liquidity value that potentially could be realized and, therefore, exclude any securities that are encumbered and incorporate any haircuts that would be required for securities financing transactions.

Foreign government debt includes securities issued or guaranteed by foreign sovereigns, agencies and multilateral development banks. Foreign government debt securities are held largely to support local liquidity requirements and Citi’s local franchises and principally include government bonds from Hong Kong, Singapore, Korea, Taiwan, India, Mexico and Brazil.

The table above includes amounts of HQLA held at Citigroup’s operating entities that are eligible for inclusion in the calculation of Citigroup’s consolidated LCR. These amounts include the HQLA needed to meet the minimum requirements at these entities and any amounts in excess of these minimums that are assumed to be transferable to Citigroup. While available liquidity resources at these operating entities increased, the amounts of HQLA included in the table above declined in the current quarter as less HQLA in the operating entities was eligible for inclusion in the consolidated metric.

Citi’s HQLA as set forth above does not include Citi’s available borrowing capacity from the Federal Home Loan Banks (FHLBs) of which Citi is a member, which was approximately \$21 billion as of June 30, 2018 (compared to \$22 billion as of March 31, 2018 and \$18 billion as of June 30, 2017) and maintained by eligible collateral pledged to such banks. The HQLA also does not include Citi’s borrowing capacity at the U.S. Federal Reserve Bank discount window or other central banks, which would be in addition to the resources noted above.

In general, Citi’s liquidity is fungible across legal entities within its bank group. Citi’s bank subsidiaries, including Citibank, can lend to the Citi parent and broker-dealer entities in accordance with Section 23A of the Federal Reserve Act. As of June 30, 2018, the capacity available for lending to these entities under Section 23A was approximately \$15 billion, unchanged from both March 31, 2018 and June 30, 2017, subject to certain eligible non-cash collateral requirements.

Loans

The table below sets forth the average loans, by business and/or segment, and the total end-of-period loans for each of the periods indicated:

In billions of dollars	Jun. 30, 2018	Mar. 31, 2018	Jun. 30, 2017
Global Consumer Banking			
North America	\$188.8	\$189.7	\$183.4
Latin America	25.5	26.3	25.5
Asia ⁽¹⁾	88.8	90.3	84.9
Total	\$303.1	\$306.3	\$293.8
Institutional Clients Group			
Corporate lending	\$135.5	\$131.6	\$121.5
Treasury and trade solutions (TTS)	77.7	78.2	73.7
Private Bank	90.7	88.9	79.3
Markets and securities services and other	43.0	40.7	37.9
Total	\$346.9	\$339.4	\$312.4
Total Corporate/Other	\$19.7	\$22.2	\$28.1
Total Citigroup loans (AVG)	\$669.7	\$667.9	\$634.3
Total Citigroup loans (EOP)	\$671.2	\$672.9	\$644.7

(1) Includes loans in certain EMEA countries for all periods presented.

As set forth in the table above, end-of-period loans increased 4% year-over-year and were largely unchanged sequentially. On an average basis, loans increased 6% year-over-year and were largely unchanged sequentially. Excluding the impact of FX translation, average loans increased 5% year-over-year and 7% in aggregate across GCB and ICG. Average GCB loans grew 3% year-over-year, driven by growth across all regions. Average ICG loans increased 10% year-over-year, driven by continued client engagement across businesses, including in TTS, the private bank and corporate lending.

Average Corporate/Other loans decreased 30% year-over-year, driven by the continued wind-down of legacy assets.

Deposits

The table below sets forth the average deposits, by business and/or segment, and the total end-of-period deposits for each of the periods indicated:

In billions of dollars	Jun. 30, 2018	Mar. 31, 2018	Jun. 30, 2017
Global Consumer Banking			
North America	\$179.9	\$180.9	\$185.1
Latin America	28.3	28.9	27.8
Asia ⁽¹⁾	97.6	99.1	94.3
Total	\$305.8	\$308.9	\$307.2
Institutional Clients Group			
Treasury and trade solutions (TTS)	\$448.7	\$440.3	\$423.9
Banking ex-TTS	125.5	128.2	122.1
Markets and securities services	88.2	84.1	84.3
Total	\$662.4	\$652.6	\$630.3
Corporate/Other	\$18.0	\$20.4	\$22.5

Total Citigroup deposits (AVG) \$986.2 \$981.9 \$960.0

Total Citigroup deposits (EOP) \$996.7 \$1,001.2 \$958.7

(1) Includes deposits in certain EMEA countries for all periods presented.

End-of-period deposits increased 4% year-over-year and were largely unchanged sequentially. On an average basis, deposits increased 3% year-over-year and were largely unchanged sequentially.

Excluding the impact of FX translation, average deposits grew 2% from the prior-year period. In GCB, deposits declined 1% as growth in Asia GCB and Latin America GCB was offset by a 3% decline in North America GCB, primarily driven by a reduction in money market balances as clients transferred cash into investment accounts.

Within ICG, average deposits grew 4% year-over-year, primarily driven by continued high-quality deposit growth in TTS.

Long-Term Debt

The weighted-average maturity of unsecured long-term debt issued by Citigroup and its affiliates (including Citibank) with a remaining life greater than one year was approximately 6.5 years as of June 30, 2018, a decline from both the prior-year period (6.9 years) and the prior quarter (6.7 years).

Citi's long-term debt outstanding at the Citigroup parent company includes senior and subordinated debt and what Citi refers to as customer-related debt, consisting of structured notes, such as equity- and credit-linked notes, as well as non-structured notes. Citi's issuance of customer-related debt is generally driven by customer demand and supplements benchmark debt issuance as a source of funding for Citi's non-bank entities. Citi's long-term debt at the bank also includes benchmark senior debt, FHLB advances and securitizations.

Long-Term Debt Outstanding

The following table sets forth Citi's end-of-period total long-term debt outstanding for each of the dates indicated:

	Jun. 30, 2018	Mar. 31, 2017	Jun. 30, 2017
In billions of dollars			
Parent and other ⁽¹⁾			
Benchmark debt:			
Senior debt	\$107.8	\$112.0	\$105.9
Subordinated debt	25.3	25.5	26.8
Trust preferred	1.7	1.7	1.7
Customer-related debt:			
Local country and other ⁽²⁾	3.8	1.6	2.1
Total parent and other	\$172.9	\$173.2	\$164.9
Bank			
FHLB borrowings	\$13.7	\$15.7	\$20.3
Securitizations ⁽³⁾	28.5	30.2	28.2
CBNA benchmark senior debt	18.5	15.0	7.2
Local country and other ⁽²⁾	3.2	3.8	4.5
Total bank	\$64.0	\$64.8	\$60.2
Total long-term debt	\$236.8	\$237.9	\$225.2

Note: Amounts represent the current value of long-term debt on Citi's Consolidated Balance Sheet which, for certain debt instruments, includes consideration of fair value, hedging impacts and unamortized discounts and premiums.

"Parent and other" includes long-term debt issued to third parties by the parent holding company (Citigroup) and (1) Citi's non-bank subsidiaries (including broker-dealer subsidiaries) that are consolidated into Citigroup. As of June 30, 2018, "parent and other" included \$24.3 billion of long-term debt issued by Citi's broker-dealer subsidiaries.

(2) Local country debt includes debt issued by Citi's affiliates in support of their local operations.

(3) Predominantly credit card securitizations, primarily backed by Citi-branded credit card receivables.

Citi's total long-term debt outstanding increased year-over-year, primarily driven by the issuance of unsecured benchmark debt at the bank and customer-related debt at the Citigroup parent company, partially offset by declines in FHLB advances. Sequentially, Citi's total long-term debt outstanding remained largely unchanged.

As part of its liability management, Citi has considered, and may continue to consider, opportunities to repurchase its long-term debt pursuant to open market purchases, tender offers or other means. Such repurchases help reduce Citi's overall funding costs and assist it in meeting regulatory changes and requirements. During the second quarter of 2018, Citi repurchased and called an aggregate of approximately \$0.8 billion of its outstanding long-term debt, including early redemption of FHLB advances.

Long-Term Debt Issuances and Maturities

The table below details Citi's long-term debt issuances and maturities (including repurchases and redemptions) during the periods presented:

In billions of dollars	2Q18		1Q18		2Q17	
	Maturities		Maturities		Maturities	
Parent and other						
Benchmark debt:						
Senior debt	\$7.2	\$4.9	\$3.5	\$5.4	\$2.0	\$6.3
Subordinated debt	0.3	0.3	1.6	0.2	—	0.2
Trust preferred	—	—	—	—	—	—
Customer-related debt	1.5	4.7	2.5	4.9	2.3	3.6
Local country and other	0.2	2.1	0.1	0.1	0.1	—
Total parent and other	\$9.1	\$12.0	\$7.7	\$10.7	\$4.3	\$10.2
Bank						
FHLB borrowings	\$4.5	\$2.5	\$6.5	\$3.9	\$1.5	\$1.5
Securitizations	2.7	1.1	2.9	2.8	0.9	5.1
CBNA benchmark senior debt	—	3.5	—	2.5	—	4.7
Local country and other	0.9	0.9	0.8	0.8	0.7	0.3
Total bank	\$8.1	\$8.0	\$10.2	\$10.1	\$3.0	\$11.6
Total	\$17.2	\$20.0	\$17.9	\$20.8	\$7.4	\$21.8

The table below shows Citi's aggregate long-term debt maturities (including repurchases and redemptions) year-to-date in 2018, as well as its aggregate expected annual long-term debt maturities as of June 30, 2018:

In billions of dollars	Maturities							
	2018 YTD	2018	2019	2020	2021	2022	2023	Thereafter
Parent and other								
Benchmark debt:								
Senior debt	\$10.7	\$7.8	\$14.4	\$8.8	\$14.1	\$7.9	\$12.4	\$42.3
Subordinated debt	1.8	1.0	—	—	—	0.7	1.1	22.5
Trust preferred	—	—	—	—	—	—	—	1.7
Customer-related debt	4.0	1.1	3.8	4.7	2.8	2.3	1.5	18.1
Local country and other	0.2	2.3	0.4	0.1	0.3	—	—	0.5
Total parent and other	\$16.8	\$12.2	\$18.6	\$13.6	\$17.3	\$11.0	\$15.0	\$85.2
Bank								
FHLB borrowings	\$11.0	\$4.8	\$5.6	\$3.4	\$—	\$—	\$—	\$—
Securitizations	5.6	3.0	7.9	5.5	5.7	1.2	2.5	2.6
CBNA benchmark debt	—	2.2	4.7	8.7	2.5	—	—	0.3
Local country and other	1.7	0.2	0.9	1.3	0.1	0.3	0.2	0.3
Total bank	\$18.3	\$10.2	\$19.1	\$18.9	\$8.4	\$1.5	\$2.7	\$3.2
Total long-term debt	\$35.1	\$22.4	\$37.7	\$32.5	\$25.7	\$12.5	\$17.7	\$88.4

Secured Funding Transactions and Short-Term Borrowings

Citi supplements its primary sources of funding with short-term borrowings. Short-term borrowings generally include (i) secured funding transactions (securities loaned or sold under agreements to repurchase, or repos) and (ii) to a lesser extent, short-term borrowings consisting of commercial paper and borrowings from the FHLB and other market participants (see Note 16 to the Consolidated Financial Statements for further information on Citigroup's and its affiliates' outstanding short-term borrowings).

Outside of secured funding transactions, Citi's short-term borrowings modestly increased 2% year-over-year and 3% sequentially, driven primarily by an increase in commercial paper.

Secured Funding

Secured funding is primarily accessed through Citi's broker-dealer subsidiaries to fund efficiently both secured lending activity and a portion of the securities inventory held in the context of market making and customer activities. Citi also executes a smaller portion of its secured funding transactions through its bank entities, which is typically collateralized by foreign government debt securities. Generally, daily changes in the level of Citi's secured funding are primarily due to fluctuations in secured lending activity in the matched book (as described below) and securities inventory.

Secured funding of \$178 billion as of June 30, 2018 increased 15% from the prior-year period and 4% sequentially.

Excluding the impact of FX translation, secured funding increased 15% from the prior-year period and 7% sequentially, both driven by normal business activity. Average balances for secured funding were approximately \$171 billion for the quarter ended June 30, 2018.

The portion of secured funding in the broker-dealer subsidiaries that funds secured lending is commonly referred to as "matched book" activity. The majority of this activity is secured by high-quality liquid securities such as U.S. Treasury securities, U.S. agency securities and foreign government debt securities. Other secured funding is secured by less-liquid securities, including equity securities, corporate bonds and asset-backed securities. The tenor of Citi's matched book liabilities is generally equal to or longer than the tenor of the corresponding matched book assets. The remainder of the secured funding activity in the broker-dealer subsidiaries serves to fund securities inventory held in the context of market making and customer activities. To maintain reliable funding under a wide range of market conditions, including under periods of stress, Citi manages these activities by taking into consideration the quality of the underlying collateral and stipulating financing tenor. The weighted average maturity of Citi's secured funding of less-liquid securities inventory was greater than 110 days as of June 30, 2018.

Citi manages the risks in its secured funding by conducting daily stress tests to account for changes in capacity, tenors, haircut, collateral profile and client actions. Additionally, Citi maintains counterparty diversification by establishing concentration triggers and assessing counterparty

reliability and stability under stress. Citi generally sources secured funding from more than 150 counterparties.

Liquidity Coverage Ratio (LCR)

In addition to internal liquidity stress metrics that Citi has developed for a 30-day stress scenario, Citi also monitors its liquidity by reference to the LCR, as calculated pursuant to the U.S. LCR rules. The table below sets forth the components of Citi's LCR calculation and HQLA in excess of net outflows for the periods indicated:

In billions of dollars	Jun. 30, 2018	Mar. 31, 2018	Jun. 30, 2017
HQLA	\$406.6	\$426.9	\$424.4
Net outflows	341.5	355.2	338.2
LCR	119	% 120	% 125
HQLA in excess of net outflows	\$65.1	\$71.7	\$86.2

Note: The amounts set forth in the table above are presented on an average basis.

As set forth in the table above, Citi's average LCR decreased year-over-year, driven by both a decline in average HQLA and a modest increase in modeled net outflows. Sequentially, Citi's average LCR decreased slightly, as a decline in modeled net outflows, which was driven by Citi's continued focus on its deposit quality and its optimization of its funding tenor, was more than offset by a decline in the HQLA.

Credit Ratings

The table below sets forth the ratings for Citigroup and Citibank as of June 30, 2018. While not included in the table below, the long- and short-term ratings of Citigroup Global Markets Holdings Inc. (CGMHI) were BBB+/A-2 at Standard & Poor's and A/F1 at Fitch as of June 30, 2018.

	Citigroup Inc.			Citibank, N.A.		
	Senior debt	Commercial paper	Outlook	Long-term	Short-term	Outlook
Fitch Ratings (Fitch)	A	F1	Stable	A+	F1	Stable
Moody's Investors Service (Moody's)	Baa1	P-2	Positive	A1	P-1	Positive
Standard & Poor's (S&P)	BBB+	A-2	Stable	A+	A-1	Stable

Potential Impacts of Ratings Downgrades

Ratings downgrades by Moody's, Fitch or S&P could negatively impact Citigroup's and/or Citibank's funding and liquidity due to reduced funding capacity, including derivative triggers, which could take the form of cash obligations and collateral requirements.

The following information is provided for the purpose of analyzing the potential funding and liquidity impact to Citigroup and Citibank of a hypothetical, simultaneous ratings downgrade across all three major rating agencies. This analysis is subject to certain estimates, estimation methodologies, judgments and uncertainties. Uncertainties include potential ratings limitations that certain entities may have with respect to permissible counterparties, as well as general subjective counterparty behavior. For example, certain corporate customers and markets counterparties could re-evaluate their business relationships with Citi and limit transactions in certain contracts or market instruments with Citi. Changes in counterparty behavior could impact Citi's funding and liquidity, as well as the results of operations of certain of its businesses. The actual impact to Citigroup or Citibank is unpredictable and may differ materially from the potential funding and liquidity impacts described below. For additional information on the impact of credit rating changes on Citi and its applicable subsidiaries, see "Risk Factors—Liquidity Risks" in Citi's 2017 Annual Report on Form 10-K.

Citigroup Inc. and Citibank—Potential Derivative Triggers

As of June 30, 2018, Citi estimates that a hypothetical one-notch downgrade of the senior debt/long-term rating of Citigroup Inc. across all three major rating agencies could impact Citigroup's funding and liquidity due to derivative triggers by approximately \$0.4 billion, unchanged from March 31, 2018. Other funding sources, such as secured financing transactions and other margin requirements, for which there are no explicit triggers, could also be adversely affected.

As of June 30, 2018, Citi estimates that a hypothetical one-notch downgrade of the senior debt/long-term rating of Citibank across all three major rating agencies could impact Citibank's funding and liquidity by approximately \$0.9 billion, compared to \$0.4 billion as of March 31, 2018.

In total, Citi estimates that a one-notch downgrade of Citigroup and Citibank, across all three major rating agencies, could result in increased aggregate cash obligations and collateral requirements of approximately \$1.2 billion, compared to \$0.8 billion as of March 31, 2018 (see also Note 19 to the Consolidated Financial Statements). As set forth under "High-Quality Liquid Assets" above, the liquidity resources which are eligible for inclusion in the calculation of Citi's consolidated HQLA was approximately \$332 billion for Citibank and \$75 billion for Citi's non-bank and other entities, for a total of approximately \$407 billion for the quarter ended June 30, 2018. These liquidity resources are available in part as a contingency for the potential events described above.

In addition, a broad range of mitigating actions are currently included in Citigroup's and Citibank's contingency funding plans. For Citigroup, these mitigating factors include, but are not limited to, accessing surplus funding capacity from existing clients, tailoring levels of secured lending and adjusting the size of select trading books and collateralized borrowings from certain Citibank subsidiaries. Mitigating actions available to Citibank include, but are not limited to, selling or financing highly liquid government securities, tailoring levels of secured lending, adjusting the size of select trading assets, reducing loan originations and renewals, raising additional deposits or borrowing from the FHLB or central banks. Citi believes these mitigating actions could substantially reduce the funding and liquidity risk, if any, of the potential downgrades described above.

Citibank—Additional Potential Impacts

In addition to the above derivative triggers, Citi believes that a potential one-notch downgrade of Citibank's senior debt/long-term rating by S&P could also have an adverse impact on the commercial paper/short-term rating of Citibank. As of June 30, 2018, Citibank had liquidity commitments of approximately \$12.0 billion to consolidated asset-backed commercial paper conduits, compared to \$10.0 billion as of March 31, 2018 (as referenced in Note 18 to the Consolidated Financial Statements).

In addition to the above-referenced liquidity resources of certain Citibank and Citibanamex entities, Citibank could reduce the funding and liquidity risk, if any, of the potential downgrades described above through mitigating actions, including repricing or reducing certain commitments to commercial paper conduits. In the event of the potential downgrades described above, Citi believes that certain corporate customers could re-evaluate their deposit relationships with Citibank. This re-evaluation could result in clients adjusting their discretionary deposit levels or changing their depository institution, which could potentially reduce certain deposit levels at Citibank. However, Citi could choose to adjust pricing, offer alternative deposit products to its existing customers or seek to attract deposits from new customers, in addition to the mitigating actions referenced above.

MARKET RISK

Market risk emanates from both Citi's trading and non-trading portfolios. For additional information on market risk and market risk management at Citi, see "Market Risk" and "Risk Factors" in Citi's 2017 Annual Report on Form 10-K.

Market Risk of Non-Trading Portfolios

For additional information on Citi's net interest revenue (for interest rate exposure purposes), interest rate risk and interest rate risk measurement, see "Market Risk of Non-Trading Portfolios" in Citi's 2017 Annual Report on Form 10-K.

The following table sets forth the estimated impact to Citi's net interest revenue, AOCI and the Common Equity Tier 1 Capital ratio (on a fully implemented basis), each assuming an unanticipated parallel instantaneous 100 bps increase in interest rates:

In millions of dollars (unless otherwise noted)	Jun. 30, 2018	Mar. 31, 2018	Jun. 30, 2017
Estimated annualized impact to net interest revenue			
U.S. dollar ⁽¹⁾	\$1,046	\$1,243	\$1,435
All other currencies	635	651	589
Total	\$1,681	\$1,894	\$2,024
As a percentage of average interest-earning assets	0.10	%0.11	%0.12
Estimated initial impact to AOCI (after-tax) ⁽²⁾	\$(4,713)	\$(4,955)	\$(4,258)
Estimated initial impact on Common Equity Tier 1 Capital ratio (bps) ⁽³⁾	(32)	(33)	(49)

Certain trading-oriented businesses within Citi have accrual-accounted positions that are excluded from the estimated impact to net interest revenue in the table, since these exposures are managed economically in combination with mark-to-market positions. The U.S. dollar interest rate exposure associated with these businesses was \$(218) million for a 100 basis point instantaneous increase in interest rates as of June 30, 2018.

(1) Includes the effect of changes in interest rates on AOCI related to investment securities, cash flow hedges and pension liability adjustments.

(2) Results as of June 30, 2018 and March 31, 2018 reflect the impact of Tax Reform, including the lower expected effective tax rate and the impact to Citi's DTA position. Results as of June 30, 2017 have not been restated.

The estimated impact to net interest revenue decreased on a sequential basis, reflecting changes in balance sheet composition, including increased sensitivity in deposits combined with loan growth. The decrease in the estimated impact to AOCI primarily reflected changes to the positioning of Citi Treasury's investment securities and related interest rate derivatives portfolio.

In the event of an unanticipated parallel instantaneous 100 bps increase in interest rates, Citi expects that the negative impact to AOCI would be offset in stockholders' equity through the combination of expected incremental net interest revenue and the expected recovery of the impact on AOCI through accretion of Citi's investment portfolio over a period of time. As of June 30, 2018, Citi expects that the negative \$4.7 billion impact to AOCI in such a scenario could potentially be offset over approximately 19 months.

The following table sets forth the estimated impact to Citi's net interest revenue, AOCI and the Common Equity Tier 1 Capital ratio (on a fully implemented basis) under four different changes in interest rate scenarios for the U.S. dollar and Citi's other currencies. While Citi also monitors the impact of a parallel decrease in interest rates, a 100 bps decrease in short-term rates is not meaningful, as it would imply negative interest rates in many of Citi's markets.

In millions of dollars (unless otherwise noted)	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Overnight rate change (bps)	100	100	—	—
10-year rate change (bps)	100	—	100	(100)
Estimated annualized impact to net interest revenue				
U.S. dollar	\$1,046	\$1,043	\$57	\$(66)
All other currencies	635	595	37	(37)
Total	\$1,681	\$1,638	\$94	\$(103)
Estimated initial impact to AOCI (after-tax) ⁽¹⁾	\$(4,713)	\$(2,713)	\$(2,176)	\$1,688
Estimated initial impact to Common Equity Tier 1 Capital ratio (bps)	(32)	(18)	(16)	11

Note: Each scenario in the table above assumes that the rate change will occur instantaneously. Changes in interest rates for maturities between the overnight rate and the 10-year rate are interpolated.

(1) Includes the effect of changes in interest rates on AOCI related to investment securities, cash flow hedges and pension liability adjustments.

As shown in the table above, the magnitude of the impact to Citi's net interest revenue and AOCI is greater under scenario 2 as compared to scenario 3. This is because the combination of changes to Citi's investment portfolio, partially offset by changes related to Citi's pension liabilities, results in a net position that is more sensitive to rates at shorter- and intermediate-term maturities.

In recent years, a number of central banks, including the European Central Bank, the Bank of Japan and the Swiss National Bank, have implemented negative interest rates, and additional governmental entities could do so in the future. While negative interest rates can adversely impact net interest revenue (as well as net interest margin), Citi has, to date, been able to partially offset the impact of negative rates in these jurisdictions through a combination of business and Citi Treasury interest rate risk mitigation activities, including applying negative rates to client accounts (for additional information on Citi Treasury's ongoing interest rate mitigation activities, see "Market Risk—Market Risk of Non-Trading Portfolios" in Citi's 2017 Annual Reporting on Form 10-K).

Changes in Foreign Exchange Rates—Impacts on AOCI and Capital

As of June 30, 2018, Citi estimates that an unanticipated parallel instantaneous 5% appreciation of the U.S. dollar against all of the other currencies in which Citi has invested capital could reduce Citi's tangible common equity (TCE) by approximately \$1.6 billion, or 1.0%, as a result of changes to Citi's foreign currency translation adjustment in AOCI, net of hedges. This impact would be primarily due to changes in the value of the Mexican peso, the Euro and the Australian dollar.

This impact is also before any mitigating actions Citi may take, including ongoing management of its foreign currency translation exposure. Specifically, as currency movements change the value of Citi's net investments in foreign currency-denominated capital, these movements also change the value of Citi's risk-weighted assets denominated in those currencies. This, coupled with Citi's foreign currency hedging strategies, such as foreign currency borrowings, foreign currency forwards and other currency hedging instruments, lessens the impact of foreign currency movements on Citi's Common Equity Tier 1 Capital ratio. Changes in these hedging strategies, as well as hedging costs, divestitures and tax impacts, can further affect the actual impact of changes in foreign exchange rates on Citi's capital as compared to an unanticipated parallel shock, as described above.

The effect of Citi's ongoing management strategies with respect to changes in foreign exchange rates and the impact of these changes on Citi's TCE and Common Equity Tier 1 Capital ratio are shown in the table below. For additional information on the changes in AOCI, see Note 17 to the Consolidated Financial Statements.

In millions of dollars (unless otherwise noted)	For the quarter ended		
	Jun. 30, 2018	Mar. 31, 2018	Jun. 30, 2017
Change in FX spot rate ⁽¹⁾	(5.8)%	2.5 %	1.9 %
Change in TCE due to FX translation, net of hedges	\$(2,241)	\$676	\$478

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As a percentage of TCE	(1.5)	%0.4	%0.3	%
Estimated impact to Common Equity Tier 1 Capital ratio (on a fully implemented basis)	—	(2)	(3)	
due to changes in FX translation, net of hedges (bps)				

(1) FX spot rate change is a weighted average based upon Citi's quarterly average GAAP capital exposure to foreign countries.

Interest Revenue/Expense and Net Interest Margin

	2nd Qtr.	1st Qtr.	2nd Qtr.	Change
In millions of dollars, except as otherwise noted	2018	2018	2017	2Q18 vs. 2Q17
Interest revenue ⁽¹⁾	\$17,613	\$16,396	\$15,416	14 %
Interest expense ⁽²⁾	5,885	5,160	4,036	46
Net interest revenue	\$11,728	\$11,236	\$11,380	3 %
Interest revenue—average rate	4.05 %	3.85 %	3.72 %	33 bps
Interest expense—average rate	1.73	1.56	1.26	47 bps
Net interest margin ⁽³⁾	2.70	2.64	2.75	(5) bps
Interest-rate benchmarks				
Two-year U.S. Treasury note—average rate	2.48 %	2.16 %	1.30 %	118 bps
10-year U.S. Treasury note—average rate	2.92	2.76	2.26	66 bps
10-year vs. two-year spread	44 bps	60 bps	96 bps	

Note: All interest expense amounts include FDIC, as well as other similar deposit insurance assessments outside of the U.S.

Net interest revenue includes the taxable equivalent adjustments related to the tax-exempt bond portfolio (based on (1) the U.S. federal statutory tax rates of 21% in 2018 and 35% in 2017) of \$63 million, \$64 million and \$122 million for the three months ended June 30, 2018, March 31, 2018 and June 30, 2017, respectively.

Interest expense associated with certain hybrid financial instruments, which are classified as Long-term debt and (2) accounted for at fair value, is reported together with any changes in fair value as part of Principal transactions in the Consolidated Statements of Income and is therefore not reflected in Interest expense in the table above.

(3) Citi's net interest margin (NIM) is calculated by dividing gross interest revenue less gross interest expense by average interest-earning assets.

Citi's net interest revenue in the second quarter of 2018 increased 4% to \$11.7 billion (as set forth in the table above, up 3% on a taxable equivalent basis) versus the prior-year period. Excluding the impact of FX translation, net interest revenue also increased 4%, or approximately \$490 million. This increase was primarily due to higher net interest revenue (\$11.1 billion, up approximately 10% or \$1.0 billion) from Citi's core accrual activities, which are mainly driven by its deposit and lending businesses. The increase in core accrual net interest revenue was partially offset by lower trading-related net interest revenue (\$0.4 billion, down approximately 54% or \$0.5 billion) and lower net interest revenue associated with the wind-down of legacy assets in Corporate/Other (\$0.2 billion, down approximately 28% or \$0.1 billion). The

increase in the core accrual net interest revenue was driven mainly by higher interest rates, loan growth and an improved loan mix.

Citi's NIM was 2.70% on a taxable equivalent basis in the second quarter of 2018, a decrease of 5 bps from the prior-year period, driven primarily by lower trading-related NIM. Citi's core accrual NIM was 3.60%, an increase of 13 bps versus the prior-year period, primarily driven by higher interest rates. (Citi's core accrual net interest revenue and core accrual NIM are non-GAAP financial measures.)

Additional Interest Rate Details

Average Balances and Interest Rates—Assets⁽¹⁾⁽²⁾⁽³⁾

Taxable Equivalent Basis

	Average volume			Interest revenue			% Average rate		
	2nd Qtr.	1st Qtr.	2nd Qtr.	2nd Qtr.	1st Qtr.	2nd Qtr.	2nd Qtr.	1st Qtr.	2nd Qtr.
In millions of dollars, except rates	2018	2018	2017	2018	2018	2017	2018	2018	2017
Assets									
Deposits with banks ⁽⁴⁾	\$176,151	\$170,867	\$166,023	\$493	\$432	\$375	1.12%	1.03%	0.91%
Federal funds sold and securities borrowed or purchased under agreements to resell ⁽⁵⁾									
In U.S. offices	\$153,273	\$140,357	\$144,483	\$838	\$713	\$472	2.19%	2.06%	1.31%
In offices outside the U.S. ⁽⁴⁾	118,098	113,920	104,780	498	326	357	1.69	1.16	1.37
Total	\$271,371	\$254,277	\$249,263	\$1,336	\$1,039	\$829	1.97%	1.66%	1.33%
Trading account assets ⁽⁶⁾⁽⁷⁾									
In U.S. offices	\$92,791	\$97,558	\$100,080	\$851	\$869	\$877	3.68%	3.61%	3.51%
In offices outside the U.S. ⁽⁴⁾	117,840	118,603	103,581	922	512	646	3.14	1.75	2.50
Total	\$210,631	\$216,161	\$203,661	\$1,773	\$1,381	\$1,523	3.38%	2.59%	3.00%
Investments									
In U.S. offices									
Taxable	\$225,886	\$229,407	\$224,021	\$1,315	\$1,224	\$1,086	2.34%	2.16%	1.94%
Exempt from U.S. income tax	17,339	17,531	18,466	180	170	197	4.16	3.93	4.28
In offices outside the U.S. ⁽⁴⁾	104,562	105,307	106,758	913	877	830	3.50	3.38	3.12
Total	\$347,787	\$352,245	\$349,245	\$2,408	\$2,271	\$2,113	2.78%	2.61%	2.43%
Loans (net of unearned income) ⁽⁸⁾									
In U.S. offices	\$382,972	\$380,357	\$369,342	\$6,958	\$6,732	\$6,393	7.29%	7.18%	6.94%
In offices outside the U.S. ⁽⁴⁾	286,772	287,568	264,986	4,251	4,177	3,925	5.95	5.89	5.94
Total	\$669,744	\$667,925	\$634,328	\$11,209	\$10,909	\$10,318	6.71%	6.62%	6.52%
Other interest-earning assets ⁽⁹⁾	\$69,341	\$66,761	\$60,107	\$394	\$364	\$258	2.28%	2.21%	1.72%
Total interest-earning assets	\$1,745,025	\$1,728,236	\$1,662,627	\$17,613	\$16,396	\$15,416	4.05%	3.85%	3.72%
Non-interest-earning assets ⁽⁶⁾	\$172,077	\$175,987	\$206,581						
Total assets	\$1,917,102	\$1,904,223	\$1,869,208						

Net interest revenue includes the taxable equivalent adjustments related to the tax-exempt bond portfolio (based on (1) the U.S. federal statutory tax rates of 21% in 2018 and 35% in 2017) of \$63 million, \$64 million and \$122 million for the three months ended June 30, 2018, March 31, 2018 and June 30, 2017, respectively.

(2) Interest rates and amounts include the effects of risk management activities associated with the respective asset categories.

(3) Monthly or quarterly averages have been used by certain subsidiaries where daily averages are unavailable.

(4) Average rates reflect prevailing local interest rates, including inflationary effects and monetary corrections in certain countries.

(5) Average volumes of securities borrowed or purchased under agreements to resell are reported net pursuant to ASC 210-20-45. However, Interest revenue excludes the impact of ASC 210-20-45.

(6) The fair value carrying amounts of derivative contracts are reported net, pursuant to ASC 815-10-45, in Non-interest-earning assets and Other non-interest-bearing liabilities.

Interest expense on Trading account liabilities of ICG is reported as a reduction of Interest revenue. Interest revenue and Interest expense on cash collateral positions are reported in interest on Trading account assets and Trading account liabilities, respectively.

(8) Includes cash-basis loans.

(9)Includes brokerage receivables.

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Average Balances and Interest Rates—Liabilities and Equity, and Net Interest Revenue⁽¹⁾⁽²⁾⁽³⁾

Taxable Equivalent Basis

	Average volume			Interest expense			% Average rate		
	2nd Qtr.	1st Qtr.	2nd Qtr.	2nd Qtr.	1st Qtr.	2nd Qtr.	2nd Qtr.	1st Qtr.	2nd Qtr.
In millions of dollars, except rates	2018	2018	2017	2018	2018	2017	2018	2018	2017
Liabilities									
Deposits									
In U.S. offices ⁽⁴⁾	\$332,595	\$323,355	\$311,758	\$1,041	\$897	\$593	1.26%	1.13%	0.76%
In offices outside the U.S. ⁽⁵⁾	453,025	446,416	439,807	1,203	1,100	1,010	1.07	1.00	0.92
Total	\$785,620	\$769,771	\$751,565	\$2,244	\$1,997	\$1,603	1.15%	1.05%	0.86%
Federal funds purchased and securities loaned or sold under agreements to repurchase ⁽⁶⁾									
In U.S. offices	\$102,517	\$99,015	\$101,623	\$796	\$604	\$396	3.11%	2.47%	1.56%
In offices outside the U.S. ⁽⁵⁾	68,556	65,450	59,354	428	345	280	2.50	2.14	1.89
Total	\$171,073	\$164,465	\$160,977	\$1,224	\$949	\$676	2.87%	2.34%	1.68%
Trading account liabilities ⁽⁷⁾⁽⁸⁾									
In U.S. offices	\$36,103	\$33,996	\$34,287	\$140	\$127	\$81	1.56%	1.52%	0.95%
In offices outside the U.S. ⁽⁵⁾	61,048	57,725	56,731	96	88	65	0.63	0.62	0.46
Total	\$97,151	\$91,721	\$91,018	\$236	\$215	\$146	0.97%	0.95%	0.64%
Short-term borrowings ⁽⁹⁾									
In U.S. offices	\$84,338	\$89,202	\$68,486	\$439	\$389	\$103	2.09%	1.77%	0.60%
In offices outside the U.S. ⁽⁵⁾	23,854	23,482	23,070	84	82	99	1.41	1.42	1.72
Total	\$108,192	\$112,684	\$91,556	\$523	\$471	\$202	1.94%	1.70%	0.88%
Long-term debt ⁽¹⁰⁾									
In U.S. offices	\$198,291	\$199,924	\$187,610	\$1,620	\$1,482	\$1,361	3.28%	3.01%	2.91%
In offices outside the U.S. ⁽⁵⁾	4,980	4,353	4,534	38	46	48	3.06	4.29	4.25
Total	\$203,271	\$204,277	\$192,144	\$1,658	\$1,528	\$1,409	3.27%	3.03%	2.94%
Total interest-bearing liabilities	\$1,365,307	\$1,342,918	\$1,287,260	\$5,885	\$5,160	\$4,036	1.73%	1.56%	1.26%
Demand deposits in U.S. offices	\$33,737	\$35,528	\$38,772						
Other non-interest-bearing liabilities ⁽⁷⁾	316,907	324,002	313,227						
Total liabilities	\$1,715,951	\$1,702,448	\$1,639,259						
Citigroup stockholders' equity	\$200,295	\$200,833	\$228,946						
Noncontrolling interest	856	942	1,003						
Total equity	\$201,151	\$201,775	\$229,949						
Total liabilities and stockholders' equity	\$1,917,102	\$1,904,223	\$1,869,208						
Net interest revenue as a percentage of average interest-earning assets ⁽¹¹⁾									
In U.S. offices	\$983,786	\$973,752	\$956,968	\$6,710	\$6,717	\$6,777	2.74%	2.80%	2.84%
In offices outside the U.S. ⁽⁶⁾	761,239	754,484	705,659	5,018	4,519	4,603	2.64	2.43	2.62
Total	\$1,745,025	\$1,728,236	\$1,662,627	\$11,728	\$11,236	\$11,380	2.70%	2.64%	2.75%

Net interest revenue includes the taxable equivalent adjustments related to the tax-exempt bond portfolio (based on (1) the U.S. federal statutory tax rates of 21% in 2018 and 35% in 2017) of \$63 million, \$64 million and \$122 million for the three months ended June 30, 2018, March 31, 2018 and June 30, 2017, respectively.

(2) Interest rates and amounts include the effects of risk management activities associated with the respective liability categories.

- (3) Monthly or quarterly averages have been used by certain subsidiaries where daily averages are unavailable.
Consists of other time deposits and savings deposits. Savings deposits are made up of insured money market
- (4) accounts, NOW accounts and other savings deposits. The interest expense on savings deposits includes FDIC deposit insurance assessments.
- (5) Average rates reflect prevailing local interest rates, including inflationary effects and monetary corrections in certain countries.
- (6) Average volumes of securities sold under agreements to repurchase are reported net pursuant to ASC 210-20-45. However, Interest expense excludes the impact of ASC 210-20-45.
- (7) The fair value carrying amounts of derivative contracts are reported net, pursuant to ASC 815-10-45, in Non-interest-earning assets and Other non-interest-bearing liabilities.

Interest expense on Trading account liabilities of ICG is reported as a reduction of Interest revenue. Interest revenue and Interest expense on cash collateral positions are reported in interest on Trading account assets and Trading account liabilities, respectively.

(9) Includes brokerage payables.

(10) Excludes hybrid financial instruments and beneficial interests in consolidated VIEs that are classified as

(11) Long-term debt, as the changes in fair value for these obligations are recorded in Principal transactions.

(11) Includes allocations for capital and funding costs based on the location of the asset.

Average Balances and Interest Rates—Assets⁽¹⁾⁽²⁾⁽³⁾⁽⁴⁾

Taxable Equivalent Basis

	Average volume		Interest revenue		% Average rate	
	Six Months 2018	Six Months 2017	Six Months 2018	Six Months 2017	Six Months 2018	Six Months 2017
In millions of dollars, except rates						
Assets						
Deposits with banks ⁽⁵⁾	\$ 173,509	\$ 160,394	\$ 925	\$ 670	1.08 %	0.84 %
Federal funds sold and securities borrowed or purchased under agreements to resell ⁽⁶⁾						
In U.S. offices	\$ 146,816	\$ 144,243	\$ 1,551	\$ 840	2.13 %	1.17 %
In offices outside the U.S. ⁽⁵⁾	116,009	103,906	824	650	1.43	1.26
Total	\$ 262,825	\$ 248,149	\$ 2,375	\$ 1,490	1.82 %	1.21 %
Trading account assets ⁽⁷⁾⁽⁸⁾						
In U.S. offices	\$ 95,175	\$ 100,958	\$ 1,720	\$ 1,761	3.64 %	3.52 %
In offices outside the U.S. ⁽⁵⁾	118,222	98,798	1,434	1,069	2.45	2.18
Total	\$ 213,397	\$ 199,756	\$ 3,154	\$ 2,830	2.98 %	2.86 %
Investments						
In U.S. offices						
Taxable	\$ 227,647	\$ 222,736	\$ 2,539	\$ 2,120	2.25 %	1.92 %
Exempt from U.S. income tax	17,435	18,573	350	393	4.05	4.27
In offices outside the U.S. ⁽⁵⁾	104,935	106,992	1,790	1,619	3.44	3.05
Total	\$ 350,017	\$ 348,301	\$ 4,679	\$ 4,132	2.70 %	2.39 %
Loans (net of unearned income) ⁽⁹⁾						
In U.S. offices	\$ 381,665	\$ 368,370	\$ 13,690	\$ 12,666	7.23 %	6.93 %
In offices outside the U.S. ⁽⁵⁾	287,170	260,464	8,428	7,720	5.92	5.98
Total	\$ 668,835	\$ 628,834	\$ 22,118	\$ 20,386	6.67 %	6.54 %
Other interest-earning assets ⁽¹⁰⁾	\$ 68,051	\$ 58,420	\$ 758	\$ 552	2.25 %	1.91 %
Total interest-earning assets	\$ 1,736,634	\$ 1,643,854	\$ 34,009	\$ 30,060	3.95 %	3.69 %
Non-interest-earning assets ⁽⁷⁾	\$ 174,032	\$ 206,029				
Total assets	\$ 1,910,666	\$ 1,849,883				

Net interest revenue includes the taxable equivalent adjustments (based on the U.S. federal statutory tax rates of (1) 21% in 2018 and 35% in 2017) of \$127 million and \$245 million for the six months ended June 30, 2018 and 2017, respectively.

(2) Interest rates and amounts include the effects of risk management activities associated with the respective asset and liability categories.

(3) Monthly or quarterly averages have been used by certain subsidiaries where daily averages are unavailable.

(4) Detailed average volume, Interest revenue and Interest expense exclude Discontinued operations. See Note 2 to the Consolidated Financial Statements.

(5)

Average rates reflect prevailing local interest rates, including inflationary effects and monetary corrections in certain countries.

(6) Average volumes of securities borrowed or purchased under agreements to resell are reported net pursuant to FIN 41 (ASC 210-20-45). However, Interest revenue excludes the impact of FIN 41 (ASC 210-20-45).

(7) The fair value carrying amounts of derivative contracts are reported in Non-interest-earning assets and Other non-interest-bearing liabilities.

Interest expense on Trading account liabilities of ICG is reported as a reduction of Interest revenue. Interest (8) revenue and Interest expense on cash collateral positions are reported in interest on Trading account assets and Trading account liabilities, respectively.

(9) Includes cash-basis loans.

(10) Includes brokerage receivables.

Average Balances and Interest Rates—Liabilities and Equity, and Net Interest Revenue⁽¹⁾⁽²⁾⁽³⁾⁽⁴⁾

Taxable Equivalent Basis

	Average volume		Interest expense		% Average rate	
	Six Months	Six Months	Six Months	Six Months	Six Months	Six Months
	2018	2017	2018	2017	2018	2017
In millions of dollars, except rates						
Liabilities						
Deposits						
In U.S. offices ⁽⁵⁾	\$327,974	\$307,026	\$1,938	\$1,100	1.19%	0.72%
In offices outside the U.S. ⁽⁶⁾	449,721	434,275	2,303	1,918	1.03%	0.89%
Total	\$777,695	\$741,301	\$4,241	\$3,018	1.10%	0.82%
Federal funds purchased and securities loaned or sold under agreements to repurchase ⁽⁷⁾						
In U.S. offices	\$100,766	\$98,042	\$1,400	\$678	2.80%	1.39%
In offices outside the U.S. ⁽⁶⁾	67,003	56,890	773	491	2.33%	1.74%
Total	\$167,769	\$154,932	\$2,173	\$1,169	2.61%	1.52%
Trading account liabilities ⁽⁸⁾⁽⁹⁾						
In U.S. offices	\$35,050	\$33,251	\$267	\$165	1.54%	1.00%
In offices outside the U.S. ⁽⁶⁾	59,387	58,199	184	128	0.62%	0.44%
Total	\$94,437	\$91,450	\$451	\$293	0.96%	0.65%
Short-term borrowings ⁽¹⁰⁾						
In U.S. offices	\$86,770	\$70,047	\$828	\$188	1.92%	0.54%
In offices outside the U.S. ⁽⁶⁾	23,668	23,538	166	213	1.41%	1.82%
Total	\$110,438	\$93,585	\$994	\$401	1.82%	0.86%
Long-term debt ⁽¹¹⁾						
In U.S. offices	\$199,108	\$183,133	\$3,102	\$2,616	3.14%	2.88%
In offices outside the U.S. ⁽⁶⁾	4,667	4,924	84	105	3.63%	4.30%
Total	\$203,775	\$188,057	\$3,186	\$2,721	3.15%	2.92%
Total interest-bearing liabilities	\$1,354,114	\$1,269,325	\$11,045	\$7,602	1.64%	1.21%
Demand deposits in U.S. offices	\$34,633	\$38,260				
Other non-interest-bearing liabilities ⁽⁸⁾	320,455	311,376				
Total liabilities	\$1,709,202	\$1,618,961				
Citigroup stockholders' equity ⁽¹²⁾	\$200,564	\$229,918				
Noncontrolling interest	899	1,002				
Total equity ⁽¹²⁾	\$201,463	\$230,920				
Total liabilities and stockholders' equity	\$1,910,665	\$1,849,881				
Net interest revenue as a percentage of average interest-earning assets						
In U.S. offices	\$978,772	\$958,043	\$13,427	\$13,540	2.77%	2.85%
In offices outside the U.S. ⁽⁶⁾	757,862	685,811	9,537	8,918	2.54%	2.62%
Total	\$1,736,634	\$1,643,854	\$22,964	\$22,458	2.67%	2.76%

Net interest revenue includes the taxable equivalent adjustments (based on the U.S. federal statutory tax rates of (1) 21% in 2018 and 35% in 2017) of \$127 million and \$245 million for the six months ended June 30, 2018 and 2017, respectively.

(2) Interest rates and amounts include the effects of risk management activities associated with the respective asset and liability categories.

(3) Monthly or quarterly averages have been used by certain subsidiaries where daily averages are unavailable.

(4)

Detailed average volume, Interest revenue and Interest expense exclude Discontinued operations. See Note 2 to the Consolidated Financial Statements.

(5) Consists of other time deposits and savings deposits. Savings deposits are made up of insured money market accounts, NOW accounts, and other savings deposits. The interest expense on savings deposits includes FDIC deposit insurance fees and charges.

(6) Average rates reflect prevailing local interest rates, including inflationary effects and monetary corrections in certain countries.

(7) Average volumes of securities loaned or sold under agreements to repurchase are reported net pursuant to FIN 41 (ASC 210-20-45). However, Interest expense excludes the impact of FIN 41 (ASC 210-20-45).

(8) The fair value carrying amounts of derivative contracts are reported in Non-interest-earning assets and Other non-interest-bearing liabilities.

(9) Interest expense on Trading account liabilities of ICG is reported as a reduction of Interest revenue. Interest revenue and Interest expense on cash collateral positions are reported in interest on Trading account assets and Trading account liabilities, respectively.

(10) Excludes hybrid financial instruments and beneficial interests in consolidated VIEs that are classified as

Long-term debt, as these obligations are accounted for in changes in fair value recorded in Principal transactions.

(11) Includes stockholders' equity from discontinued operations.

(12) Includes allocations for capital and funding costs based on the location of the asset.

Analysis of Changes in Interest Revenue⁽¹⁾⁽²⁾⁽³⁾

In millions of dollars	2nd Qtr. 2018 vs. 1st Qtr. 2018			2nd Qtr. 2018 vs. 2nd Qtr. 2017		
	Increase (decrease) due to change in:			Increase (decrease) due to change in:		
	Average volume	Average rate	Net change	Average volume	Average rate	Net change
Deposits with banks ⁽⁴⁾	\$14	\$47	\$61	\$24	\$94	\$118
Federal funds sold and securities borrowed or purchased under agreements to resell						
In U.S. offices	\$68	\$57	\$125	\$30	\$336	\$366
In offices outside the U.S. ⁽⁴⁾	12	160	172	49	92	141
Total	\$80	\$217	\$297	\$79	\$428	\$507
Trading account assets ⁽⁵⁾						
In U.S. offices	\$(43)	\$25	\$(18)	\$(66)	\$40	\$(26)
In offices outside the U.S. ⁽⁴⁾	(3)	413	410	97	179	276
Total	\$(46)	\$438	\$392	\$31	\$219	\$250
Investments ⁽¹⁾						
In U.S. offices	\$(21)	\$122	\$101	\$4	\$208	\$212
In offices outside the U.S. ⁽⁴⁾	(6)	42	36	(17)	100	83
Total	\$(27)	\$164	\$137	\$(13)	\$308	\$295
Loans (net of unearned income) ⁽⁶⁾						
In U.S. offices	\$47	\$179	\$226	\$241	\$324	\$565
In offices outside the U.S. ⁽⁴⁾	(12)	86	74	323	3	326
Total	\$35	\$265	\$300	\$564	\$327	\$891
Other interest-earning assets ⁽⁷⁾	\$14	\$16	\$30	\$44	\$92	\$136
Total interest revenue	\$70	\$1,147	\$1,217	\$729	\$1,468	\$2,197

(1) The taxable equivalent adjustment is related to the tax-exempt bond portfolio based on the U.S. federal statutory tax rates of 21% in 2018 and 35% in 2017 and is included in this presentation.

(2) Rate/volume variance is allocated based on the percentage relationship of changes in volume and changes in rate to the total net change.

(3) Detailed average volume, Interest revenue and Interest expense exclude Discontinued operations. See Note 2 to the Consolidated Financial Statements.

(4) Changes in average rates reflect changes in prevailing local interest rates, including inflationary effects and monetary corrections in certain countries.

Interest expense on Trading account liabilities of ICG is reported as a reduction of Interest revenue. Interest revenue and Interest expense on cash collateral positions are reported in interest on Trading account assets and Trading account liabilities, respectively.

(6) Includes cash-basis loans.

(7) Includes brokerage receivables.

Analysis of Changes in Interest Expense and Net Interest Revenue⁽¹⁾⁽²⁾⁽³⁾

In millions of dollars	2nd Qtr. 2018 vs. 1st Qtr. 2018			2nd Qtr. 2018 vs. 2nd Qtr. 2017		
	Increase (decrease) due to change in:			Increase (decrease) due to change in:		
	Average volume	Average rate	Net change	Average volume	Average rate	Net change
Deposits						
In U.S. offices	\$26	\$ 118	\$ 144	\$42	\$406	\$448
In offices outside the U.S. ⁽⁴⁾	16	87	103	31	162	193
Total	\$42	\$ 205	\$ 247	\$73	\$568	\$641
Federal funds purchased and securities loaned or sold under agreements to repurchase						
In U.S. offices	\$22	\$ 170	\$ 192	\$4	\$396	\$400
In offices outside the U.S. ⁽⁴⁾	17	66	83	48	100	148
Total	\$39	\$ 236	\$ 275	\$52	\$496	\$548
Trading account liabilities ⁽⁵⁾						
In U.S. offices	\$8	\$ 5	\$ 13	\$5	\$54	\$59
In offices outside the U.S. ⁽⁴⁾	5	3	8	5	26	31
Total	\$13	\$ 8	\$ 21	\$10	\$80	\$90
Short-term borrowings ⁽⁶⁾						
In U.S. offices	\$(22)	\$ 72	\$ 50	\$29	\$307	\$336
In offices outside the U.S. ⁽⁴⁾	1	1	2	3	(18)	(15)
Total	\$(21)	\$ 73	\$ 52	\$32	\$289	\$321
Long-term debt						
In U.S. offices	\$(12)	\$ 150	\$ 138	\$81	\$178	\$259
In offices outside the U.S. ⁽⁴⁾	6	(14)	(8)	4	(14)	(10)
Total	\$(6)	\$ 136	\$ 130	\$85	\$164	\$249
Total interest expense	\$67	\$ 658	\$ 725	\$252	\$1,597	\$1,849
Net interest revenue	\$3	\$ 489	\$ 492	\$476	\$(128)	\$348

(1) The taxable equivalent adjustment is related to the tax-exempt bond portfolio based on the U.S. federal statutory tax rates of 21% in 2018 and 35% in 2017 and is included in this presentation.

(2) Rate/volume variance is allocated based on the percentage relationship of changes in volume and changes in rate to the total net change.

(3) Detailed average volume, Interest revenue and Interest expense exclude Discontinued operations. See Note 2 to the Consolidated Financial Statements.

(4) Changes in average rates reflect changes in prevailing local interest rates, including inflationary effects and monetary corrections in certain countries.

Interest expense on Trading account liabilities of ICG is reported as a reduction of Interest revenue. Interest revenue and Interest expense on cash collateral positions are reported in interest on Trading account assets and Trading account liabilities, respectively.

(6) Includes brokerage payables.

Market Risk of Trading Portfolios

For additional information on Citi's market risk of trading portfolios, see "Market Risk—Market Risk of Trading Portfolios" in Citi's 2017 Annual Report on Form 10-K.

Value at Risk

As of June 30, 2018, Citi estimates that the conservative features of its VAR calibration contributed an approximate 25% add-on to what would be a VAR estimated under the assumption of stable and perfectly normal distributed markets. As of March 31, 2018, the add-on was 17%.

As set forth in the table below, Citi's average trading VAR as of June 30, 2018 decreased compared to March 31, 2018. The decrease was primarily due to lower interest rate and credit spread risk in the Markets businesses within ICG. The decrease of average trading and credit portfolio VAR was in line with the decrease of average trading VAR. The average incremental impact of the credit portfolio was mostly unchanged from March 31, 2018 to June 30, 2018.

Quarter-end and Average Trading VAR and Trading and Credit Portfolio VAR

	Second Quarter		First Quarter		Second Quarter	
In millions of dollars	June 30, 2018	2018 Average	March 31, 2018	2018 Average	June 30, 2017	2017 Average
Interest rate	\$ 60	\$ 61	\$ 84	\$ 68	\$ 48	\$ 52
Credit spread	46	47	52	49	52	\$ 49
Covariance adjustment ⁽¹⁾	(25)	(26)	(24)	(25)	(15)	(15)
Fully diversified interest rate and credit spread ⁽²⁾	\$ 81	\$ 82	\$ 112	\$ 92	\$ 85	\$ 86
Foreign exchange	29	30	33	30	23	23
Equity	23	20	20	22	15	15
Commodity	16	17	19	20	20	21
Covariance adjustment ⁽¹⁾	(74)	(69)	(73)	(71)	(53)	(59)
Total trading VAR—all market risk factors, including general and specific risk (excluding credit portfolios) ⁽²⁾	\$ 75	\$ 80	\$ 111	\$ 93	\$ 90	\$ 86
Specific risk-only component ⁽³⁾	\$ 2	\$ 3	\$ 3	\$ 3	\$ 1	\$ 1
Total trading VAR—general market risk factors only (excluding credit portfolios)	\$ 73	\$ 77	\$ 108	\$ 90	\$ 89	\$ 85
Incremental impact of the credit portfolio ⁽⁴⁾	\$ 16	\$ 10	\$ 5	\$ 9	\$ 5	\$ 10
Total trading and credit portfolio VAR	\$ 91	\$ 90	\$ 116	\$ 102	\$ 95	\$ 96

Covariance adjustment (also known as diversification benefit) equals the difference between the total VAR and the sum of the VARs tied to each individual risk type. The benefit reflects the fact that the risks within each and across

(1) risk types are not perfectly correlated and, consequently, the total VAR on a given day will be lower than the sum of the VARs relating to each individual risk type. The determination of the primary drivers of changes to the covariance adjustment is made by an examination of the impact of both model parameter and position changes.

The total trading VAR includes mark-to-market and certain fair value option trading positions in ICG, with the

(2) exception of hedges to the loan portfolio, fair value option loans and all CVA exposures. Available-for-sale and accrual exposures are not included.

(3) The specific risk-only component represents the level of equity and fixed income issuer-specific risk embedded in VAR.

(4) The credit portfolio is composed of mark-to-market positions associated with non-trading business units including Citi Treasury, the CVA relating to derivative counterparties and all associated CVA hedges. FVA and DVA are not included. The credit portfolio also includes hedges to the loan portfolio, fair value option loans and hedges to the leveraged finance pipeline within capital markets origination in ICG.

The table below provides the range of market factor VARs associated with Citi's total trading VAR, inclusive of specific risk:

	Second Quarter 2018		First Quarter 2018		Second Quarter 2017	
In millions of dollars	Low	High	Low	High	Low	High
Interest rate	\$38	\$91	\$50	\$89	\$33	\$72
Credit spread	43	52	45	53	47	53
Fully diversified interest rate and credit spread	\$59	\$118	\$78	\$117	\$67	\$107
Foreign exchange	20	44	24	44	17	28
Equity	15	26	16	32	10	24
Commodity	13	22	16	23	14	30
Total trading	\$57	\$120	\$79	\$118	\$67	\$116
Total trading and credit portfolio	69	123	88	124	78	123

Note: No covariance adjustment can be inferred from the above table as the high and low for each market factor will be from different close-of-business dates.

The following table provides the VAR for ICG, excluding the CVA relating to derivative counterparties, hedges of CVA, fair value option loans and hedges to the loan portfolio:

	Jun. 30, 2018
In millions of dollars	
Total—all market risk factors, including general and specific risk	
Average—during quarter	\$ 78
High—during quarter	120
Low—during quarter	55

Regulatory VAR Back-testing

In accordance with Basel III, Citi is required to perform back-testing to evaluate the effectiveness of its Regulatory VAR model. Regulatory VAR back-testing is the process in which the daily one-day VAR, at a 99% confidence interval, is compared to the buy-and-hold profit and loss (i.e., the profit and loss impact if the portfolio is held constant at the end of the day and re-priced the following day). 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 profit and loss excludes realized trading revenue, net interest, fees and commissions, intra-day trading profit and loss and changes in reserves.

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 back-testing exceptions.

As of June 30, 2018, there was one back-testing exception observed for Citi's Regulatory VAR for the prior 12 months. On May 29, 2018, the G10 rates business in ICG experienced large losses due to exceptional market moves triggered by political turmoil in Italy.

Country Risk

For additional information on country risk at Citi, see “Country Risk” in Citi’s 2017 Annual Report on Form 10-K.

Top 25 Country Exposures

The following table presents Citi’s top 25 exposures by country (excluding the U.S.) as of June 30, 2018. The total exposure as of June 30, 2018 to the top 25 countries disclosed below, in combination with the U.S., would represent approximately 95% of Citi’s exposure to all countries. For purposes of the table, loan amounts are reflected in the country where the loan is booked, which is generally based on the domicile of the borrower. For example, a loan to a Chinese subsidiary of a Switzerland-based corporation will generally be categorized as a loan in China. In addition, Citi has developed regional booking centers in certain countries, most significantly in the United Kingdom (U.K.) and Ireland,

in order to more efficiently serve its corporate customers. As an example, with respect to the U.K., only 27% of corporate

loans presented in the table below are to U.K. domiciled entities (27% for unfunded commitments), with the balance of the loans predominately to European domiciled counterparties.

Approximately 84% of the total U.K. funded loans and 90% of the total U.K. unfunded commitments were investment grade as of June 30, 2018. Trading account assets and investment securities are generally categorized based on the domicile of the issuer of the security of the underlying reference entity. For additional information on the assets included in the table, see the footnotes to the table below.

For a discussion of uncertainties arising as a result of the terms and other uncertainties resulting from the U.K.’s potential exit from the EU, see “Risk Factors—Strategic Risks” in Citigroup’s 2017 Annual Report on Form 10-K.

In billions of dollars	ICG loans ⁽¹⁾	GCB loans ⁽²⁾	Other funded ⁽²⁾	Unfunded ⁽³⁾	Net MTM on derivatives/repl ⁽⁴⁾	Total hedges (on loans and CVA)	Investment securities ⁽⁵⁾	Trading account assets ⁽⁶⁾	Total as of 2Q18	Total as of 1Q18	Total as of 2Q17	Total as a % of Citi as of 2Q18
United Kingdom	\$ 38.5	\$ -10.5		\$ 62.4	\$ 12.4	\$(3.5)	\$ 6.4	\$(0.9)	\$125.8	\$125.7	\$111.8	7.9 %
Mexico ⁽⁷⁾	9.6	25.5	0.4	7.6	0.5	(0.6)	13.2	4.0	60.2	63.9	61.3	3.8
Hong Kong	18.8	11.8	0.9	6.3	1.2	(0.2)	5.3	1.0	45.1	45.9	39.7	2.8
Singapore	13.7	12.3	0.3	4.8	1.1	(0.2)	8.7	0.5	41.2	43.0	41.2	2.6
Korea	2.2	19.0	0.2	2.9	1.6	(1.2)	8.9	1.4	35.0	35.8	35.1	2.2
Ireland	12.7	—	1.1	16.4	0.4	—	—	0.7	31.3	32.6	28.9	2.0
India	4.1	6.8	0.7	5.4	1.3	(0.8)	8.7	1.4	27.6	31.7	33.4	1.7
Brazil	11.6	—	0.1	3.0	5.0	(1.4)	3.0	3.1	24.4	26.9	27.3	1.5
Australia	4.7	10.4	—	6.2	0.8	(0.4)	1.9	(0.4)	23.2	24.6	23.7	1.5
China	8.0	4.8	0.3	1.8	2.4	(0.6)	2.4	0.4	19.5	19.8	19.4	1.2
Taiwan	5.3	8.9	0.2	1.2	1.2	—	1.1	1.1	19.0	20.3	18.4	1.2
Germany	0.1	—	0.1	4.5	3.4	(3.4)	9.4	2.7	16.8	14.7	19.5	1.1
Japan	2.9	0.1	0.1	2.3	4.0	(1.3)	4.9	2.9	15.9	18.4	18.6	1.0
Canada	1.9	0.7	0.5	7.1	2.2	(0.3)	3.3	0.4	15.8	15.6	16.3	1.0
Poland	3.6	1.9	0.1	2.9	0.1	(0.1)	4.0	0.5	13.0	14.7	13.1	0.8
United Arab Emirates	5.6	1.5	0.1	2.8	0.3	(0.1)	—	—	10.2	11.0	6.2	0.6

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Jersey	6.9	—	0.4	2.5	0.2	—	—	—	10.0	9.0	4.1	0.6
Malaysia	1.7	4.8	0.3	1.3	0.1	(0.1))1.2	0.4	9.7	10.0	9.0	0.6
Thailand	1.2	2.3	—	1.5	0.1	—	1.4	0.4	6.9	7.4	7.0	0.4
Indonesia	2.3	1.1	—	1.4	0.1	(0.1)	)1.2	0.2	6.2	6.5	5.7	0.4
South Africa	1.8	—	—	1.3	0.4	(0.1)	)2.0	(0.1)	)5.3	4.7	3.9	0.3
Philippines	0.8	1.2	0.1	0.4	1.3	(0.1)	)1.4	0.1	5.2	4.3	3.6	0.3
Luxembourg	—	—	—	—	0.5	(0.3)	)4.3	0.4	4.9	5.7	5.8	0.3
Russia	1.9	0.9	—	0.8	0.2	(0.1)	)0.7	0.2	4.6	5.5	4.7	0.3
Argentina	1.8	—	—	0.1	1.0	(0.4)	)0.2	1.0	3.7	4.3	3.0	0.2
Total												36.3%

ICG loans reflect funded corporate loans and private bank loans, net of unearned income. As of June 30, 2018, (1)private bank loans in the table above totaled \$24.5 billion, concentrated in Hong Kong (\$7.3 billion), Singapore (\$6.8 billion) and the U.K. (\$5.5 billion).

- (2) Other funded includes other direct exposure such as accounts receivable, loans HFS, other loans in Corporate/Other and investments accounted for under the equity method.
- (3) Unfunded exposure includes unfunded corporate lending commitments, letters of credit and other contingencies.
- (4) Net mark-to-market counterparty risk on OTC derivatives and securities lending/borrowing transactions (repos). Exposures are shown net of collateral and inclusive of CVA. Includes margin loans.
- (5) Investment securities include securities available-for-sale, recorded at fair market value, and securities held-to-maturity, recorded at historical cost.
- (6) Trading account assets are shown on a net basis and include issuer risk on cash products and derivative exposure where the underlying reference entity/issuer is located in that country.
- (7) The decrease in total exposures in Mexico from 1Q18 was primarily due to FX translation. For additional information, see Note 17 to the Consolidated Financial Statements.

Argentina

As of June 30, 2018, Citi's net investment in its Argentine operations was approximately \$740 million, compared to \$954 million at December 31, 2017.

For all periods up to and including the second quarter of 2018, Citi used the Argentine peso as the functional currency in Argentina and translated the financial statements of its Argentine operations into U.S. dollars using the official exchange rate published by the Central Bank of Argentina. The impact of devaluations of the Argentine peso on Citi's net investment in Argentina, net of hedges, was reported as a translation loss in AOCI.

Citi continued to monitor the inflation trends in Argentina during the second quarter of 2018 to assess whether the Argentine economy should be considered highly inflationary, which is defined in U.S. GAAP as the period in which the three-year cumulative inflation rate in the country exceeds 100%. The determination that Argentina has a highly inflationary economy would require a change in the functional currency of Citi's Argentine operations to the U.S. dollar in the quarterly period following when the economy was deemed to be highly inflationary.

While there has been uncertainty in recent periods about the three-year cumulative inflation rate given the unavailability and inconsistency of certain historical inflation data in Argentina, as of June 30, 2018, all available inflation statistics published by the Argentine Central Bank had exceeded a three-year cumulative rate of 100%. The Argentine economy was deemed to be highly inflationary as of the second quarter of 2018 and, as a result, Citi was required to change the functional currency of its Argentine operations to the U.S. dollar, effective as of July 1, 2018. As the change was made effective in July 2018, there was no financial impact to Citi in the second quarter of 2018. Furthermore, a change in the functional currency to the U.S. dollar does not result in any immediate gains or losses to Citi. However, prospective changes in the translation of Citi's Argentine peso-denominated assets and liabilities into U.S. dollars at spot exchange rates and prospective changes in the fair value of Citi's derivative positions used to economically hedge the investment in Argentina will be recorded in earnings instead of AOCI.

INCOME TAXES

Deferred Tax Assets

For additional information on Citi's deferred tax assets (DTAs), see "Risk Factors—Strategic Risks," "Significant Accounting Policies and Significant Estimates—Income Taxes" and Notes 1 and 9 to the Consolidated Financial Statements in Citi's 2017 Annual Report on Form 10-K.

At June 30, 2018, Citigroup had recorded net DTAs of approximately \$22.9 billion, a decrease of \$0.2 billion from March 31, 2018 and an increase of \$0.4 billion from December 31, 2017. The decrease for the quarter was primarily driven by the generation of earnings and the increase for the six months was primarily driven by losses in Other comprehensive income and adoption of ASU 2016-16 (see Note 1 to the Consolidated Financial Statements), partially offset by earnings.

The following table summarizes Citi's net DTAs balance. Of Citi's net DTAs as of June 30, 2018, those arising from net operating losses, foreign tax credit and general business credit carry-forwards (\$11.7 billion) are 100% deducted in calculating Citi's regulatory capital, while DTAs arising from temporary differences are deducted from regulatory capital if in excess of the 10%/15% limitations (\$0 billion).

Despite a \$0.4 billion increase in net DTAs from December 31, 2017, Citi was able to reduce the amount of DTAs arising from net operating losses, foreign tax credits and general business credit carry-forwards by \$0.5 billion, thereby reducing the amount of DTAs that were excluded from Common Equity Tier 1 Capital from \$12.3 billion to \$11.7 billion as of June 30, 2018. Thus, approximately \$11.2 billion of net DTAs were not deducted in calculating regulatory capital pursuant to Basel III standards as of June 30, 2018 and were appropriately risk weighted as per those rules.

Jurisdiction/Component DTAs balance

In billions of dollars	June 30, 2018	December 31, 2017
Total U.S.	\$20.3	\$ 19.9
Total foreign	2.6	2.6
Total	\$22.9	\$ 22.5

Effective Tax Rate

Citi's effective tax rate for the second quarter of 2018 was 24.3%, as compared with 31.6% in the second quarter of 2017. The decrease in the effective tax rate was primarily due to the lower U.S. federal statutory tax rate pursuant to Tax Reform.

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Citi's second quarter of 2018 tax provision did not include any changes to Citi's provisional income tax estimates recorded in the fourth quarter of 2017.

FUTURE APPLICATION OF ACCOUNTING STANDARDS

Accounting for Financial Instruments—Credit Losses

In June 2016, the Financial Accounting Standards Board (FASB) issued ASU No. 2016-13, Financial Instruments-Credit Losses (Topic 326). The ASU introduces a new credit loss methodology, the Current Expected Credit Losses (CECL) methodology, which requires earlier recognition of credit losses, while also providing additional transparency about credit risk.

The CECL methodology utilizes a lifetime “expected credit loss” measurement objective for the recognition of credit losses for loans, held-to-maturity debt securities and other receivables at the time the financial asset is originated or acquired. The expected credit losses (ECL) are adjusted each period for changes in expected lifetime credit losses. This methodology replaces the multiple existing impairment methods in current GAAP, which generally require that a loss be incurred before it is recognized. For available-for-sale debt securities where fair value is less than cost, credit-related impairment, if any, will be recognized through an allowance for credit losses and adjusted each period for changes in credit risk.

The CECL methodology represents a significant change from existing GAAP and may result in material changes to the Company’s accounting for financial instruments. The Company is evaluating the effect that ASU 2016-13 will have on its Consolidated Financial Statements and related disclosures. The impact of the ASU will depend upon the state of the economy and the nature of Citi’s portfolios at the date of adoption. Based on a preliminary analysis performed in 2018 and the environment and portfolios at that time, the overall impact was estimated to be an approximate 10% to 20% increase in credit reserves as of that time. Moreover, there are still some implementation questions recently discussed by the FASB’s Transition Resource Group, including whether a reserve for accrued interest on credit cards is required and whether partial discounting of inputs to expected credit loss models is permitted, that will need to be resolved by the FASB and that could affect the estimated impact. The ASU will be effective for Citi as of January 1, 2020. For additional information, see “Capital Resources—Regulatory Capital Treatment—Implementation and Transition of the Current Expected Credit Losses (CECL) Methodology” in the First Quarter of 2018 Form 10-Q.

Lease Accounting

In February 2016, the FASB issued ASU No. 2016-02, Leases (Topic 842), which is intended to increase transparency and comparability of accounting for lease transactions. The ASU will require lessees to recognize leases on the balance sheet as lease assets and lease liabilities and will require both quantitative and qualitative disclosures regarding key information about leasing arrangements. Lessor accounting is largely unchanged. The guidance is effective beginning January 1, 2019. The Company estimates that upon adoption, its Consolidated Balance Sheet will have an approximate \$5

billion increase in assets and liabilities. Additionally, the Company estimates an approximate \$140 million increase in retained earnings due to the cumulative effect of recognizing previously deferred gains on sale/leaseback transactions.

Subsequent Measurement of Goodwill

In January 2017, the FASB issued ASU No. 2017-04, Intangibles—Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment. The ASU simplifies the subsequent measurement of goodwill impairment by eliminating the requirement to calculate the implied fair value of goodwill (i.e., the current Step 2 of the goodwill impairment test) to measure a goodwill impairment charge. Under the ASU, the impairment test is the comparison of the fair value of a reporting unit with its carrying amount (the current Step 1), with the impairment charge being the deficit in fair value but not exceeding the total amount of goodwill allocated to that reporting unit. The simplified one-step impairment test applies to all reporting units (including those with zero or negative carrying amounts). The ASU will be effective for Citi as of January 1, 2020. The impact of the ASU will depend upon the performance of Citi’s reporting units and the market conditions impacting the fair value of each reporting unit going forward. See Note 1 to the Consolidated Financial Statements for a discussion of “Accounting Changes.”

DISCLOSURE CONTROLS AND PROCEDURES

Citi's disclosure controls and procedures are designed to ensure that information required to be disclosed under the Securities Exchange Act of 1934, as amended, is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, including without limitation that information required to be disclosed by Citi in its SEC filings is accumulated and communicated to management, including the Chief Executive Officer (CEO) and Chief Financial Officer (CFO), as appropriate, to allow for timely decisions regarding required disclosure. Citi's Disclosure Committee assists the CEO and CFO in their responsibilities to design, establish, maintain and evaluate the effectiveness of Citi's disclosure controls and procedures. The Disclosure Committee is responsible for, among other things, the oversight, maintenance and implementation of the disclosure controls and procedures, subject to the supervision and oversight of the CEO and CFO.

Citi's management, with the participation of its CEO and CFO, has evaluated the effectiveness of Citigroup's disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934) as of June 30, 2018 and, based on that evaluation, the CEO and CFO have concluded that at that date, Citigroup's disclosure controls and procedures were effective.

DISCLOSURE PURSUANT TO SECTION 219 OF THE IRAN THREAT REDUCTION AND SYRIA HUMAN RIGHTS ACT

Pursuant to Section 219 of the Iran Threat Reduction and Syria Human Rights Act of 2012, which added Section 13(r) to the Securities Exchange Act of 1934, as amended, Citi is required to disclose in its annual or quarterly reports, as applicable, whether it or any of its affiliates knowingly engaged in certain activities, transactions or dealings relating to Iran or with individuals or entities that are subject to sanctions under U.S. law. Disclosure is generally required even where the activities, transactions or dealings were conducted in compliance with applicable law.

Between November 2017 and February 2018, Citibank N.A., India (branch), acting as the remitting bank, inadvertently processed five domestic, local currency, non-U.S. dollar transactions on behalf of its clients to IRISL India PVT, Ltd, a subsidiary of the Islamic Republic of Iran Shipping Lines (IRISL). The total value of these payments was approximately USD 2,156.00 (INR 147,979.22). The transactions did not result in any revenue for Citi. These payments were identified during the second quarter of 2018 through Citi's sanctions screening capabilities, even though neither IRISL nor its subsidiary is identified as a Government of Iran entity by the U.S. Department of Treasury's Office of Foreign Assets Control (OFAC). These transactions were reported to OFAC.

FORWARD-LOOKING STATEMENTS

Certain statements in this Form 10-Q, including but not limited to statements included within the Management's Discussion and Analysis of Financial Condition and Results of Operations, are "forward-looking statements" within the meaning of the rules and regulations of the SEC. In addition, Citigroup also may make forward-looking statements in its other documents filed or furnished with the SEC, and its management may make forward-looking statements orally to analysts, investors, representatives of the media and others.

Generally, forward-looking statements are not based on historical facts but instead represent Citigroup's and its management's beliefs regarding future events. Such statements may be identified by words such as believe, expect, anticipate, intend, estimate, may increase, may fluctuate, target, illustrative, and similar expressions or future or conditional verbs such as will, should, would and could.

Such statements are based on management's current expectations and are subject to risks, uncertainties and changes in circumstances. Actual results and capital and other financial conditions may differ materially from those included in these statements due to a variety of factors, including without limitation (i) the precautionary statements included within each individual business's discussion and analysis of its results of operations above and in Citi's 2017 Annual Report on Form 10-K and First Quarter of 2018 Form 10-Q; (ii) the factors listed and described under "Risk Factors" in Citi's 2017 Annual Report on Form 10-K; and (iii) the risks and uncertainties summarized below:

the potential impact on Citi's ability to return capital to common shareholders, consistent with its capital optimization efforts and targets, due to, among other things, Citi's results of operations, Citi's ability to effectively manage its level of risk weighted assets and GSIB surcharge, potential changes to the regulatory capital framework, the CCAR process and the results of regulatory stress tests or any changes to the stress testing and CCAR requirements or process, such as the proposed introduction of a firm-specific "stress capital buffer" (SCB), including as a result of any year-to-year variability resulting from the SCB and the impact on Citi's estimated management buffer;

the ongoing regulatory and other uncertainties and changes faced by financial institutions, including Citi, in the U.S. and globally, including, among others, potential policy and/or regulatory changes arising from a new administration in Mexico, uncertainties and potential changes to various aspects of the regulatory capital framework, and the potential impact these uncertainties and changes could have on Citi's businesses, results of operations, financial condition, strategy or organizational structure and compliance risks and costs;

Citi's ability to utilize its remaining DTAs (including the foreign tax credit component of its DTAs) and thus reduce the negative impact of the DTAs on Citi's regulatory capital, including as a result of its ability to generate U.S.

taxable income and by the provisions of and guidance issued in connection with Tax Reform;

the potential impact to Citi if its interpretation or application of the complex tax laws to which it is subject, such as withholding tax obligations and stamp and other transactional taxes, differs from those of the relevant governmental authorities;

Citi's ability to achieve the expected returns on its ongoing investments in its businesses and efficiency initiatives, as part of its operational and financial objectives and targets, including as a result of factors that Citi cannot control; the potential impact from declining sales and revenues or other difficulties of any retailer or merchant with whom Citi has a co-branding or private label credit card relationship, termination of a particular relationship, external factors outside the control of either party to the relationship, such as the general economic environment, or other factors, including bankruptcies, liquidations, consolidations and other similar events, and the potential negative impact such an event could have on Citi, including as a result of loss of revenues, higher cost of credit, impairment of purchased credit card relationships and contract-related intangibles or other losses;

the potential impact to Citi's businesses, credit costs, deposits, revenues or other results of operations and financial condition as a result of macroeconomic and geopolitical challenges and uncertainties and volatility, including the further pursuit of protectionist trade or other related policies by the U.S. and/or other countries, governmental fiscal and monetary actions, or expected actions, such as changes in the federal funds rate and any balance sheet normalization program implemented by the Federal Reserve Board or other central banks, the process for the U.K. to

withdraw from the European Union, or geopolitical disputes or other instabilities, including those in Asia, the Middle East, Latin America or elsewhere;

the various risks faced by Citi as a result of its presence in the emerging markets, including, among others, sovereign volatility, political events, foreign exchange controls, limitations on foreign investment, sociopolitical instability (including from hyper-inflation), fraud, nationalization or loss of licenses, business restrictions, sanctions or asset freezes, potential criminal charges, closure of branches or subsidiaries and confiscation of assets as well as the increased compliance, regulatory and legal risks and costs;

Citi's ability in its resolution plan submissions to address any deficiencies identified or future guidance, including any final 2019 resolution plan guidance, provided by the Federal Reserve Board and FDIC;

the potential impact on Citi's performance, including its competitive position and ability to effectively manage its businesses and continue to execute its strategies, if Citi is unable to hire and retain highly qualified employees for any reason;

Citi's ability to effectively compete with U.S. and non-U.S. financial services companies and others;

the potential impact of concentrations of risk, such as credit and market risk arising from the size and volume of Citi's transactions with counterparties in the public sector, including the U.S. government and its agencies, or in the financial services industry, on Citi's results of operations;

the potential impacts on Citi's liquidity and/or costs of funding as a result of external factors, including, among others, market disruptions and governmental fiscal and monetary policies as well as regulatory changes or negative investor perceptions of Citi's creditworthiness;

the impact of ratings downgrades of Citi or one or more of its more significant subsidiaries or issuing entities on Citi's funding and liquidity as well as the results of operations of certain of its businesses;

the potential impact to Citi from a disruption of its operational systems, including as a result of, among other things, human error, fraud or malice, accidental technological failure, electrical or telecommunication outages or failure of computer servers, or other similar damage to Citi's property or assets, or failures by third parties with whom Citi does business, as well as disruptions in the operations of Citi's clients, customers or other third parties;

the increasing risk of continually evolving, sophisticated cybersecurity risks faced by financial institutions, including Citi and third parties with whom it does business, and others (such as theft of funds or theft, loss, misuse or disclosure of confidential client, customer, corporate or network information or assets and other attempts by unauthorized parties to disrupt computer and network systems), and the potential impact from such risks, including, among others, reputational damage with clients, customers and others, lost revenues, additional costs (including credit, remediation and other costs), regulatory penalties and inquiries, legal exposure and other financial losses;

the potential impact of incorrect assumptions or estimates in Citi's financial statements or the impact of ongoing changes to financial accounting and reporting standards or interpretations, on how Citi records and reports its financial condition and results of operations;

the potential impact to Citi's results of operations and/or regulatory capital and capital ratios if Citi's risk management process, strategies or models, including those related to its ability to manage and aggregate data, are deficient or ineffective, require refinement, modification or enhancement or any approval is withdrawn by Citi's U.S. banking regulators;

the potential impact to Citi of ongoing implementation and interpretation of regulatory changes and requirements in the U.S. and globally, such as on Citi's compliance risks and costs, including reputational and legal risks as well as remediation and other financial costs, such as penalties and fines; and

the potential outcomes of the extensive legal and regulatory proceedings, investigations and other inquiries to which Citi is or may be subject at any given time, particularly given the increased focus on conduct risk and the severity of the remedies sought and potential collateral consequences to Citi arising from such outcomes.

Any forward-looking statements made by or on behalf of Citigroup speak only as to the date they are made, and Citi does not undertake to update forward-looking statements to reflect the impact of circumstances or events that arise after the date the forward-looking statements were made.

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CONSOLIDATED FINANCIAL STATEMENTS

CONSOLIDATED STATEMENT OF INCOME (UNAUDITED) Citigroup Inc. and Subsidiaries

	Three Months Ended June 30,		Six Months Ended June 30,	
In millions of dollars, except per share amounts	2018	2017	2018	2017
Revenues				
Interest revenue	\$17,550	\$15,294	\$33,882	\$29,815
Interest expense	5,885	4,036	11,045	7,602
Net interest revenue	\$11,665	\$11,258	\$22,837	\$22,213
Commissions and fees	\$3,111	\$3,256	\$6,141	\$6,311
Principal transactions	2,151	2,643	5,440	5,737
Administration and other fiduciary fees	934	909	1,839	1,743
Realized gains on sales of investments, net	102	221	272	413
Impairment losses on investments				
Gross impairment losses	(15)	(20)	(43)	(32)
Less: Impairments recognized in AOCI	—	—	—	—
Net impairment losses recognized in earnings	\$(15)	\$(20)	\$(43)	\$(32)
Other revenue	\$521	\$(112)	\$855	\$136
Total non-interest revenues	\$6,804	\$6,897	\$14,504	\$14,308
Total revenues, net of interest expense	\$18,469	\$18,155	\$37,341	\$36,521
Provisions for credit losses and for benefits and claims				
Provision for loan losses	\$1,795	\$1,666	\$3,598	\$3,341
Policyholder benefits and claims	21	23	47	53
Provision (release) for unfunded lending commitments	(4)	28	24	(15)
Total provisions for credit losses and for benefits and claims	\$1,812	\$1,717	\$3,669	\$3,379
Operating expenses				
Compensation and benefits	\$5,452	\$5,463	\$11,259	\$10,997
Premises and equipment	570	604	1,163	1,224
Technology/communication	1,797	1,695	3,555	3,358
Advertising and marketing	411	432	792	805
Other operating	2,482	2,566	4,868	5,099
Total operating expenses	\$10,712	\$10,760	\$21,637	\$21,483
Income from continuing operations before income taxes	\$5,945	\$5,678	\$12,035	\$11,659
Provision for income taxes	1,444	1,795	2,885	3,658
Income from continuing operations	\$4,501	\$3,883	\$9,150	\$8,001
Discontinued operations				
Income (loss) from discontinued operations	\$(2)	\$33	\$(9)	\$5
Provision (benefit) for income taxes	(17)	12	(17)	2
Income from discontinued operations, net of taxes	\$15	\$21	\$8	\$3
Net income before attribution of noncontrolling interests	\$4,516	\$3,904	\$9,158	\$8,004
Noncontrolling interests	26	32	48	42
Citigroup's net income	\$4,490	\$3,872	\$9,110	\$7,962
Basic earnings per share ⁽¹⁾				
Income from continuing operations	\$1.62	\$1.27	\$3.30	\$2.63
Income from discontinued operations, net of taxes	0.01	0.01	0.01	—
Net income	\$1.63	\$1.28	\$3.31	\$2.63
Weighted average common shares outstanding (in millions)	2,530.9	2,739.1	2,546.2	2,752.2

Diluted earnings per share⁽¹⁾

Income from continuing operations	\$ 1.62	\$ 1.27	\$ 3.30	\$ 2.63
Income (loss) from discontinued operations, net of taxes	0.01	0.01	0.01	—
Net income	\$ 1.63	\$ 1.28	\$ 3.31	\$ 2.63
Adjusted weighted average common shares outstanding (in millions)	2,532.3	2,739.2	2,547.6	2,752.3

(1) Due to rounding, earnings per share on continuing operations and discontinued operations may not sum to earnings per share on net income.

The Notes to the Consolidated Financial Statements are an integral part of these Consolidated Financial Statements.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME Citigroup Inc. and Subsidiaries
(UNAUDITED)

	Three Months Ended June 30,		Six Months Ended June 30,	
In millions of dollars	2018	2017	2018	2017
Citigroup's net income	\$4,490	\$3,872	\$9,110	\$7,962
Add: Citigroup's other comprehensive income				
Net change in unrealized gains and losses on investment securities, net of taxes ⁽¹⁾⁽²⁾	\$(498)	\$(27)	\$(1,556)	\$193
Net change in debt valuation adjustment (DVA), net of taxes ⁽¹⁾	318	(84)	446	(144)
Net change in cash flow hedges, net of taxes	(101)	117	(323)	115
Benefit plans liability adjustment, net of taxes	301	(135)	389	(147)
Net change in foreign currency translation adjustment, net of taxes and hedges	(2,867)	643	(1,747)	1,961
Net change in excluded component of fair value hedges, net of taxes	(28)	—	(32)	—
Citigroup's total other comprehensive income	\$(2,875)	\$514	\$(2,823)	\$1,978
Citigroup's total comprehensive income	\$1,615	\$4,386	\$6,287	\$9,940
Add: Other comprehensive income attributable to noncontrolling interests	\$(57)	\$39	\$(43)	\$70
Add: Net income attributable to noncontrolling interests	26	32	48	42
Total comprehensive income	\$1,584	\$4,457	\$6,292	\$10,052

(1) See Note 1 to the Consolidated Financial Statements.

For the three and six months ended June 30, 2018, respectively, amount represents the net change in unrealized (2) gains and losses on available-for-sale (AFS) debt securities. Effective January 1, 2018, the AFS category is eliminated for equity securities under ASU 2016-01.

The Notes to the Consolidated Financial Statements are an integral part of these Consolidated Financial Statements.

CONSOLIDATED BALANCE SHEET Citigroup Inc. and Subsidiaries

	June 30, 2018 (Unaudited)	December 31, 2017
In millions of dollars		
Assets		
Cash and due from banks (including segregated cash and other deposits)	\$21,077	\$23,775
Deposits with banks	179,825	156,741
Federal funds sold and securities borrowed or purchased under agreements to resell (including \$169,113 and \$132,949 as of June 30, 2018 and December 31, 2017, respectively, at fair value)	265,526	232,478
Brokerage receivables	36,977	38,384
Trading account assets (including \$113,280 and \$99,460 pledged to creditors at June 30, 2018 and December 31, 2017, respectively)	262,949	252,790
Investments:		
Available-for-sale debt securities (including \$7,901 and \$9,493 pledged to creditors as of June 30, 2018 and December 31, 2017, respectively)	289,031	290,725
Held-to-maturity debt securities (including \$1,094 and \$435 pledged to creditors as of June 30, 2018 and December 31, 2017, respectively)	52,897	53,320
Equity securities (including \$1,432 and \$1,395 at fair value as of June 30, 2018 and December 31, 2017, respectively, of which \$189 was available for sale as of December 31, 2017)	7,788	8,245
Total investments	\$349,716	\$352,290
Loans:		
Consumer (including \$22 and \$25 as of June 30, 2018 and December 31, 2017, respectively, at fair value)	323,632	333,656
Corporate (including \$2,978 and \$4,349 as of June 30, 2018 and December 31, 2017, respectively, at fair value)	347,548	333,378
Loans, net of unearned income	\$671,180	\$667,034
Allowance for loan losses	(12,126)	(12,355)
Total loans, net	\$659,054	\$654,679
Goodwill	22,058	22,256
Intangible assets (other than MSRs)	4,729	4,588
Mortgage servicing rights (MSRs)	596	558
Other assets (including \$21,703 and \$18,559 as of June 30, 2018 and December 31, 2017, respectively, at fair value)	109,827	103,926
Total assets	\$1,912,334	\$1,842,465

The following table presents certain assets of consolidated variable interest entities (VIEs), which are included in the Consolidated Balance Sheet above. The assets in the table below include those assets that can only be used to settle obligations of consolidated VIEs, presented on the following page, and are in excess of those obligations. Additionally, the assets in the table below include third-party assets of consolidated VIEs only and exclude intercompany balances that eliminate in consolidation.

	June 30, 2018 (Unaudited)	December 31, 2017
In millions of dollars		
Assets of consolidated VIEs to be used to settle obligations of consolidated VIEs		
Cash and due from banks	\$ 46	\$ 52

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Trading account assets	745	1,129
Investments	2,462	2,498
Loans, net of unearned income		
Consumer	50,042	54,656
Corporate	19,075	19,835
Loans, net of unearned income	\$ 69,117	\$ 74,491
Allowance for loan losses	(1,903)	(1,930)
Total loans, net	\$ 67,214	\$ 72,561
Other assets	171	154
Total assets of consolidated VIEs to be used to settle obligations of consolidated VIEs	\$ 70,638	\$ 76,394
Statement continues on the next page.		

CONSOLIDATED BALANCE SHEET
(Continued)

Citigroup Inc. and Subsidiaries

	June 30, 2018 (Unaudited)	December 31, 2017
In millions of dollars, except shares and per share amounts		
Liabilities		
Non-interest-bearing deposits in U.S. offices	\$ 117,473	\$ 126,880
Interest-bearing deposits in U.S. offices (including \$334 and \$303 as of June 30, 2018 and December 31, 2017, respectively, at fair value)	337,228	318,613
Non-interest-bearing deposits in offices outside the U.S.	86,241	87,440
Interest-bearing deposits in offices outside the U.S. (including \$1,294 and \$1,162 as of June 30, 2018 and December 31, 2017, respectively, at fair value)	455,788	426,889
Total deposits	\$ 996,730	\$ 959,822
Federal funds purchased and securities loaned or sold under agreements to repurchase (including \$49,246 and \$40,638 as of June 30, 2018 and December 31, 2017, respectively, at fair value)	177,828	156,277
Brokerage payables	67,672	61,342
Trading account liabilities	140,745	125,170
Short-term borrowings (including \$4,093 and \$4,627 as of June 30, 2018 and December 31, 2017, respectively, at fair value)	37,233	44,452
Long-term debt (including \$35,462 and \$31,392 as of June 30, 2018 and December 31, 2017, respectively, at fair value)	236,822	236,709
Other liabilities (including \$17,819 and \$13,961 as of June 30, 2018 and December 31, 2017, respectively, at fair value)	54,336	57,021
Total liabilities	\$ 1,711,366	\$ 1,640,793
Stockholders' equity		
Preferred stock (\$1.00 par value; authorized shares: 30 million), issued shares: as of June 30, 2018—761,400 and as of December 31, 2017—770,120, at aggregate liquidation value	\$ 19,035	\$ 19,253
Common stock (\$0.01 par value; authorized shares: 6 billion), issued shares: as of June 30, 2018—3,099,558,751 and as of December 31, 2017—3,099,523,273	31	31
Additional paid-in capital	107,724	108,008
Retained earnings	145,211	138,425
Treasury stock, at cost: June 30, 2018—582,953,339 shares and December 31, 2017—529,614,728 shares	(34,413)	(30,309)
Accumulated other comprehensive income (loss) (AOCI)	(37,494)	(34,668)
Total Citigroup stockholders' equity	\$ 200,094	\$ 200,740
Noncontrolling interest	874	932
Total equity	\$ 200,968	\$ 201,672
Total liabilities and equity	\$ 1,912,334	\$ 1,842,465

The following table presents certain liabilities of consolidated VIEs, which are included in the Consolidated Balance Sheet above. The liabilities in the table below include third-party liabilities of consolidated VIEs only and exclude intercompany balances that eliminate in consolidation. The liabilities also exclude amounts where creditors or beneficial interest holders have recourse to the general credit of Citigroup.

	June 30, 2018 (Unaudited)	December 31, 2017
In millions of dollars		

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Liabilities of consolidated VIEs for which creditors or beneficial interest holders
do not have recourse to the general credit of Citigroup

Short-term borrowings	\$ 12,293	\$ 10,142
Long-term debt	28,727	30,492
Other liabilities	834	611
Total liabilities of consolidated VIEs for which creditors or beneficial interest holders do not have recourse to the general credit of Citigroup	\$ 41,854	\$ 41,245

The Notes to the Consolidated Financial Statements are an integral part of these Consolidated Financial Statements.

CONSOLIDATED STATEMENT OF CHANGES IN STOCKHOLDERS' EQUITY Citigroup Inc. and Subsidiaries
(UNAUDITED)

In millions of dollars	Six Months Ended	
	June 30, 2018	2017
Preferred stock at aggregate liquidation value		
Balance, beginning of period	\$19,253	\$19,253
Redemption of preferred stock	(218)	—
Balance, end of period	\$19,035	\$19,253
Common stock and additional paid-in capital		
Balance, beginning of period	\$108,039	\$108,073
Employee benefit plans	(285)	(239)
Other	1	(5)
Balance, end of period	\$107,755	\$107,829
Retained earnings		
Balance, beginning of period	\$138,425	\$146,477
Adjustment to opening balance, net of taxes ⁽¹⁾	(84)	(660)
Adjusted balance, beginning of period	\$138,341	\$145,817
Citigroup's net income	9,110	7,962
Common dividends ⁽²⁾	(1,650)	(890)
Preferred dividends	(590)	(621)
Other ⁽³⁾	—	(90)
Balance, end of period	\$145,211	\$152,178
Treasury stock, at cost		
Balance, beginning of period	\$(30,309)	\$(16,302)
Employee benefit plans ⁽⁴⁾	471	523
Treasury stock acquired ⁽⁵⁾	(4,575)	(3,563)
Balance, end of period	\$(34,413)	\$(19,342)
Citigroup's accumulated other comprehensive income (loss)		
Balance, beginning of period	\$(34,668)	\$(32,381)
Adjustment to opening balance, net of taxes ⁽¹⁾	(3)	504
Adjusted balance, beginning of period	\$(34,671)	\$(31,877)
Citigroup's total other comprehensive income (loss)	(2,823)	1,978
Balance, end of period	\$(37,494)	\$(29,899)
Total Citigroup common stockholders' equity	\$181,059	\$210,766
Total Citigroup stockholders' equity	\$200,094	\$230,019
Noncontrolling interests		
Balance, beginning of period	\$932	\$1,023
Transactions between Citigroup and the noncontrolling-interest shareholders	(16)	6
Net income attributable to noncontrolling-interest shareholders	48	42
Distributions paid to noncontrolling-interest shareholders	(36)	—
Other comprehensive income (loss) attributable to noncontrolling-interest shareholders	(43)	70
Other	(11)	(53)
Net change in noncontrolling interests	\$(58)	\$65
Balance, end of period	\$874	\$1,088
Total equity	\$200,968	\$231,107

(1) See Note 1 to the Consolidated Financial Statements for additional details.

(2)

Common dividends declared were \$0.32 per share in the first and second quarters of 2018 and \$0.16 per share in the first and second quarters of 2017.

(3) Includes the impact of ASU 2016-09, Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting. See Note 1 to the Consolidated Financial Statements.

Includes treasury stock related to (i) certain activity on employee stock option program exercises where the (4) employee delivers existing shares to cover the option exercise, or (ii) under Citi's employee restricted or deferred stock programs where shares are withheld to satisfy tax requirements.

(5) For the six months ended June 30, 2018 and 2017, primarily consists of open market purchases under Citi's Board of Directors-approved common stock repurchase program.

The Notes to the Consolidated Financial Statements are an integral part of these Consolidated Financial Statements.

CONSOLIDATED STATEMENT OF CASH FLOWS Citigroup Inc. and Subsidiaries
(UNAUDITED)

	Six Months Ended June 30,	
	2018	2017
In millions of dollars		
Cash flows from operating activities of continuing operations		
Net income before attribution of noncontrolling interests	\$9,158	\$8,004
Net income attributable to noncontrolling interests	48	42
Citigroup's net income	\$9,110	\$7,962
Income from discontinued operations, net of taxes	8	3
Income from continuing operations—excluding noncontrolling interests	\$9,102	\$7,959
Adjustments to reconcile net income to net cash provided by operating activities of continuing operations		
Net gains on significant disposals ⁽¹⁾	—	(19)
Depreciation and amortization	1,855	1,797
Provision for loan losses	3,598	3,341
Realized gains from sales of investments	(272)	(413)
Net impairment losses on investments, goodwill and intangible assets	43	60
Change in trading account assets	(10,235)	(14,741)
Change in trading account liabilities	15,575	(2,847)
Change in brokerage receivables net of brokerage payables	7,737	(5,805)
Change in loans HFS	(147)	(515)
Change in other assets	(5,799)	(4,480)
Change in other liabilities	(2,685)	(2,975)
Other, net	(10,453)	(2,975)
Total adjustments	\$(783)	\$(29,572)
Net cash provided by (used in) operating activities of continuing operations	\$8,319	\$(21,613)
Cash flows from investing activities of continuing operations		
Change in federal funds sold and securities borrowed or purchased under agreements to resell	\$(33,048)	\$2,748
Change in loans	(10,132)	(29,952)
Proceeds from sales and securitizations of loans	3,217	6,256
Purchases of investments	(85,871)	(96,925)
Proceeds from sales of investments	41,808	56,728
Proceeds from maturities of investments	48,846	47,785
Proceeds from significant disposals ⁽¹⁾	—	2,732
Capital expenditures on premises and equipment and capitalized software	(1,690)	(1,647)
Proceeds from sales of premises and equipment, subsidiaries and affiliates and repossessed assets	143	215
Other, net	98	102
Net cash used in investing activities of continuing operations	\$(36,629)	\$(11,958)
Cash flows from financing activities of continuing operations		
Dividends paid	\$(2,232)	\$(1,504)
Redemption of preferred stock	(218)	—
Treasury stock acquired	(4,686)	(3,635)
Stock tendered for payment of withholding taxes	(475)	(401)
Change in federal funds purchased and securities loaned or sold under agreements to repurchase	21,551	12,959
Issuance of long-term debt	40,757	37,679
Payments and redemptions of long-term debt	(35,087)	(21,317)

Change in deposits	36,908	29,337
Change in short-term borrowings	(7,219	)5,818

CONSOLIDATED STATEMENT OF CASH FLOWS

(UNAUDITED) (Continued)

In millions of dollars	Six Months Ended	
	June 30,	
	2018	2017
Net cash provided by financing activities of continuing operations	\$49,299	\$58,936
Effect of exchange rate changes on cash and due from banks	\$(603)	\$223
Change in cash and due from banks and deposits with banks ⁽²⁾	\$20,386	\$25,588
Cash, due from banks and deposits with banks at beginning of period ⁽²⁾	180,516	160,494
Cash, due from banks and deposits with banks at end of period ⁽²⁾	\$200,902	\$186,082
Cash and due from banks	\$21,077	\$20,940
Deposits with banks	179,825	165,142
Cash, due from banks and deposits with banks at end of period	\$200,902	\$186,082
Supplemental disclosure of cash flow information for continuing operations		
Cash paid during the period for income taxes	\$2,239	\$1,975
Cash paid during the period for interest	9,957	7,329
Non-cash investing activities		
Transfers to loans HFS from loans	\$2,900	\$3,300
Transfers to OREO and other repossessed assets	55	58

(1) See Note 2 to the Consolidated Financial Statements for further information on significant disposals.

(2) Includes the impact of ASU 2016-18, Restricted Cash. See Notes 1 and 22 to the Consolidated Financial Statements.

The Notes to the Consolidated Financial Statements are an integral part of these Consolidated Financial Statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

1. BASIS OF PRESENTATION AND ACCOUNTING CHANGES

Basis of Presentation

The accompanying unaudited Consolidated Financial Statements as of June 30, 2018 and for the three- and six-month periods ended June 30, 2018 and 2017 include the accounts of Citigroup Inc. and its consolidated subsidiaries.

In the opinion of management, all adjustments, consisting of normal recurring adjustments, necessary for a fair presentation have been reflected. The accompanying unaudited Consolidated Financial Statements should be read in conjunction with the Consolidated Financial Statements and related notes included in Citigroup's Annual Report on Form 10-K for the fiscal year ended December 31, 2017 (2017 Annual Report on Form 10-K) and Citigroup's Quarterly Report on Form 10-Q for the quarter ended March 31, 2018 (First Quarter of 2018 Form 10-Q).

Certain financial information that is normally included in annual financial statements prepared in accordance with U.S. generally accepted accounting principles (GAAP), but is not required for interim reporting purposes, has been condensed or omitted.

Management must make estimates and assumptions that affect the Consolidated Financial Statements and the related footnote disclosures. While management uses its best judgment, actual results could differ from those estimates.

As noted above, the Notes to Consolidated Financial Statements are unaudited.

Throughout these Notes, "Citigroup," "Citi" and the "Company" refer to Citigroup Inc. and its consolidated subsidiaries.

Certain reclassifications have been made to the prior periods' financial statements and notes to conform to the current period's presentation.

ACCOUNTING CHANGES

Revenue Recognition

In May 2014, the Financial Accounting Standards Board (FASB) issued ASU 2014-09, Revenue from Contracts with Customers (Revenue Recognition), which outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers. The core principle of the revenue model is that an entity recognizes revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The ASU defines the promised good or service as the performance obligation under the contract.

While the guidance replaces most existing revenue recognition guidance in GAAP, the ASU is not applicable to financial instruments and, therefore, does not impact a majority of the Company's revenues, including net interest income, loan fees, gains on sales and mark-to-market accounting.

In accordance with the new revenue recognition standard, Citi has identified the specific performance obligation (promised services) associated with the contract with the customer and has determined when that specific performance obligation has been satisfied, which may be at a point in time or over time depending on how the performance obligation is defined. The contracts with customers also contain the transaction price, which consists of fixed consideration and/or consideration that may vary (variable consideration), and is defined as the amount of consideration an entity expects to be entitled to when or as the performance obligation is satisfied, excluding amounts collected on behalf of third parties (including transaction taxes). The amounts recognized at the point in time the performance obligation is satisfied may differ from the ultimate transaction price associated with that performance obligation when a portion of it is based on variable consideration. For example, some consideration is based on the client's month-end balance or market values which are unknown at the time the contract is executed. The remaining transaction price amount, if any, will be recognized as the variable consideration becomes determinable. In certain transactions, the performance obligation is considered satisfied at a point in time in the future. In this instance, Citi defers revenue on the balance sheet that will only be recognized upon completion of the performance obligation. The new revenue recognition standard further clarified the guidance related to reporting revenue gross as principal versus net as an agent. In many cases, Citi outsources a component of its performance obligations to third parties. The

Company has determined that it acts as principal in the majority of these transactions and therefore presents the amounts paid to these third parties gross within operating expenses.

The Company has retrospectively adopted this standard as of January 1, 2018 and as a result was required to report amounts paid to third parties where Citi is principal to the contract within Operating expenses. The adoption resulted in an increase in both revenue and expenses of approximately \$250 million for the three-month period ended March 31, 2018 and approximately \$500 million for the six-month period ended June 30, 2018, respectively, while increasing approximately \$1 billion for the year ended December 31, 2017 with similar amounts for prior periods. Prior to adoption, these expense amounts were reported as contra revenue primarily within Commissions and fees and Administration and other fiduciary fees revenue. Accordingly, prior periods have been reclassified to conform to the new presentation.

See Note 5 to the Consolidated Financial Statements for a description of the Company's revenue recognition policies for Commissions and fees and Administration and other fiduciary fees.

Income Tax Impact of Intra-Entity Transfers of Assets

In October 2016, the FASB issued ASU No. 2016-16, Income Taxes—Intra-Entity Transfers of Assets Other Than Inventory, which requires an entity to recognize the income tax consequences of an intra-entity transfer of an asset other than inventory when the transfer occurs. The ASU was effective January 1, 2018 and was adopted as of that date. The impact of this standard was an increase of DTAs by approximately \$300 million, a decrease of retained earnings by approximately \$80 million and a decrease of prepaid tax assets by approximately \$380 million.

Clarifying the Definition of a Business

In January 2017, the FASB issued ASU No. 2017-01, Business Combinations (Topic 805): Clarifying the Definition of a Business. The definition of a business directly and indirectly affects many areas of accounting (e.g., acquisitions, disposals, goodwill and consolidation). The ASU narrows the definition of a business by introducing a quantitative screen as the first step, such that if substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or a group of similar identifiable assets, then the set of transferred assets and activities is not a business. If the set is not scoped out from the quantitative screen, the entity then evaluates whether the set meets the requirement that a business include, at a minimum, an input and a substantive process that together significantly contribute to the ability to create outputs.

The ASU was effective for public entities, including Citi, as of January 1, 2018 with prospective application. The ongoing impact of the ASU will depend upon the acquisition and disposal activities of Citi. If fewer transactions qualify as a business, there could be less initial recognition of goodwill, but also less goodwill allocated to disposals.

Changes in Accounting for Pension and Postretirement (Benefit) Expense

In March 2017, the FASB issued ASU No. 2017-07, Compensation—Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost, which changes the income statement presentation of net benefit expense and requires restating the Company's financial statements for each of the earlier periods presented in Citi's annual and interim financial statements. The change in presentation was effective for annual and interim periods starting January 1, 2018. The ASU requires that only the service cost component of net benefit expense be included in Compensation and benefits on the income statement. The other components of net benefit expense are required to be presented outside of Compensation and benefits and are presented in Other operating expense. Since both of these income statement line items are part of Operating expenses, total Operating expenses and Net income will not change. This change in presentation did not have a material effect on Compensation and benefits and Other operating expenses and is applied prospectively. The components of

the net benefit expense are currently disclosed in Note 8 to the Consolidated Financial Statements.

The new standard also changes the components of net benefit expense that are eligible for capitalization when employee costs are capitalized in connection with various activities, such as internally developed software, construction-in-progress, and loan origination costs. Prospectively from January 1, 2018, only the service cost component of net benefit expense may be capitalized. Existing capitalized balances are not affected. This change in amounts eligible for capitalization does not have a material effect on the Company's Consolidated Financial Statements and related disclosures.

Hedging

In August 2017, the FASB issued ASU No. 2017-12, Targeted Improvements to Accounting for Hedging Activities, which better aligns an entity's risk management activities and financial reporting for hedging relationships through changes to the designation and measurement guidance for qualifying hedging relationships and the presentation of hedge results. The ASU requires the change in the fair value of the hedging instrument to be presented in the same income statement line as the hedged item and also requires expanded disclosures. Citi adopted this standard on January 1, 2018 and transferred approximately \$4 billion of pre-payable mortgage backed securities and municipal bonds from held-to-maturity (HTM) into available-for-sale (AFS) securities classification as permitted as a one-time transfer upon adoption of the standard, as these assets were deemed to be eligible to be hedged under the last of layer

hedge strategy. The impact to opening retained earnings was immaterial. See Note 19 to the Consolidated Financial Statements for more information.

Recognition and Measurement of Financial Assets and Financial Liabilities

In January 2016, the FASB issued ASU No. 2016-01, Financial Instruments—Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities, which addresses certain aspects of recognition, measurement, presentation and disclosure of financial instruments. In February 2018, the FASB issued ASU No. 2018-03, Technical Corrections and Improvements to Financial Instruments—Overall (Subtopic 825-10), to clarify certain provisions in ASU 2016-01.

The ASUs require entities to present separately in AOCI the portion of the total change in the fair value of a liability resulting from a change in the instrument-specific credit risk when the entity has elected to measure the liability at fair value in accordance with the fair value option for financial instruments. It also requires equity investments (except those accounted for under the equity method of accounting or those that result in consolidation of the investee) to be measured at fair value with changes in fair value recognized in net income, thus eliminating the AFS category for equity investments. However, Federal Reserve Bank and Federal Home Loan Bank stock, as well as certain exchange seats, will continue to be presented at cost. The ASUs also provide

an instrument-by-instrument election to measure non-marketable equity investments using a measurement alternative. Under the measurement alternative, the investment is carried at cost plus or minus changes resulting from observable prices in orderly transactions for the identical or a similar investment of the same issuer. In addition, equity securities under the measurement alternative are also assessed for impairment. Finally, the ASUs require that fair value disclosures for financial instruments not measured at fair value on the balance sheet be presented at their exit prices (e.g., held-for-investment loans).

Citi early adopted the provisions of ASU 2016-01

related to presentation of the change in fair value of liabilities for which the fair value option was elected, related to changes in Citigroup's own credit spreads in Accumulated other comprehensive income (loss) (AOCI) effective January 1, 2016. Accordingly, since the first quarter of 2016, these amounts have been reflected as a component of AOCI, whereas these amounts were previously recognized in Citigroup's revenues and net income. The impact of adopting this amendment resulted in a cumulative catch-up reclassification from retained earnings to AOCI of an accumulated after-tax loss of approximately \$15 million at January 1, 2016. Financial statements for periods prior to 2016 were not subject to restatement under the provisions of this ASU. For additional information, see Notes 17, 20 and 21 to the Consolidated Financial Statements.

The other provisions of ASU 2016-01, as discussed above, was effective January 1, 2018. Citi has adopted both ASU 2016-01 and ASU 2018-03 as of January 1, 2018. Accordingly, as of the first quarter of 2018, the changes to accounting for equity securities and fair value disclosures have been reflected in Citigroup's financial statements. The impact of adopting the change to AFS equity securities resulted in a cumulative catch-up reclassification from AOCI to retained earnings of an accumulated after-tax gain of approximately \$3 million at January 1, 2018. Citi elected the measurement alternative for all non-marketable equity investments that no longer qualify for cost measurement under the ASUs. This provision in the ASUs was adopted prospectively. Financial statements for periods prior to 2018 were not subject to restatement under the provisions of the ASUs. For additional information, see Notes 12, 17 and 20 to the Consolidated Financial Statements.

Statement of Cash Flows

In November 2016, the FASB issued ASU No. 2016-18, Restricted Cash, which requires that companies present cash, cash equivalents and amounts generally described as restricted cash or restricted cash equivalents (restricted cash) when reconciling beginning-of-period and end-of-period totals on the Statement of Cash Flows. In connection with the adoption of the ASU, Citigroup also changed its definition of cash and cash equivalents to include all of Cash and due from banks and predominately all of Deposits with banks. The Company has retrospectively adopted this ASU as of January 1, 2018 and as a result Net cash provided by investing activities of continuing operations on the

Statement of Cash Flows increased by \$27.7 billion for the six months ended June 30, 2017.

In August 2016, the FASB issued ASU No. 2016-15, Classification of Certain Cash Receipts and Cash Payments, which provides guidance on the classification and presentation of certain cash receipts and payments on the Statement of Cash Flows. The Company has retrospectively adopted this ASU as of January 1, 2018 which resulted in immaterial changes to Citi's Consolidated Statement of Cash Flows.

Premium Amortization on Purchased Callable Debt Securities

In March 2017, the FASB issued Accounting Standards Update (ASU) No. 2017-08, Receivables—Nonrefundable Fees and Other Costs (Subtopic 310-20): Premium Amortization on Purchased Callable Debt Securities, which amends the amortization period for certain purchased callable debt securities held at a premium. The ASU requires entities to amortize premiums on debt securities by the first call date when the securities have fixed and determinable call dates and prices. The scope of the ASU includes all accounting premiums, such as purchase premiums and cumulative fair value hedge adjustments. The ASU does not change the accounting for discounts, which continue to be recognized over the contractual life of a security.

Citi early adopted the ASU in the second quarter of 2017, with an effective date of January 1, 2017. Adoption of the ASU is on a modified retrospective basis through a cumulative effect adjustment to retained earnings as of the

beginning of the year of adoption. Adoption of the ASU primarily affected Citi's AFS and HTM portfolios of callable state and municipal debt securities. The ASU adoption resulted in a net reduction to total stockholders' equity of \$156 million (after tax), effective as of January 1, 2017. This amount is composed of a reduction of approximately \$660 million to retained earnings for the incremental amortization of purchase premiums and cumulative hedge adjustments generated under fair value hedges of these callable debt securities, offset by an increase to AOCI of \$504 million related to the cumulative fair value hedge adjustments reclassified to retained earnings for AFS debt securities.

2. DISCONTINUED OPERATIONS AND SIGNIFICANT DISPOSALS

Summary of Discontinued Operations

Citi sold its German retail banking operations and Egg Banking plc credit card business in 2008 and 2011, respectively. Residual items from these disposals mainly related to reversal of reserves associated with agreed tax settlement and expirations of certain warranties and indemnifications, resulted in income from Discontinued operations, net of taxes, as summarized below. All Discontinued operations results are recorded within Corporate/Other.

The following summarizes financial information for all discontinued operations:

	Three Months Ended June 30, 2018	Six Months Ended June 30, 2017	Three Months Ended June 30, 2018	Six Months Ended June 30, 2017
In millions of dollars				
Total revenues, net of interest expense	\$—	\$—	\$—	\$—
(Loss) income from discontinued operations	\$(2)	\$33	\$(9)	\$5
(Benefit) provision for income taxes	(17)	12	(17)	2
Income from discontinued operations, net of taxes	\$15	\$21	\$8	\$3

Cash flows for discontinued operations were not material for the periods presented.

Significant Disposals

There were no new significant disposal transactions during the three and six months ended June 30, 2018. For a description of the Company's significant disposal transactions and financial impact, see Note 2 to the Consolidated Financial Statements in Citi's 2017 Annual Report on Form 10-K.

3. BUSINESS SEGMENTS

Citigroup's activities are conducted through the following business segments: Global Consumer Banking (GCB) and ICG. In addition, Corporate/Other includes activities not assigned to a specific business segment, as well as certain North America and international loan portfolios, discontinued operations and other legacy assets.

The prior-period balances reflect reclassifications to conform the presentation for all periods to the current period's presentation. Effective January 1, 2018, financial data was reclassified to reflect:

- adoption of ASU No. 2014-09, Revenue Recognition, which occurred on January 1, 2018 on a retrospective basis. See "Accounting Changes" in Note 1 to the Consolidated Financial Statements;
- the re-attribution of certain costs between Corporate/Other and GCB and ICG; and
- certain other immaterial reclassifications.

Citi's consolidated results remain unchanged for all periods presented as a result of the changes and reclassifications discussed above.

For additional information regarding Citigroup's business segments, see Note 3 to the Consolidated Financial Statements in Citi's 2017 Annual Report on Form 10-K.

The following table presents certain information regarding the Company's continuing operations by segment:

	Three Months Ended June 30,							
	Revenues, net of interest expense		Provision (benefits) income taxes ⁽¹⁾		Income (loss) from continuing operations		Identifiable assets	
In millions of dollars, except identifiable assets in billions	2018	2017	2018	2017	2018	2017	June 30, 2018	December 31, 2017
Global Consumer Banking	\$8,250	\$8,073	\$411	\$646	\$1,279	\$1,128	\$422	\$428
Institutional Clients Group	9,691	9,421	971	1,327	3,237	2,780	1,397	1,336
Corporate/Other	528	661	62	(178)	(15)	(25)	93	78
Total	\$18,469	\$18,155	\$1,444	\$1,795	\$4,501	\$3,883	\$1,912	\$1,842

⁽¹⁾ Includes total revenues, net of interest expense (excluding Corporate/Other), in North America of \$8.6 billion and \$8.6 billion; in EMEA of \$3.0 billion and \$2.9 billion; in Latin America of \$2.5 billion and \$2.4 billion; and in Asia of \$3.8 billion and \$3.6 billion for the three months ended June 30, 2018 and 2017, respectively. These regional numbers exclude Corporate/Other, which largely operates within the U.S.

⁽²⁾ Includes pretax provisions for credit losses and for benefits and claims in the GCB results of \$1.9 billion and \$1.8 billion; in the ICG results of \$25 million and \$87 million; and in the Corporate/Other results of \$(118) million and \$(132) million for the three months ended June 30, 2018 and 2017, respectively.

	Six Months Ended June 30,					
	Revenues,		Provision (benefits)		Income (loss) from	
In millions of dollars	2018	2017	2018	2017	2018	2017
Global Consumer Banking	\$16,683	\$15,919	\$ 864	\$ 1,228	\$ 2,673	\$ 2,126
Institutional Clients Group	19,539	18,740	2,028	2,702	6,566	5,791
Corporate/Other	1,119	1,862	(7	)(272	)(89	) 84
Total	\$37,341	\$36,521	\$ 2,885	\$ 3,658	\$ 9,150	\$ 8,001

Includes total revenues, net of interest expense, in North America of \$16.9 billion and \$17.2 billion; in EMEA of \$6.2 billion and \$5.7 billion; in Latin America of \$5.1 billion and \$4.7 billion; and in Asia of \$8.0 billion and \$7.1 billion for the six months ended June 30, 2018 and 2017, respectively. Regional numbers exclude Corporate/Other, which largely operates within the U.S.

Includes pretax provisions for credit losses and for benefits and claims in the GCB results of \$3.8 billion and \$3.6 billion; in the ICG results of \$(16) million and \$(118) million; and in Corporate/Other results of \$(125) million and \$(80) million for the six months ended June 30, 2018 and 2017, respectively.

4. INTEREST REVENUE AND EXPENSE

Interest revenue and Interest expense consisted of the following:

In millions of dollars	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Interest revenue				
Loan interest, including fees	\$11,190	\$10,293	\$22,082	\$20,338
Deposits with banks	493	375	925	670
Federal funds sold and securities borrowed or purchased under agreements to resell	1,336	829	2,375	1,490
Investments, including dividends	2,374	2,058	4,608	4,018
Trading account assets ⁽¹⁾	1,763	1,481	3,134	2,747
Other interest	394	258	758	552
Total interest revenue	\$17,550	\$15,294	\$33,882	\$29,815
Interest expense				
Deposits ⁽²⁾	\$2,244	\$1,603	\$4,241	\$3,018
Federal funds purchased and securities loaned or sold under agreements to repurchase	1,224	676	2,173	1,169
Trading account liabilities ⁽¹⁾	236	146	451	293
Short-term borrowings	523	202	994	401
Long-term debt	1,658	1,409	3,186	2,721
Total interest expense	\$5,885	\$4,036	\$11,045	\$7,602
Net interest revenue	\$11,665	\$11,258	\$22,837	\$22,213
Provision for loan losses	1,795	1,666	3,598	3,341
Net interest revenue after provision for loan losses	\$9,870	\$9,592	\$19,239	\$18,872

(1) Interest expense on Trading account liabilities is reported as a reduction of interest revenue from Trading account assets.

Includes deposit insurance fees and charges of \$319 million and \$329 million for the three months ended June 30, (2)2018 and 2017, respectively, and \$695 million and \$634 million for the six months ended June 30, 2018 and 2017, respectively.

5. COMMISSIONS AND FEES; ADMINISTRATION AND OTHER FIDUCIARY FEES

The primary components of Commissions and fees revenue are investment banking fees, brokerage commissions, credit- and bank-card income and deposit-related fees.

Investment banking fees are substantially composed of underwriting and advisory revenues. Such fees are recognized at the point in time when Citigroup's performance under the terms of a contractual arrangement is completed, which is typically at the closing of a transaction. Reimbursed expenses related to these transactions are recorded as revenue and are included within investment banking fees. In certain instances for advisory contracts, Citi will receive amounts in advance of the deal's closing. In these instances, the amounts received will be recognized as a liability and not recognized in revenue until the transaction closes. The contract liability amount for the periods presented was negligible. Out-of-pocket expenses associated with underwriting activity are deferred and recognized at the time the related revenue is recognized, while out-of-pocket expenses associated with advisory arrangements are expensed as incurred. In general, expenses incurred related to investment banking transactions, whether consummated or not, are recorded in Other operating expenses. The Company has determined that it acts as principal in the majority of these transactions and therefore presents expenses gross within Other operating expenses.

Brokerage commissions primarily include commissions and fees from the following: executing transactions for clients on exchanges and over-the-counter markets; sales of mutual funds and other annuity products; and assisting clients in clearing transactions, providing brokerage services and other such activities. Brokerage commissions are recognized in Commissions and fees at the point in time the associated service is fulfilled, generally on trade-execution date.

Gains or losses, if any, on these transactions are included in Principal transactions (see Note 6 to the Consolidated Financial Statements). Sales of certain investment products include a portion of variable consideration associated with the underlying product. In these instances, a portion of the revenue associated with the sale of the product is not recognized until the variable consideration becomes fixed. The Company recognized \$124 million and \$99 million of revenue related to such variable consideration for the three months ended June 30, 2018 and 2017, respectively, and \$272 million and \$195 million for the six months ended June 30, 2018 and 2017, respectively. These amounts primarily relate to performance obligations satisfied in prior periods.

Credit- and bank-card income is primarily composed of interchange fees, which are earned by card issuers based on purchase sales, and certain card fees, including annual fees. Costs related to customer reward programs and certain payments to partners (primarily based on program sales, profitability and customer acquisitions) are recorded as a reduction of credit- and bank-card income. Interchange revenues are recognized as earned on a daily basis when Citi's performance obligation to transmit funds to the payment networks has been satisfied. Annual card fees, net of origination costs, are deferred and amortized on a straight-line basis over a 12-month period. Costs related to card reward programs are recognized when the rewards are earned by the cardholders. Payments to partners are recognized when incurred.

Deposit-related fees consist of service charges on deposit accounts and fees earned from performing cash management activities and other deposit account services. Such fees are recognized in the period in which the related service is provided.

Transactional service fees primarily consist of fees charged for processing services such as cash management, global payments, clearing, international funds transfer, and other trade services. Such fees are recognized as/when the associated service is satisfied, which normally occurs at the point in time the service is requested by the customer and provided by Citi.

Insurance distribution revenue consists of commissions earned from third-party insurance companies for marketing and selling insurance policies on behalf of such entities. Such commissions are recognized in Commissions and fees at the point in time the associated service is fulfilled, generally when the insurance policy is sold to the policyholder.

Sales of certain insurance products include a portion of variable consideration associated with the underlying product. In these instances, a portion of the revenue associated with the sale of the policy is not recognized until the variable consideration becomes determinable. The Company recognized \$101 million and \$107 million for the three months

ended June 30, 2018 and 2017, respectively, and \$204 million and \$227 million for the six months ended June 30, 2018 and June 30, 2017, respectively. These amounts primarily relate to performance obligations in prior periods. Insurance premiums consist of premium income from insurance policies which Citi has underwritten and sold to policyholders.

The following tables present Commissions and fees revenue:

In millions of dollars	Three Months Ended June 30, 2018				Six Months Ended June 30, 2018			
	ICG	GCB	Corporate/Other	Total	ICG	GCB	Corporate/Other	Total
Investment banking	\$1,012	\$—	\$ —	\$1,012	\$1,839	\$—	\$ —	\$1,839
Brokerage commissions	491	206	—	697	1,057	455	—	1,512
Credit- and bank-card income								
Interchange fees	276	2,025	5	2,306	536	3,900	10	4,446
Card-related loan fees	17	147	6	170	31	302	12	345
Card rewards and partner payments	(126)	(2,065)	(6)	(2,197)	(250)	(3,940)	(11)	(4,201)
Deposit-related fees ⁽¹⁾	236	160	1	397	472	343	1	816
Transactional service fees	182	21	1	204	372	42	3	417
Corporate finance ⁽²⁾	219	1	—	220	361	3	—	364
Insurance distribution revenue ⁽³⁾	5	142	5	152	10	285	10	305
Insurance premiums ⁽³⁾	—	32	(1)	31	—	65	(2)	63
Loan servicing	38	40	11	89	76	62	23	161
Other	(5)	34	1	30	10	61	3	74
Total commissions and fees ⁽⁴⁾	\$2,345	\$743	\$ 23	\$3,111	\$4,514	\$1,578	\$ 49	\$6,141

In millions of dollars	Three Months Ended June 30, 2017				Six Months Ended June 30, 2017			
	ICG	GCB	Corporate/Other	Total	ICG	GCB	Corporate/Other	Total
Investment banking	\$967	\$—	\$ —	\$967	\$1,879	\$—	\$ —	\$1,879
Brokerage commissions	490	199	1	690	972	393	2	1,367
Credit- and bank-card income								
Interchange fees	241	1,892	23	2,156	463	3,595	63	4,121
Card-related loan fees	14	187	12	213	26	354	28	408
Card rewards and partner payments	(109)	(1,844)	(14)	(1,967)	(211)	(3,530)	(41)	(3,782)
Deposit-related fees ⁽¹⁾	239	181	4	424	447	366	8	821
Transactional service fees	197	26	9	232	371	53	33	457
Corporate finance ⁽²⁾	249	1	—	250	433	2	—	435
Insurance distribution revenue ⁽³⁾	2	138	17	157	5	283	41	329
Insurance premiums ⁽³⁾	—	32	(1)	31	—	65	(3)	62
Loan servicing	36	28	32	96	71	54	64	189
Other	(16)	20	3	7	(38)	39	24	25
Total commissions and fees ⁽⁴⁾	\$2,310	\$860	\$ 86	\$3,256	\$4,418	\$1,674	\$ 219	\$6,311

Includes overdraft fees of \$30 million and \$33 million for the three months ended June 30, 2018 and 2017,

(1) respectively, and \$62 million and \$66 million for the six months ended June 30, 2018 and 2017, respectively.

Overdraft fees are accounted for under ASC 310.

(2) Consists primarily of fees earned from structuring and underwriting loan syndications or related financing activity. This activity is accounted for under ASC 310.

(3) Previously reported as insurance premiums on the Consolidated Statement of Income.

Commissions and fees includes \$(1,648) million and \$(1,347) million not accounted for under ASC 606, Revenue from Contracts with Customers, for the three months ended June 30, 2018 and 2017, respectively, and \$(3,193)

(4) million and \$(2,625) million for the six months ended June 30, 2018 and 2017, respectively. Amounts reported in Commissions and fees accounted for under other guidance primarily include card-related loan fees, card reward programs and certain partner payments, corporate finance fees, insurance premiums, and loan servicing fees.

Administration and Other Fiduciary Fees

Administration and other fiduciary fees are primarily composed of custody fees and fiduciary fees.

The custody product is composed of numerous services related to the administration, safekeeping and reporting for both U.S. and non-U.S. denominated securities. The services offered to clients include: trade settlement, safekeeping, income collection, corporate action notification, record-keeping and reporting, tax reporting, and cash management. These services are provided for a wide range of securities, including but not limited to equities, municipal and corporate bonds, mortgage and asset-backed securities, money market instruments, U.S. Treasuries and agencies, derivative instruments, mutual funds, alternative investments and precious metals. Custody fees are recognized as/when the associated promised service is satisfied, which normally occurs at the point in time the service is requested by the customer and provided by Citi.

Fiduciary fees consist of trust services and investment management services. As an escrow agent, Citi receives, safe-

keeps, services and manages clients' escrowed assets such as cash, securities, property (including intellectual property), contracts, or other collateral. Citi performs its escrow agent duties by safekeeping the funds during the specified time period agreed upon by all parties and therefore earns its revenue evenly during the contract duration.

Investment management services consist of managing assets on behalf of Citi's retail and institutional clients. Revenue from these services primarily consists of asset-based fees for advisory accounts, which are based on the market value of the client's assets and recognized monthly, when the market value is fixed. In some instances, the Company contracts with third-party advisors and to third-party custodians. The Company has determined that it acts as principal in the majority of these transactions and therefore presents the amounts paid to third parties gross within Other operating expenses.

The following table presents Administration and other fiduciary fees:

In millions of dollars	Three Months Ended June 30, 2018				Six Months Ended June 30, 2018			
	ICG	GCB	Corporate/Other	Total	ICG	GCB	Corporate/Other	Total
Custody fees	\$399	\$45	\$ 17	\$461	\$767	\$92	\$ 32	\$891
Fiduciary fees	165	150	12	327	332	297	19	648
Guarantee fees	130	14	2	146	267	29	4	300
Total administration and other fiduciary fees ⁽¹⁾	\$694	\$209	\$ 31	\$934	\$1,366	\$418	\$ 55	\$1,839
In millions of dollars	Three Months Ended June 30, 2017				Six Months Ended June 30, 2017			
	ICG	GCB	Corporate/Other	Total	ICG	GCB	Corporate/Other	Total
Custody fees	\$382	\$41	\$ 14	\$437	\$510	\$54	\$ 16	\$580
Fiduciary fees	147	142	30	319	289	274	41	604
Guarantee fees	138	13	2	153	494	50	15	559
Total administration and other fiduciary fees ⁽¹⁾	\$667	\$196	\$ 46	\$909	\$1,293	\$378	\$ 72	\$1,743

Administration and other fiduciary fees includes \$146 million and \$153 million for the three months ended June 30, 2018 and 2017, respectively, and \$299 million and \$296 million for the six months ended June 30, 2018 and 2017, respectively, that are not accounted for under ASC 606, Revenue from Contracts with Customers. These amounts include guarantee fees.

6. PRINCIPAL TRANSACTIONS

Principal transactions revenue consists of realized and unrealized gains and losses from trading activities. Trading activities include revenues from fixed income, equities, credit and commodities products and foreign exchange transactions which are managed on a portfolio basis characterized by primary risk. Not included in the table below is the impact of net interest revenue related to trading activities, which is an integral part of trading activities' profitability. See Note 4 to the Consolidated Financial Statements for information about net interest revenue related to trading activities. Principal transactions include CVA (credit valuation adjustments on derivatives) and FVA (funding valuation adjustments) on over-the-counter derivatives. These adjustments are discussed further in Note 20 to the Consolidated Financial Statements.

In certain transactions, Citi incurs fees and presents these fees paid to third parties in operating expenses.

The following table presents Principal transactions revenue:

	Three Months		Six Months	
	Ended June 30,		Ended June 30,	
In millions of dollars	2018	2017	2018	2017
Global Consumer Banking	\$ 143	\$ 152	\$ 293	\$ 307
Institutional Clients Group	2,358	2,151	5,242	4,882
Corporate/Other	(350)	)340	(95)	)548
Total Citigroup	\$2,151	\$2,643	\$5,440	\$5,737
Interest rate risks ⁽¹⁾	\$ 1,551	\$ 1,495	\$3,173	\$3,241
Foreign exchange risks ⁽²⁾	175	757	920	1,336
Equity risks ⁽³⁾	120	74	686	286
Commodity and other risks ⁽⁴⁾	208	169	300	322
Credit products and risks ⁽⁵⁾	97	148	361	552
Total	\$2,151	\$2,643	\$5,440	\$5,737

- Includes revenues from government securities and corporate debt, municipal securities, mortgage securities and other debt instruments. Also includes spot and forward trading of currencies and exchange-traded and over-the-counter (OTC) currency options, options on fixed income securities, interest rate swaps, currency swaps, swap options, caps and floors, financial futures, OTC options and forward contracts on fixed income securities.
- (2) Includes revenues from foreign exchange spot, forward, option and swap contracts, as well as foreign currency translation (FX translation) gains and losses.
- (3) Includes revenues from common, preferred and convertible preferred stock, convertible corporate debt, equity-linked notes and exchange-traded and OTC equity options and warrants.
- (4) Primarily includes revenues from crude oil, refined oil products, natural gas and other commodities trades.
- (5) Includes revenues from structured credit products.

7. INCENTIVE PLANS

For additional information on Citi's incentive plans, see Note 7 to the Consolidated Financial Statements in Citi's 2017 Annual Report on Form 10-K.

8. RETIREMENT BENEFITS

For additional information on Citi's retirement benefits, see Note 8 to the Consolidated Financial Statements in Citi's 2017 Annual Report on Form 10-K.

Net (Benefit) Expense

The following table summarizes the components of net (benefit) expense recognized in the Consolidated Statement of Income for the Company's pension and postretirement plans for Significant Plans and All Other Plans:

In millions of dollars	Three Months Ended June 30,							
	Pension plans				Postretirement benefit plans			
	U.S. plans		Non-U.S. plans		U.S. plans		Non-U.S. plans	
	2018	2017	2018	2017	2018	2017	2018	2017
Benefits earned during the period	\$—	\$—	\$ 38	\$ 38	\$ —	\$ —	\$ 3	\$ 2
Interest cost on benefit obligation	126	136	72	74	7	8	25	25
Expected return on plan assets	(211)	(217)	(72)	(76)	(3)	(2)	(22)	(22)
Amortization of unrecognized								
Prior service benefit	—	1	(1)	(1)	—	—	(3)	(3)
Net actuarial loss	42	40	14	15	—	1	8	9
Curtailment loss ⁽¹⁾	1	3	—	—	—	—	—	—
Settlement loss ⁽¹⁾	—	—	1	4	—	—	—	—
Total net (benefit) expense	\$(42)	\$(37)	\$ 52	\$ 54	\$ 4	\$ 7	\$ 11	\$ 11

(1) Losses due to curtailment and settlement relate to repositioning and divestiture activities.

In millions of dollars	Six Months Ended June 30,							
	Pension plans				Postretirement benefit plans			
	U.S. plans		Non-U.S. plans		U.S. plans		Non-U.S. plans	
	2018	2017	2018	2017	2018	2017	2018	2017
Benefits earned during the period	\$1	\$1	\$76	\$74	\$—	\$—	\$5	\$4
Interest cost on benefit obligation	249	275	147	145	13	14	51	49
Expected return on plan assets	(424)	(433)	(150)	(146)	(6)	(3)	(45)	(43)
Amortization of unrecognized								
Prior service benefit	—	1	(2)	(2)	—	—	(5)	(5)
Net actuarial loss	89	84	27	31	—	—	15	17
Curtailment loss ⁽¹⁾	1	3	—	—	—	—	—	—
Settlement loss ⁽¹⁾	—	—	5	4	—	—	—	—
Total net (benefit) expense	\$(84)	\$(69)	\$103	\$106	\$7	\$11	\$21	\$22

(1) Losses due to curtailment and settlement relate to repositioning and divestiture activities.

Funded Status and Accumulated Other Comprehensive Income (AOCI)

The following tables summarize the funded status and amounts recognized in the Consolidated Balance Sheet for the Company's

Significant Plans.

In millions of dollars	Six Months Ended June 30, 2018			
	Pension plans		Postretirement benefit plans	
	U.S. plans	Non-U.S. plans	U.S. plans	Non-U.S. plans
Change in projected benefit obligation				
Projected benefit obligation at beginning of year	\$ 14,040	\$ 7,433	\$ 699	\$ 1,261
Plans measured annually	(28)	(1,987)	—	(334)
Projected benefit obligation at beginning of year—Significant Plans	\$ 14,012	\$ 5,446	\$ 699	\$ 927
First quarter activity	(576)	151	(32)	89
Projected benefit obligation at March 31, 2018—Significant Plans	\$ 13,436	\$ 5,597	\$ 667	\$ 1,016
Benefits earned during the period	—	22	—	2
Interest cost on benefit obligation	126	60	7	22
Actuarial (gain) loss	(516)	(96)	8	(1)
Benefits paid, net of participants' contributions and government subsidy	(206)	(74)	(15)	(15)
Curtailment loss ⁽¹⁾	1	—	—	—
Foreign exchange impact and other	—	(256)	—	(73)
Projected benefit obligation at period end—Significant Plans	\$ 12,841	\$ 5,253	\$ 667	\$ 951

(1) Loss due to curtailment relates to repositioning activities.

In millions of dollars	Six Months Ended June 30, 2018			
	Pension plans		Postretirement benefit plans	
	U.S. plans	Non-U.S. plans	U.S. plans	Non-U.S. plans
Change in plan assets				
Plan assets at fair value at beginning of year	\$ 12,725	\$ 7,128	\$ 262	\$ 1,119
Plans measured annually	—	(1,305)	) —	(10)
Plan assets at fair value at beginning of year—Significant Plans	\$ 12,725	\$ 5,823	\$ 262	\$ 1,109
First quarter activity	(349)	) 115	\$ (21)	58
Plan assets at fair value at March 31, 2018—Significant Plans	\$ 12,376	\$ 5,938	\$ 241	\$ 1,167
Actual return on plan assets	(27)	) (22	) —	20
Company contributions, net of reimbursements	13	21	11	—
Benefits paid, net of participants' contributions and government subsidy	(206)	) (74	) (15)	(15)
Foreign exchange impact and other	—	(253	) —	(83)
Plan assets at fair value at period end—Significant Plans	\$ 12,156	\$ 5,610	\$ 237	\$ 1,089
Funded status of the Significant Plans				
Qualified plans ⁽¹⁾	\$ (18)	\$ 357	\$ (430)	\$ 138
Nonqualified plans	(667)) —	—	—
Funded status of the plans at period end—Significant Plans	\$ (685)	\$ 357	\$ (430)	\$ 138
Net amount recognized at period end				
Benefit asset	\$ —	\$ 847	\$ —	\$ (380)
Benefit liability	(685)	) (490	) (430)	518
Net amount recognized on the balance sheet—Significant Plans	\$ (685)	\$ 357	\$ (430)	\$ 138
Amounts recognized in AOCI at period end				
Prior service benefit	\$ —	\$ 25	\$ —	\$ 78
Net actuarial (loss) gain	(6,324)	) (801	) 79	(334)
Net amount recognized in equity (pretax)—Significant Plans	\$ (6,324)	\$ (776	) \$ 79	\$ (256)
Accumulated benefit obligation at period end—Significant Plans	\$ 12,833	\$ 4,992	\$ 667	\$ 951

(1) The U.S. qualified pension plan is fully funded pursuant to the Employee Retirement Income Security Act of 1974, as amended (ERISA), funding rules as of January 1, 2018 and no minimum required funding is expected for 2018.

The following table shows the change in AOCI related to the Company's pension, postretirement and post employment plans:

In millions of dollars	Three Months Ended June 30, 2018	Six Months Ended June 30, 2018
Beginning of period balance, net of tax ⁽¹⁾⁽²⁾	\$(6,095)	\$(6,183)
Actuarial assumptions changes and plan experience	603	1,119
Net asset (loss) gain due to difference between actual and expected returns	(328)	) (779)
Net amortization	54	112
Prior service cost	—	6
Curtailment/settlement gain ⁽³⁾	2	—
Foreign exchange impact and other	72	36
Change in deferred taxes, net	(102)) (105)

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Change, net of tax	\$ 301	\$ 389
End of period balance, net of tax ⁽¹⁾⁽²⁾	\$(5,794)	\$(5,794)

(1) See Note 17 to the Consolidated Financial Statements for further discussion of net AOCI balance.

(2) Includes net-of-tax amounts for certain profit sharing plans outside the U.S.

(3) Gains due to curtailment and settlement relate to repositioning and divestiture activities.

Plan Assumptions

The discount rates utilized during the period in determining the pension and postretirement net (benefit) expense for the Significant Plans are as follows:

Net (benefit) expense assumed discount rates during the period	Three Months Ended	
	Jun. 30, 2018	Jun. 30, 2017
U.S. plans		
Qualified pension	3.95%	3.60%
Nonqualified pension	3.95	3.60
Postretirement	3.90	3.50
Non-U.S. plans		
Pension	0.75 -9.90	0.6-10.20
Weighted average	4.86	4.75
Postretirement	9.50	9.55

The discount rates utilized at period-end in determining the pension and postretirement benefit obligations for the Significant Plans are as follows:

Plan obligations assumed discount rates at period ended	Jun. 30, 2018	Mar. 31, 2018	Dec. 31,
			2017
U.S. plans			
Qualified pension	4.25%	3.95%	3.60%
Nonqualified pension	4.25	3.95	3.60
Postretirement	4.20	3.90	3.50
Non-U.S. plans			
Pension	0.80-10.70	0.75 -9.90	0.6-10.20
Weighted average	4.88	4.86	4.75
Postretirement	9.50	9.50	9.55

Sensitivities of Certain Key Assumptions

The following table summarizes the estimated effect on the Company's Significant Plans quarterly expense of a one-percentage-point change in the discount rate:

In millions of dollars	Three Months Ended June 30,	
	2018	
	One-percentage-point increase	One-percentage-point decrease
Pension		
U.S. plans	\$ 6	\$ (9)
Non-U.S. plans	(3)	5
Postretirement		
U.S. plans	—	(1)
Non-U.S. plans	(2)	2

Contributions

For the U.S. pension plans, there were no required minimum cash contributions during the first six months of 2018.

The following table summarizes the Company's actual contributions for the six months ended June 30, 2018 and 2017, as well as estimated expected Company contributions for the remainder of 2018 and the actual contributions made for

the remainder of 2017.

	Pension plans			Postretirement plans			
	U.S. plans	Non-U.S. plans		U.S. plans	Non-U.S. plans		
In millions of dollars	2018	2017	2018	2017	2018	2017	2018
Company contributions ⁽²⁾ for the six months ended June 30	\$28	\$26	\$112	\$58	\$7	\$19	\$5
Company contributions made or expected to be made during the remainder of the year	29	79	67	68	2	157	5

(1) The U.S. pension plans include benefits paid directly by the Company for the nonqualified pension plans.

(2) Company contributions are composed of cash contributions made to the plans and benefits paid directly by the Company.

Defined Contribution Plans

The following table summarizes the Company's contributions for the defined contribution plans:

	Three Months Ended June 30,	Six Months Ended June 30,		
In millions of dollars	2018	2017	2018	2017
U.S. plans	\$99	\$100	\$203	\$198
Non-U.S. plans	72	66	148	135

Post Employment Plans

The following table summarizes the components of net expense recognized in the Consolidated Statement of Income for the Company's U.S. post employment plans:

	Three Months Ended June 30,	Six Months Ended June 30,		
In millions of dollars	2018	2017	2018	2017
Interest cost on benefit obligation	\$1	\$1	\$1	\$1
Expected return on plan assets	(1)	—	(1)	—
Amortization of unrecognized				
Prior service benefit	(7)	(7)	(15)	(15)
Net actuarial loss	—	—	1	1
Total service-related benefit	\$(7)	\$(6)	\$(14)	\$(13)
Non-service-related expense	\$(3)	\$4	\$3	\$12
Total net (benefit) expense	\$(10)	\$(2)	\$(11)	\$(1)

9. EARNINGS PER SHARE

The following table reconciles the income and share data used in the basic and diluted earnings per share (EPS) computations:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
In millions of dollars, except per share amounts				
Income from continuing operations before attribution of noncontrolling interests	\$4,501	\$3,883	\$9,150	\$8,001
Less: Noncontrolling interests from continuing operations	26	32	48	42
Net income from continuing operations (for EPS purposes)	\$4,475	\$3,851	\$9,102	\$7,959
Income (loss) from discontinued operations, net of taxes	15	21	8	3
Citigroup's net income	\$4,490	\$3,872	\$9,110	\$7,962
Less: Preferred dividends ⁽¹⁾	318	320	590	621
Net income available to common shareholders	\$4,172	\$3,552	\$8,520	\$7,341
Less: Dividends and undistributed earnings allocated to employee restricted and deferred shares with nonforfeitable rights to dividends, applicable to basic EPS	49	48	90	103
Net income allocated to common shareholders for basic EPS	\$4,123	\$3,504	\$8,430	\$7,238
Net income allocated to common shareholders for diluted EPS	4,123	3,504	8,430	7,238
Weighted-average common shares outstanding applicable to basic EPS (in millions)	2,530.92	2,739.1	2,546.22	2,752.2
Effect of dilutive securities ⁽²⁾				
Options ⁽³⁾	0.1	0.1	0.1	0.1
Other employee plans	1.3	—	1.3	—
Adjusted weighted-average common shares outstanding applicable to diluted EPS ⁽⁴⁾	2,532.32	2,739.22	2,547.62	2,752.3
Basic earnings per share ⁽⁵⁾				
Income from continuing operations	\$1.62	\$1.27	\$3.30	\$2.63
Discontinued operations	0.01	0.01	0.01	—
Net income	\$1.63	\$1.28	\$3.31	\$2.63
Diluted earnings per share ⁽⁵⁾				
Income from continuing operations	\$1.62	\$1.27	\$3.30	\$2.63
Discontinued operations	0.01	0.01	0.01	—
Net income	\$1.63	\$1.28	\$3.31	\$2.63

As of June 30, 2018, Citi estimates it will distribute preferred dividends of approximately \$583 million during the remainder of 2018, assuming such dividends are declared by the Citi Board of Directors. During the first six months of 2018, Citi redeemed all of its 3.8 million Series AA preferred shares for \$96.8 million and all of its 4.9 million Series E preferred shares for \$121.3 million. All preferred shares were redeemed at par value.

Warrants issued to the U.S. Treasury as part of the Troubled Asset Relief Program (TARP) and the loss-sharing agreement (all of which were subsequently sold to the public in January 2011), with exercise prices of \$178.50 and \$104.33 per share for approximately 21.0 million and 25.5 million shares of Citigroup common stock, respectively. Both warrants were not included in the computation of earnings per share in the three and six months ended June 30, 2018 and 2017 because they were anti-dilutive.

During the second quarters of 2018 and 2017, weighted-average options to purchase 0.5 million and 0.8 million shares of common stock, respectively, were outstanding, but not included in the computation of earnings per share because the weighted-average exercise prices of \$148.77 and \$204.80 per share, respectively, were anti-dilutive.

Due to rounding, common shares outstanding applicable to basic EPS and the effect of dilutive securities may not sum to common shares outstanding applicable to diluted EPS.

Due to rounding, earnings per share on continuing operations and discontinued operations may not sum to earnings per share on net income.

10. FEDERAL FUNDS, SECURITIES BORROWED, LOANED AND SUBJECT TO REPURCHASE AGREEMENTS

For additional information on the Company's resale and repurchase agreements and securities borrowing and lending agreements, see Note 11 to the Consolidated Financial Statements in Citi's 2017 Annual Report on Form 10-K.

Federal funds sold and securities borrowed or purchased under agreements to resell, at their respective carrying values, consisted of the following:

In millions of dollars	June 30, 2018	December 31, 2017
Federal funds sold	\$—	\$ —
Securities purchased under agreements to resell	142,627	130,984
Deposits paid for securities borrowed	122,899	101,494
Total ⁽¹⁾	\$265,526	\$ 232,478

Federal funds purchased and securities loaned or sold under agreements to repurchase, at their respective carrying values, consisted of the following:

In millions of dollars	June 30, 2018	December 31, 2017
Federal funds purchased	\$118	\$ 326
Securities sold under agreements to repurchase	162,555	142,646
Deposits received for securities loaned	15,155	13,305
Total ⁽¹⁾	\$177,828	\$ 156,277

The above tables do not include securities-for-securities lending transactions of \$17.8 billion and \$14.0 billion at June 30, 2018 and December 31, 2017, respectively, where the Company acts as lender and receives securities that can be sold or pledged as collateral. In these transactions, the Company recognizes the securities received at fair value within Other assets and the obligation to return those securities as a liability within Brokerage payables.

It is the Company's policy to take possession of the underlying collateral, monitor its market value relative to the amounts due under the agreements and, when necessary, require prompt transfer of additional collateral in order to maintain contractual margin protection. For resale and repurchase agreements, when necessary, the Company posts additional collateral in order to maintain contractual margin protection.

A substantial portion of the resale and repurchase agreements is recorded at fair value, as described in Notes 20 and 21 to the Consolidated Financial Statements. The remaining portion is carried at the amount of cash initially advanced or received, plus accrued interest, as specified in the respective agreements.

A substantial portion of securities borrowing and lending agreements is recorded at the amount of cash advanced or received. The remaining portion is recorded at fair value as the Company elected the fair value option for certain securities borrowed and loaned portfolios, as described in Note 21 to the Consolidated Financial Statements. With respect to securities loaned, the Company receives cash collateral in an amount generally in excess of the market value of the securities loaned. The Company monitors the market value of securities borrowed and securities loaned on a daily basis and obtains or posts additional collateral in order to maintain contractual margin protection.

The following tables present the gross and net resale and repurchase agreements and securities borrowing and lending agreements and the related offsetting amount permitted under ASC 210-20-45. The tables also include amounts related to financial instruments that are not permitted to be offset under ASC 210-20-45, but would be eligible for offsetting to the extent that an event of default occurred and a legal opinion supporting enforceability of the offsetting rights has been obtained. Remaining exposures continue to be secured by financial collateral, but the Company may not have sought or been able to obtain a legal opinion evidencing enforceability of the offsetting right.

In millions of dollars	As of June 30, 2018				
	Gross amounts	Gross amounts	Net amounts of	Amounts not offset	Net amounts ⁽⁴⁾

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	of recognized assets	offset on the Consolidated Balance Sheet ⁽¹⁾	assets included on the Consolidated Balance Sheet ⁽²⁾	the Consolidated Balance Sheet but eligible for offsetting upon counterparty default ⁽³⁾	
Securities purchased under agreements to resell	\$ 223,470	\$ 80,843	\$ 142,627	\$ 111,150	\$ 31,477
Deposits paid for securities borrowed	122,899	—	122,899	26,497	96,402
Total	\$ 346,369	\$ 80,843	\$ 265,526	\$ 137,647	\$ 127,879

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In millions of dollars	Gross amounts of recognized liabilities	Gross amounts offset on the Consolidated Balance Sheet ⁽¹⁾	Net amounts of liabilities included on the Consolidated Balance Sheet ⁽²⁾	Amounts not offset on the Consolidated Balance Sheet but eligible for offsetting upon counterparty default ⁽³⁾	Net amounts ⁽⁴⁾
Securities sold under agreements to repurchase	\$ 243,398	\$ 80,843	\$ 162,555	\$ 89,609	\$ 72,946
Deposits received for securities loaned	15,155	—	15,155	4,341	10,814
Total	\$ 258,553	\$ 80,843	\$ 177,710	\$ 93,950	\$ 83,760

As of December 31, 2017

In millions of dollars	Gross amounts of recognized assets	Gross amounts offset on the Consolidated Balance Sheet ⁽¹⁾	Net amounts of assets included on the Consolidated Balance Sheet ⁽²⁾	Amounts not offset on the Consolidated Balance Sheet but eligible for offsetting upon counterparty default ⁽³⁾	Net amounts ⁽⁴⁾
Securities purchased under agreements to resell	\$ 204,460	\$ 73,476	\$ 130,984	\$ 103,022	\$ 27,962
Deposits paid for securities borrowed	101,494	—	101,494	22,271	79,223
Total	\$ 305,954	\$ 73,476	\$ 232,478	\$ 125,293	\$ 107,185

In millions of dollars	Gross amounts of recognized liabilities	Gross amounts offset on the Consolidated Balance Sheet ⁽¹⁾	Net amounts of liabilities included on the Consolidated Balance Sheet ⁽²⁾	Amounts not offset on the Consolidated Balance Sheet but eligible for offsetting upon counterparty default ⁽³⁾	Net amounts ⁽⁴⁾
Securities sold under agreements to repurchase	\$ 216,122	\$ 73,476	\$ 142,646	\$ 73,716	\$ 68,930
Deposits received for securities loaned	13,305	—	13,305	4,079	9,226
Total	\$ 229,427	\$ 73,476	\$ 155,951	\$ 77,795	\$ 78,156

(1) Includes financial instruments subject to enforceable master netting agreements that are permitted to be offset under ASC 210-20-45.

(2) The total of this column for each period excludes federal funds sold/purchased. See tables above.

(3) Includes financial instruments subject to enforceable master netting agreements that are not permitted to be offset under ASC 210-20-45, but would be eligible for offsetting to the extent that an event of default has occurred and a

legal opinion supporting enforceability of the offsetting right has been obtained.

- (4) Remaining exposures continue to be secured by financial collateral, but the Company may not have sought or been able to obtain a legal opinion evidencing enforceability of the offsetting right.

The following tables present the gross amount of liabilities associated with repurchase agreements and securities lending agreements, by remaining contractual maturity:

In millions of dollars	As of June 30, 2018				
	Open and overnight	Up to 30 days	31–90 days	Greater than 90 days	Total
Securities sold under agreements to repurchase	\$ 114,766	\$ 55,286	\$ 26,266	\$ 47,080	\$ 243,398
Deposits received for securities loaned	10,431	207	2,527	1,990	15,155
Total	\$ 125,197	\$ 55,493	\$ 28,793	\$ 49,070	\$ 258,553

In millions of dollars	As of December 31, 2017				
	Open and overnight	Up to 30 days	31–90 days	Greater than 90 days	Total
Securities sold under agreements to repurchase	\$ 82,073	\$ 68,372	\$ 33,846	\$ 31,831	\$ 216,122
Deposits received for securities loaned	9,946	266	1,912	1,181	13,305
Total	\$ 92,019	\$ 68,638	\$ 35,758	\$ 33,012	\$ 229,427

The following tables present the gross amount of liabilities associated with repurchase agreements and securities lending agreements, by class of underlying collateral:

In millions of dollars	As of June 30, 2018		
	Repurchase agreements	Securities lending agreements	Total
U.S. Treasury and federal agency securities	\$85,479	\$ 86	\$85,565
State and municipal securities	2,168	—	2,168
Foreign government securities	92,604	584	93,188
Corporate bonds	21,843	612	22,455
Equity securities	16,492	13,648	30,140
Mortgage-backed securities	14,342	—	14,342
Asset-backed securities	6,441	—	6,441
Other	4,029	225	4,254
Total	\$243,398	\$ 15,155	\$258,553

In millions of dollars	As of December 31, 2017		
	Repurchase agreements	Securities lending agreements	Total
U.S. Treasury and federal agency securities	\$58,774	\$ —	\$58,774
State and municipal securities	1,605	—	1,605
Foreign government securities	89,576	105	89,681
Corporate bonds	20,194	657	20,851
Equity securities	20,724	11,907	32,631
Mortgage-backed securities	17,791	—	17,791
Asset-backed securities	5,479	—	5,479
Other	1,979	636	2,615
Total	\$216,122	\$ 13,305	\$229,427

11. BROKERAGE RECEIVABLES AND BROKERAGE PAYABLES

The Company has receivables and payables for financial instruments sold to and purchased from brokers, dealers and customers, which arise in the ordinary course of business.

For additional information on these receivables and payables, see Note 12 to the Consolidated Financial Statements in Citi's 2017 Annual Report on Form 10-K.

Brokerage receivables and Brokerage payables consisted of the following:

In millions of dollars	June 30, December 31,	
	2018	2017
Receivables from customers	\$16,208	\$ 19,215
Receivables from brokers, dealers and clearing organizations	20,769	19,169
Total brokerage receivables ⁽¹⁾	\$36,977	\$ 38,384
Payables to customers	\$40,408	\$ 38,741
Payables to brokers, dealers and clearing organizations	27,264	22,601
Total brokerage payables ⁽¹⁾	\$67,672	\$ 61,342

(1) Includes brokerage receivables and payables recorded by Citi broker-dealer entities that are accounted for in accordance with the AICPA Accounting Guide for Brokers and Dealers in Securities as codified in ASC 940-320.

12. INVESTMENTS

For additional information regarding Citi's investment portfolios, including evaluating investments for other-than-temporary impairment (OTTI), see Note 13 to the Consolidated Financial Statements in Citi's 2017 Annual Report on Form 10-K.

Overview

Citi adopted ASU 2016-01 and ASU 2018-03 as of January 1, 2018. The ASUs require fair value changes on marketable equity securities to be recognized in earnings. The available-for-sale category was eliminated for equity securities. Also, non-marketable equity securities are required to be measured at fair value with changes in fair value recognized in earnings unless: (i) the measurement alternative is elected or (ii) the investment represents Federal Reserve Bank and Federal Home Loan Bank stock or certain exchange seats that continue to be carried at cost. See Note 1 to the Consolidated Financial Statements for additional details.

The following tables present Citi's investments by category:

In millions of dollars	June 30, 2018
Debt securities available-for-sale (AFS)	\$289,031
Debt securities held-to-maturity (HTM) ⁽¹⁾	52,897
Marketable equity securities carried at fair value ⁽²⁾	204
Non-marketable equity securities carried at fair value ⁽²⁾	1,228
Non-marketable equity securities measured using the measurement alternative ⁽³⁾	415
Non-marketable equity securities carried at cost ⁽⁴⁾	5,941
Total investments	\$349,716

In millions of dollars	December 31, 2017
Securities available-for-sale (AFS)	\$ 290,914
Debt securities held-to-maturity (HTM) ⁽¹⁾	53,320
Non-marketable equity securities carried at fair value ⁽²⁾	1,206

Non-marketable equity securities carried at cost ⁽⁴⁾	6,850
Total investments	\$ 352,290

(1) Carried at adjusted amortized cost basis, net of any credit-related impairment.

(2) Unrealized gains and losses are recognized in earnings.

(3) Impairment losses and adjustments to the carrying value as a result of observable price changes are recognized in earnings.

(4) Represents shares issued by the Federal Reserve Bank, Federal Home Loan Banks and certain exchanges of which Citigroup is a member.

The following table presents interest and dividend income on investments:

	Three Months		Six Months	
	Ended June		Ended June	
	30,		30,	
In millions of dollars	2018	2017	2018	2017
Taxable interest	\$2,158	\$1,859	\$4,200	\$3,623
Interest exempt from U.S. federal income tax	132	141	262	283
Dividend income	84	58	146	112
Total interest and dividend income	\$2,374	\$2,058	\$4,608	\$4,018

The following table presents realized gains and losses on the sales of investments, which excludes OTTI losses:

	Three Months Ended June 30,		Six Months Ended June 30,	
In millions of dollars	2018	2017	2018	2017
Gross realized investment gains	\$170	\$258	\$396	\$546
Gross realized investment losses	(68)	(37)	(124)	(133)
Net realized gains on sale of investments	\$102	\$221	\$272	\$413

Securities Available-for-Sale

The amortized cost and fair value of AFS securities were as follows:

	June 30, 2018				December 31, 2017			
In millions of dollars	Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value	Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value
Securities AFS								
Mortgage-backed securities ⁽¹⁾								
U.S. government-sponsored agency guaranteed	\$43,825	\$ 141	\$ 994	\$42,972	\$42,116	\$ 125	\$ 500	\$41,741
Prime	—	—	—	—	11	6	—	17
Alt-A	1	—	—	1	26	90	—	116
Non-U.S. residential	1,851	7	1	1,857	2,744	13	6	2,751
Commercial	281	1	3	279	334	—	2	332
Total mortgage-backed securities	\$45,958	\$ 149	\$ 998	\$45,109	\$45,231	\$ 234	\$ 508	\$44,957
U.S. Treasury and federal agency securities								
U.S. Treasury	\$108,616	\$ 53	\$ 1,772	\$106,897	\$108,344	\$ 77	\$ 971	\$107,450
Agency obligations	11,557	7	190	11,374	10,813	7	124	10,696
Total U.S. Treasury and federal agency securities	\$120,173	\$ 60	\$ 1,962	\$118,271	\$119,157	\$ 84	\$ 1,095	\$118,146
State and municipal ⁽²⁾	\$9,885	\$ 123	\$ 244	\$9,764	\$8,870	\$ 140	\$ 245	\$8,765
Foreign government	98,172	385	732	97,825	100,615	508	590	100,533
Corporate	12,694	37	130	12,601	14,144	51	86	14,109
Asset-backed securities ⁽¹⁾	1,868	5	3	1,870	3,906	14	2	3,918
Other debt securities	3,590	1	—	3,591	297	—	—	297
Total debt securities AFS	\$292,340	\$ 760	\$ 4,069	\$289,031	\$292,220	\$ 1,031	\$ 2,526	\$290,725
Marketable equity securities AFS ⁽³⁾	\$—	\$ —	\$ —	\$—	\$186	\$ 4	\$ 1	\$189
Total securities AFS	\$292,340	\$ 760	\$ 4,069	\$289,031	\$292,406	\$ 1,035	\$ 2,527	\$290,914

The Company invests in mortgage-backed and asset-backed securities. These securitizations are generally considered VIEs. The Company's maximum exposure to loss from these VIEs is equal to the carrying amount of the securities, which is reflected in the table above. For mortgage-backed and asset-backed securitizations in which the Company has other involvement, see Note 18 to the Consolidated Financial Statements.

(1) In the second quarter of 2017, Citi early adopted ASU 2017-08, Receivables-Nonrefundable Fees and Other Costs (Subtopic 310-20): Premium Amortization on Purchased Callable Debt Securities. Upon adoption, a cumulative effect adjustment was recorded to reduce retained earnings, effective January 1, 2017, for the incremental

amortization of purchase premiums and cumulative fair value hedge adjustments on callable state and municipal debt securities. For additional information, see Note 1 to the Consolidated Financial Statements.

(3) Citi adopted ASU 2016-01 and ASU 2018-03 as of January 1, 2018, resulting in a cumulative effect adjustment from AOCI to retained earnings for net unrealized gains on marketable equity securities AFS. The available-for-sale category was eliminated for equity securities effective January 1, 2018. See Note 1 to the Consolidated Financial Statements for additional details.

The following table shows the fair value of AFS securities that have been in an unrealized loss position:

In millions of dollars	Less than 12 months		12 months or longer		Total	
	Fair value	Gross unrealized losses	Fair value	Gross unrealized losses	Fair value	Gross unrealized losses
June 30, 2018						
Debt Securities AFS ⁽¹⁾						
Mortgage-backed securities						
U.S. government-sponsored agency guaranteed	\$ 13,676	\$ 328	\$ 13,363	\$ 666	\$ 27,039	\$ 994
Non-U.S. residential	203	1	1	—	204	1
Commercial	234	2	27	1	261	3
Total mortgage-backed securities	\$ 14,113	\$ 331	\$ 13,391	\$ 667	\$ 27,504	\$ 998
U.S. Treasury and federal agency securities						
U.S. Treasury	\$ 68,095	\$ 1,208	\$ 20,384	\$ 564	\$ 88,479	\$ 1,772
Agency obligations	4,900	78	4,619	112	9,519	190
Total U.S. Treasury and federal agency securities	\$ 72,995	\$ 1,286	\$ 25,003	\$ 676	\$ 97,998	\$ 1,962
State and municipal	\$ 2,043	\$ 25	\$ 1,161	\$ 219	\$ 3,204	\$ 244
Foreign government	50,160	470	10,488	262	60,648	732
Corporate	6,362	120	521	10	6,883	130
Asset-backed securities	511	3	11	—	522	3
Other debt securities	1,174	—	—	—	1,174	—
Total debt securities AFS	\$ 147,358	\$ 2,235	\$ 50,575	\$ 1,834	\$ 197,933	\$ 4,069
December 31, 2017						
Securities AFS						
Mortgage-backed securities						
U.S. government-sponsored agency guaranteed	\$ 30,994	\$ 438	\$ 2,206	\$ 62	\$ 33,200	\$ 500
Non-U.S. residential	753	6	—	—	753	6
Commercial	150	1	57	1	207	2
Total mortgage-backed securities	\$ 31,897	\$ 445	\$ 2,263	\$ 63	\$ 34,160	\$ 508
U.S. Treasury and federal agency securities						
U.S. Treasury	\$ 79,050	\$ 856	\$ 7,404	\$ 115	\$ 86,454	\$ 971
Agency obligations	8,857	110	1,163	14	10,020	124
Total U.S. Treasury and federal agency securities	\$ 87,907	\$ 966	\$ 8,567	\$ 129	\$ 96,474	\$ 1,095
State and municipal	\$ 1,009	\$ 11	\$ 1,155	\$ 234	\$ 2,164	\$ 245
Foreign government	53,206	356	9,051	234	62,257	590
Corporate	6,737	74	859	12	7,596	86
Asset-backed securities	449	1	25	1	474	2
Other debt securities	—	—	—	—	—	—
Marketable equity securities AFS ⁽¹⁾	11	1	—	—	11	1
Total securities AFS	\$ 181,216	\$ 1,854	\$ 21,920	\$ 673	\$ 203,136	\$ 2,527

Citi adopted ASU 2016-01 and ASU 2018-03 as of January 1, 2018, resulting in a cumulative effect adjustment from AOCI to retained earnings for net unrealized gains on marketable equity securities AFS. The available-for-sale category was eliminated for equity securities effective January 1, 2018. See Note 1 to the Consolidated Financial Statements for additional details.

The following table presents the amortized cost and fair value of AFS debt securities by contractual maturity dates:

In millions of dollars	June 30, 2018		December 31, 2017	
	Amortized cost	Fair value	Amortized cost	Fair value
Mortgage-backed securities ⁽¹⁾				
Due within 1 year	\$34	\$34	\$45	\$45
After 1 but within 5 years	1,207	1,202	1,306	1,304
After 5 but within 10 years	1,531	1,503	1,376	1,369
After 10 years ⁽²⁾	43,186	42,370	42,504	42,239
Total	\$45,958	\$45,109	\$45,231	\$44,957
U.S. Treasury and federal agency securities				
Due within 1 year	\$26,550	\$26,528	\$4,913	\$4,907
After 1 but within 5 years	91,342	89,497	111,236	110,238
After 5 but within 10 years	2,190	2,153	3,008	3,001
After 10 years ⁽²⁾	91	93	—	—
Total	\$120,173	\$118,271	\$119,157	\$118,146
State and municipal				
Due within 1 year	\$773	\$773	\$1,792	\$1,792
After 1 but within 5 years	3,460	3,457	2,579	2,576
After 5 but within 10 years	564	584	514	528
After 10 years ⁽²⁾	5,088	4,950	3,985	3,869
Total	\$9,885	\$9,764	\$8,870	\$8,765
Foreign government				
Due within 1 year	\$36,246	\$36,189	\$32,130	\$32,100
After 1 but within 5 years	47,736	47,344	53,034	53,165
After 5 but within 10 years	11,805	11,816	12,949	12,680
After 10 years ⁽²⁾	2,385	2,476	2,502	2,588
Total	\$98,172	\$97,825	\$100,615	\$100,533
All other ⁽³⁾				
Due within 1 year	\$4,881	\$4,879	\$3,998	\$3,991
After 1 but within 5 years	10,494	10,420	9,047	9,027
After 5 but within 10 years	2,004	2,011	3,415	3,431
After 10 years ⁽²⁾	773	752	1,887	1,875
Total	\$18,152	\$18,062	\$18,347	\$18,324
Total debt securities AFS	\$292,340	\$289,031	\$292,220	\$290,725

(1) Includes mortgage-backed securities of U.S. government-sponsored agencies.

(2) Investments with no stated maturities are included as contractual maturities of greater than 10 years. Actual maturities may differ due to call or prepayment rights.

(3) Includes corporate, asset-backed and other debt securities.

Debt Securities Held-to-Maturity

The carrying value and fair value of debt securities HTM were as follows:

In millions of dollars	Carrying value	Gross unrealized gains	Gross unrealized losses	Fair value
June 30, 2018				
Debt securities held-to-maturity				
Mortgage-backed securities ⁽¹⁾				
U.S. government agency guaranteed	\$ 24,939	\$ 11	\$ 661	\$ 24,289
Alt-A	—	—	—	—
Non-U.S. residential	1,356	20	—	1,376
Commercial	264	—	—	264
Total mortgage-backed securities	\$ 26,559	\$ 31	\$ 661	\$ 25,929
State and municipal	\$ 7,480	\$ 180	\$ 132	\$ 7,528
Foreign government	1,348	—	15	1,333
Asset-backed securities ⁽¹⁾	17,510	47	2	17,555
Total debt securities held-to-maturity	\$ 52,897	\$ 258	\$ 810	\$ 52,345
December 31, 2017				
Debt securities held-to-maturity				
Mortgage-backed securities ⁽¹⁾				
U.S. government agency guaranteed	\$ 23,880	\$ 40	\$ 157	\$ 23,763
Alt-A	141	57	—	198
Non-U.S. residential	1,841	65	—	1,906
Commercial	237	—	—	237
Total mortgage-backed securities	\$ 26,099	\$ 162	\$ 157	\$ 26,104
State and municipal ⁽²⁾	\$ 8,897	\$ 378	\$ 73	\$ 9,202
Foreign government	740	—	18	722
Asset-backed securities ⁽¹⁾	17,584	162	22	17,724
Total debt securities held-to-maturity	\$ 53,320	\$ 702	\$ 270	\$ 53,752

The Company invests in mortgage-backed and asset-backed securities. These securitizations are generally considered VIEs. The Company's maximum exposure to loss from these VIEs is equal to the carrying amount of the securities, which is reflected in the table above. For mortgage-backed and asset-backed securitizations in which the Company has other involvement, see Note 18 to the Consolidated Financial Statements.

In the second quarter of 2017, Citi early adopted ASU 2017-08, Receivables-Nonrefundable Fees and Other Costs (Subtopic 310-20): Premium Amortization on Purchased Callable Debt Securities. Upon adoption, a cumulative effect adjustment was recorded to reduce retained earnings, effective January 1, 2017, for the incremental amortization of purchase premiums and cumulative fair value hedge adjustments on callable state and municipal debt securities. For additional information, see Note 1 to the Consolidated Financial Statements.

The table below shows the fair value of debt securities HTM that have been in an unrecognized loss position:

In millions of dollars	Less than 12 months		12 months or longer		Total	
	Fair value	Gross unrecognized losses	Fair value	Gross unrecognized losses	Fair value	Gross unrecognized losses
June 30, 2018						
Debt securities held-to-maturity						
Mortgage-backed securities	\$16,731	\$ 410	\$5,805	\$ 251	\$22,536	\$ 661
State and municipal	1,518	24	747	108	2,265	132
Foreign government	1,334	15	—	—	1,334	15
Asset-backed securities	16	—	611	2	627	2
Total debt securities held-to-maturity	\$19,599	\$ 449	\$7,163	\$ 361	\$26,762	\$ 810
December 31, 2017						
Debt securities held-to-maturity						
Mortgage-backed securities	\$8,569	\$ 50	\$6,353	\$ 107	\$14,922	\$ 157
State and municipal	353	5	835	68	1,188	73
Foreign government	723	18	—	—	723	18
Asset-backed securities	71	3	134	19	205	22
Total debt securities held-to-maturity	\$9,716	\$ 76	\$7,322	\$ 194	\$17,038	\$ 270

Note: Excluded from the gross unrecognized losses presented in the table above are \$(69) million and \$(117) million of net unrealized losses recorded in AOCI as of June 30, 2018 and December 31, 2017, respectively, primarily related to the difference between the amortized cost and carrying value of HTM debt securities that were reclassified from AFS. Substantially all of these net unrecognized losses relate to securities that have been in a loss position for 12 months or longer at June 30, 2018 and December 31, 2017.

The following table presents the carrying value and fair value of HTM debt securities by contractual maturity dates:

In millions of dollars	June 30, 2018		December 31, 2017	
	Carrying value	Fair value	Carrying value	Fair value
Mortgage-backed securities				
Due within 1 year	\$—	\$—	\$—	\$—
After 1 but within 5 years	130	128	720	720
After 5 but within 10 years	180	179	148	149
After 10 years ⁽¹⁾	26,249	25,622	25,231	25,235
Total	\$26,559	\$25,929	\$26,099	\$26,104
State and municipal				
Due within 1 year	\$67	\$67	\$407	\$425
After 1 but within 5 years	187	194	259	270
After 5 but within 10 years	464	468	512	524
After 10 years ⁽¹⁾	6,762	6,799	7,719	7,983
Total	\$7,480	\$7,528	\$8,897	\$9,202
Foreign government				
Due within 1 year	\$362	\$362	\$381	\$381
After 1 but within 5 years	986	971	359	341
After 5 but within 10 years	—	—	—	—
After 10 years ⁽¹⁾	—	—	—	—
Total	\$1,348	\$1,333	\$740	\$722
All other ⁽²⁾				
Due within 1 year	\$—	\$—	\$—	\$—
After 1 but within 5 years	—	—	—	—
After 5 but within 10 years	1,441	1,445	1,669	1,680
After 10 years ⁽¹⁾	16,069	16,110	15,915	16,044
Total	\$17,510	\$17,555	\$17,584	\$17,724
Total debt securities held-to-maturity	\$52,897	\$52,345	\$53,320	\$53,752

(1) Investments with no stated maturities are included as contractual maturities of greater than 10 years. Actual maturities may differ due to call or prepayment rights.

(2) Includes corporate and asset-backed securities.

Evaluating Investments for Other-Than-Temporary Impairment

Overview

The Company conducts periodic reviews of all securities with unrealized losses to evaluate whether the impairment is other-than-temporary. This review applies to all securities that are not measured at fair value through earnings.

Effective January 1, 2018, the AFS category was eliminated for equity securities and, therefore, other-than-temporary impairment (OTTI) review is not required for those securities. See Note 1 to the Consolidated Financial Statements for additional details.

An unrealized loss exists when the current fair value of an individual security is less than its amortized cost basis. Unrealized losses that are determined to be temporary in nature are recorded, net of tax, in AOCI for AFS securities. Temporary losses related to HTM debt securities generally are not recorded, as these investments are carried at adjusted amortized cost basis. However, for HTM debt securities with credit-related impairment, the credit loss is recognized in earnings as OTTI, and any difference between the cost basis adjusted for the OTTI and fair value is recognized in AOCI and amortized as an adjustment of yield over the remaining contractual life of the security. For debt securities transferred to HTM from Trading account assets, amortized cost is defined as the fair value of the securities at the date of transfer, plus any accretion income and less any impairment recognized in earnings subsequent to transfer. For debt securities transferred to HTM from AFS, amortized cost is defined as the original purchase cost, adjusted for the cumulative accretion or amortization of any purchase discount or premium, plus or minus any cumulative fair value hedge adjustments, net of accretion or amortization, and less any impairment recognized in earnings.

Regardless of the classification of securities as AFS or HTM, the Company assesses each position with an unrealized loss for OTTI. Factors considered in determining whether a loss is temporary include:

- the length of time and the extent to which fair value has been below cost;
- the severity of the impairment;
- the cause of the impairment and the financial condition and near-term prospects of the issuer;
- activity in the market of the issuer that may indicate adverse credit conditions; and
- the Company's ability and intent to hold the investment for a period of time sufficient to allow for any anticipated recovery.

The Company's review for impairment generally entails:

- identification and evaluation of impaired investments;
- analysis of individual investments that have fair values less than amortized cost, including consideration of the length of time the investment has been in an unrealized loss position and the expected recovery period;
- consideration of evidential matter, including an evaluation of factors or triggers that could cause individual investments to qualify as having other-than-temporary

impairment and those that would not support other-than-temporary impairment; and

- documentation of the results of these analyses, as required under business policies.

Debt Securities

The entire difference between amortized cost basis and fair value is recognized in earnings as OTTI for impaired debt securities that the Company has an intent to sell or for which the Company believes it will more-likely-than-not be required to sell prior to recovery of the amortized cost basis. However, for those securities that the Company does not intend to sell and is not likely to be required to sell, only the credit-related impairment is recognized in earnings and any non-credit-related impairment is recorded in AOCI.

For debt securities, credit impairment exists where management does not expect to receive contractual principal and interest cash flows sufficient to recover the entire amortized cost basis of a security.

AFS Equity Securities and Equity Method Investments

For AFS equity securities, prior to January 1, 2018, management considered the various factors described above, including its intent and ability to hold an equity security for a period of time sufficient for recovery to cost or whether it was more-likely-than-not that the Company would have been required to sell the security prior to recovery of its cost basis. Where management lacked that intent or ability, the security's decline in fair value was deemed to be other-than-temporary and was recorded in earnings. Effective January 1, 2018, the AFS category has been eliminated for equity securities and, therefore, OTTI review is not required for those securities. See Note 1 to the Consolidated Financial Statements for additional details.

Management assesses equity method investments that have fair values that are less than their respective carrying values for OTTI. Fair value is measured as price multiplied by quantity if the investee has publicly listed securities. If the investee is not publicly listed, other methods are used (see Note 20 to the Consolidated Financial Statements). For impaired equity method investments that Citi plans to sell prior to recovery of value or would likely be required to sell, with no expectation that the fair value will recover prior to the expected sale date, the full impairment is recognized in earnings as OTTI regardless of severity and duration. The measurement of the OTTI does not include partial projected recoveries subsequent to the balance sheet date.

For impaired equity method investments that management does not plan to sell and is not likely to be required to sell prior to recovery of value, the evaluation of whether an impairment is other-than-temporary is based on (i) whether and when an equity method investment will recover in value and (ii) whether the investor has the intent and ability to hold that investment for a period of time sufficient to recover the value. The determination of whether the impairment is considered other-than-temporary considers the following indicators:

- the cause of the impairment and the financial condition and near-term prospects of the issuer, including any

specific events that may influence the operations of the issuer;
the intent and ability to hold the investment for a period of time sufficient to allow for any anticipated recovery in market value; and
the length of time and extent to which fair value has been less than the carrying value.

The sections below describe the Company's process for identifying credit-related impairments for security types that have the most significant unrealized losses as of June 30, 2018.

Mortgage-Backed Securities

For U.S. mortgage-backed securities, credit impairment is assessed using a cash flow model that estimates the principal and interest cash flows on the underlying mortgages using the security-specific collateral and transaction structure. The model distributes the estimated cash flows to the various tranches of securities, considering the transaction structure and any subordination and credit enhancements that exist in that structure. The cash flow model incorporates actual cash flows on the mortgage-backed securities through the current period and then estimates the remaining cash flows using a number of assumptions, including default rates, prepayment rates, recovery rates (on foreclosed properties) and loss severity rates (on non-agency mortgage-backed securities).

Management develops specific assumptions using market data, internal estimates and estimates published by rating agencies and other third-party sources. Default rates are projected by considering current underlying mortgage loan performance, generally assuming the default of (i) 10% of current loans, (ii) 25% of 30–59 day delinquent loans,

(iii) 70% of 60–90 day delinquent loans and (iv) 100% of 91+ day delinquent loans. These estimates are extrapolated along a default timing curve to estimate the total lifetime pool default rate. Other assumptions contemplate the actual collateral attributes, including geographic concentrations, rating actions and current market prices.

Cash flow projections are developed using different stress test scenarios. Management evaluates the results of those stress tests (including the severity of any cash shortfall indicated and the likelihood of the stress scenarios actually occurring based on the underlying pool's characteristics and performance) to assess whether management expects to recover the amortized cost basis of the security. If cash flow projections indicate that the Company does not expect to recover its amortized cost basis, the Company recognizes the estimated credit loss in earnings.

State and Municipal Securities

The process for identifying credit impairments in Citigroup's AFS and HTM state and municipal bonds is primarily based on a credit analysis that incorporates third-party credit ratings. Citigroup monitors the bond issuers and any insurers providing default protection in the form of financial guarantee insurance. The average external credit rating, ignoring any insurance, is Aa3/AA-. In the event of an external rating downgrade or other indicator of credit impairment (i.e., based on instrument-specific estimates of cash flows or probability of issuer default), the subject bond is specifically reviewed for adverse changes in the amount or timing of expected contractual principal and interest payments.

For state and municipal bonds with unrealized losses that Citigroup plans to sell, or would be more-likely-than-not required to sell, the full impairment is recognized in earnings.

Recognition and Measurement of OTTI

The following tables present total OTTI recognized in earnings:

OTTI on Investments	Three Months Ended June 30, 2018		Six Months Ended June 30, 2018	
	AFS	HTM	Total	Total
In millions of dollars				
Impairment losses related to debt securities that the Company does not intend to sell nor will likely be required to sell:				

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Total OTTI losses recognized during the period	\$—	\$—	\$—	\$—
Less: portion of impairment loss recognized in AOCI (before taxes)	—	—	—	—
Net impairment losses recognized in earnings for debt securities that the Company does not intend to sell nor will likely be required to sell	\$—	\$—	\$—	\$—
Impairment losses recognized in earnings for debt securities that the Company intends to sell, would be more-likely-than-not required to sell or will be subject to an issuer call deemed probable of exercise	12	—	12	39
Total OTTI losses recognized in earnings	\$12	\$—	\$12	\$39

For the three and six months ended June 30, 2018, amounts represent AFS debt securities. Effective January 1, (1)2018, the AFS category was eliminated for equity securities. See Note 1 to the Consolidated Financial Statements for additional details.

OTTI on Investments	Three months ended		Six Months Ended	
	June 30, 2017		June 30, 2017	
In millions of dollars	AFS ⁽¹⁾	HTM	Total AFS	Total HTM
Impairment losses related to securities that the Company does not intend to sell nor will likely be required to sell:				
Total OTTI losses recognized during the period	\$—	\$—	\$—	\$—
Less: portion of impairment loss recognized in AOCI (before taxes)	—	—	—	—
Net impairment losses recognized in earnings for securities that the Company does not intend to sell nor will likely be required to sell	\$—	\$—	\$—	\$—
Impairment losses recognized in earnings for securities that the Company intends to sell, would be more-likely-than-not required to sell or will be subject to an issuer call deemed probable of exercise and FX losses	20	—	20	31
Total impairment losses recognized in earnings	\$20	\$—	\$20	\$31

(1) Includes OTTI on non-marketable equity securities.

The following are three-month rollforwards of the credit-related impairments recognized in earnings for AFS and HTM debt securities held that the Company does not intend to sell nor likely will be required to sell:

In millions of dollars	Cumulative OTTI credit losses recognized in earnings on debt securities still held			
	March 31, 2018 balance	Credit impairments recognized in earnings on securities not previously impaired	Credit impairments recognized in earnings on securities that have been previously impaired	Changes due to credit-impaired securities sold, transferred or matured June 30, 2018 balance
AFS debt securities				
Mortgage-backed securities ⁽¹⁾	\$25	\$—	\$—	(24)) \$ 1
State and municipal	—	—	—	—
Foreign government securities	—	—	—	—
Corporate	4	—	—	4
All other debt securities	2	—	—	2
Total OTTI credit losses recognized for AFS debt securities	\$31	\$—	\$—	(24)) \$ 7
HTM debt securities				
Mortgage-backed securities	\$—	\$—	\$—	— \$ —
State and municipal	—	—	—	—
Total OTTI credit losses recognized for HTM debt securities	\$—	\$—	\$—	— \$ —

(1) Primarily consists of Prime securities.

In millions of dollars	Cumulative OTTI credit losses recognized in earnings on debt securities still held				
	March 31, 2017 balance	Credit impairments recognized in earnings on securities not previously impaired	Credit impairments recognized in earnings on securities that have been previously impaired	Reductions due to credit-impaired securities sold, transferred or matured	June 30, 2017 balance
AFS debt securities					
Mortgage-backed securities	\$—	\$	—\$	—\$ —	\$ —
State and municipal	4	—	—	—	4
Foreign government securities	—	—	—	—	—
Corporate	4	—	—	—	4
All other debt securities	22	—	—	(22)) —
Total OTTI credit losses recognized for AFS debt securities	\$30	\$	—\$	—\$ (22)	) \$ 8
HTM debt securities					
Mortgage-backed securities ⁽¹⁾	\$97	\$	—\$	—\$ —	\$ 97
State and municipal	3	—	—	—	3
Total OTTI credit losses recognized for HTM debt securities	\$100	\$	—\$	—\$ —	\$ 100

(1) Primarily consists of Alt-A securities.

The following are six-month rollforwards of the credit-related impairments recognized in earnings for AFS and HTM debt securities held that the Company does not intend to sell nor likely will be required to sell:

In millions of dollars	Cumulative OTTI credit losses recognized in earnings on debt securities still held				
	December 31, 2017 balance	Credit impairments recognized in earnings on securities not previously impaired	Credit impairments recognized in earnings on securities that have been previously impaired	Changes due to credit-impaired securities sold, transferred or matured ⁽¹⁾	June 30, 2018 balance
AFS debt securities					
Mortgage-backed securities ⁽²⁾	\$38	\$	—\$	—\$ (37)	) \$ 1
State and municipal	4	—	—	(4)) —
Foreign government securities	—	—	—	—	—
Corporate	4	—	—	—	4
All other debt securities	2	—	—	—	2
Total OTTI credit losses recognized for AFS debt securities	\$48	\$	—\$	—\$ (41)	) \$ 7
HTM debt securities					
Mortgage-backed securities ⁽³⁾	\$54	\$	—\$	—\$ (54)) \$ —
State and municipal	3	—	—	(3)) —
Total OTTI credit losses recognized for HTM debt securities	\$57	\$	—\$	—\$ (57)) \$ —

- (1) Includes \$18 million in cumulative OTTI reclassified from HTM to AFS due to the transfer of the related debt securities from HTM to AFS. Citi adopted ASU 2017-12, Targeted Improvements to Accounting for Hedge Activities, on January 1, 2018 and transferred approximately \$4 billion of HTM debt securities into AFS classification as permitted as a one-time transfer under the standard.
- (2) Primarily consists of Prime securities.
- (3) Primarily consists of Alt-A securities.

In millions of dollars	Cumulative OTTI credit losses recognized in earnings on debt securities still held				
	December 31, 2016 balance	Credit impairments recognized in earnings on securities not previously impaired	Credit impairments recognized in earnings on securities that have been previously impaired	Reductions due to credit-impaired securities sold, transferred or matured	June 30, 2017 balance
AFS debt securities					
Mortgage-backed securities	\$—	\$	—\$	—\$ —	\$ —
State and municipal	4	—	—	—	4
Foreign government securities	—	—	—	—	—
Corporate	5	—	—	(1	) 4
All other debt securities	22	—	—	(22) —
Total OTTI credit losses recognized for AFS debt securities	\$31	\$	—\$	—\$ (23	) \$ 8
HTM debt securities					
Mortgage-backed securities ⁽¹⁾	\$101	\$	—\$	—\$ (4	) \$ 97
State and municipal	3	—	—	—	3
Total OTTI credit losses recognized for HTM debt securities	\$104	\$	—\$	—\$ (4	) \$ 100

(1) Primarily consists of Alt-A securities.

Non-Marketable Equity Securities Not Carried at Fair Value

Effective January 1, 2018, non-marketable equity securities are required to be measured at fair value with changes in fair value recognized in earnings unless: (i) the measurement alternative is elected or (ii) the investment represents Federal Reserve Bank and Federal Home Loan Bank stock or certain exchange seats that continue to be carried at cost. See Note 1 to the Consolidated Financial Statements for additional details.

The election to measure a non-marketable equity security using the measurement alternative is made on an instrument-by-instrument basis. Under the measurement alternative, an equity security is carried at cost plus or minus changes resulting from observable prices in orderly transactions for the identical or a similar investment of the same issuer. In addition, equity securities under the measurement alternative are also assessed for impairment, as described below. The carrying value of the equity security is adjusted to fair value on the date of an observed transaction. Fair value may differ from the observed transaction price due to a number of factors, including marketability adjustments and differences in rights and obligations when the observed transaction is not for the identical investment held by Citi. On a quarterly basis, management qualitatively assesses whether each equity security under the measurement alternative is impaired. Impairment indicators that are considered include, but are not limited to, the following:

- A significant deterioration in the earnings performance, credit rating, asset quality, or business prospects of the investee;

- A significant adverse change in the regulatory, economic, or technological environment of the investee;

- A significant adverse change in the general market condition of either the geographical area or the industry in which the investee operates;

- A bona fide offer to purchase, an offer by the investee to sell, or a completed auction process for the same or similar investment for an amount less than the carrying amount of that investment; and

-

Factors that raise significant concerns about the investee's ability to continue as a going concern, such as negative cash flows from operations, working capital deficiencies, or noncompliance with statutory capital requirements or debt covenants.

When the qualitative assessment indicates that impairment exists, the investment is written down to fair value, with the full difference between the fair value of the investment and its carrying amount recognized in earnings.

Below is the carrying value of non-marketable equity securities measured using the measurement alternative at June 30, 2018, and amounts recognized in earnings for the three and six months ended June 30, 2018:

In millions of dollars	Three Months Ended June 30, 2018	Six Months Ended June 30, 2018
Measurement alternative, balance at June 30, 2018	\$ 415	\$ 415
Measurement alternative—impairment losses ⁽¹⁾	3	4
Measurement alternative—downward changes for observable prices ⁽¹⁾	2	4
Measurement alternative—upward changes for observable prices ⁽¹⁾	4	112

(1) See Note 20 to the Consolidated Financial Statements for additional information on these nonrecurring fair value measurements.

A similar impairment analysis is performed for non-marketable equity securities carried at cost. For the three and six months ended June 30, 2018, there was no impairment loss recognized in earnings for non-marketable equity securities carried at cost.

Investments in Alternative Investment Funds That Calculate Net Asset Value

The Company holds investments in certain alternative investment funds that calculate net asset value (NAV), or its equivalent, including hedge funds, private equity funds, funds of funds and real estate funds, as provided by third-party asset managers. Investments in such funds are generally classified as non-marketable equity securities carried at fair value. The fair values of these investments are estimated using the NAV of the Company's ownership interest in the funds. Some of these investments are in "covered funds" for purposes of the Volcker Rule, which prohibits certain proprietary investment activities and limits the ownership of, and relationships with, covered funds. On April 21, 2017, Citi's request for extension of the permitted holding period under the Volcker Rule for certain of its investments in illiquid funds was approved, allowing the Company to hold such investments until the earlier of 5 years from the July 21, 2017 expiration date of the general conformance period, or the date such investments mature or are otherwise conformed with the Volcker Rule.

In millions of dollars	Fair value	Unfunded commitments	Redemption frequency (if currently eligible)	Redemption notice
	June 30, 2018	December 31, 2017	monthly, quarterly, annually	period
Hedge funds	\$ —	\$ 1	Generally quarterly	10–95 days
Private equity funds ⁽¹⁾⁽²⁾	368	372	—	—
Real estate funds ⁽²⁾⁽³⁾	16	31	—	—
Mutual/collective investment funds	26	—	—	—
Total	\$410	\$ 404	\$ 81	\$ 82

(1) Private equity funds include funds that invest in infrastructure, emerging markets and venture capital.

(2) With respect to the Company's investments in private equity funds and real estate funds, distributions from each fund will be received as the underlying assets held by these funds are liquidated. It is estimated that the underlying assets of these funds will be liquidated over a period of several years as market conditions allow. Private equity and real estate funds do not allow redemption of investments by their investors. Investors are permitted to sell or transfer their investments, subject to the approval of the general partner or investment manager of these funds,

which generally may not be unreasonably withheld.

(3) Includes several real estate funds that invest primarily in commercial real estate in the U.S., Europe and Asia.

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13. LOANS

Citigroup loans are reported in two categories: consumer and corporate. These categories are classified primarily according to the segment and subsegment that manage the loans. For additional information regarding Citi's consumer and corporate loans, including related accounting policies, see Note 14 to the Consolidated Financial Statements in Citi's 2017 Annual Report on Form 10-K.

Consumer Loans

Consumer loans represent loans and leases managed primarily by GCB and Corporate/Other. The following table provides Citi's consumer loans by loan type:

In millions of dollars	June 30, 2018	December 31, 2017
In U.S. offices		
Mortgage and real estate ⁽¹⁾	\$61,692	\$ 65,467
Installment, revolving credit and other	3,759	3,398
Cards	135,968	139,006
Commercial and industrial	7,459	7,840
	\$208,878	\$ 215,711
In offices outside the U.S.		
Mortgage and real estate ⁽¹⁾	\$43,056	\$ 44,081
Installment, revolving credit and other	27,254	26,556
Cards	24,712	26,257
Commercial and industrial	18,966	20,238
Lease financing	55	76
	\$114,043	\$ 117,208
Total consumer loans	\$322,921	\$ 332,919
Net unearned income	\$711	\$ 737
Consumer loans, net of unearned income	\$323,632	\$ 333,656

(1) Loans secured primarily by real estate.

The Company sold and/or reclassified to held-for-sale \$1.9 billion and \$2.8 billion, \$0.6 billion and \$2.8 billion of consumer loans during the three and six months ended June 30, 2018 and 2017, respectively.

Consumer Loan Delinquency and Non-Accrual Details at June 30, 2018

In millions of dollars	Total current ⁽¹⁾⁽²⁾	30–89 day past due ⁽³⁾	≥ 90 days past due ⁽³⁾	Past due government guaranteed ⁽⁴⁾	Total loans ⁽²⁾	Total non-accrual	90 days past due and accruing
In North America offices							
Residential first mortgages ⁽⁵⁾	\$ 46,314	\$ 404	\$ 255	\$ 931	\$47,904	\$ 619	\$ 673
Home equity loans ⁽⁶⁾⁽⁷⁾	12,420	155	286	—	12,861	606	—
Credit cards	133,860	1,388	1,493	—	136,741	—	1,493
Installment and other	3,402	38	13	—	3,453	20	—
Commercial banking loans	9,054	10	40	—	9,104	128	—
Total	\$ 205,050	\$ 1,995	\$ 2,087	\$ 931	\$210,063	\$ 1,373	\$ 2,166
In offices outside North America							
Residential first mortgages ⁽⁵⁾	\$ 35,789	\$ 205	\$ 140	\$ —	\$36,134	\$ 382	\$ —
Credit cards	23,389	416	352	—	24,157	312	227
Installment and other	24,772	243	109	—	25,124	144	—
Commercial banking loans	28,027	54	72	—	28,153	172	—
Total	\$ 111,977	\$ 918	\$ 673	\$ —	\$113,568	\$ 1,010	\$ 227
Total GCB and Corporate/Other— Consumer	\$ 317,027	\$ 2,913	\$ 2,760	\$ 931	\$323,631	\$ 2,383	\$ 2,393
Other ⁽⁸⁾	1	—	—	—	1	—	—
Total Citigroup	\$ 317,028	\$ 2,913	\$ 2,760	\$ 931	\$323,632	\$ 2,383	\$ 2,393

(1) Loans less than 30 days past due are presented as current.

(2) Includes \$22 million of residential first mortgages recorded at fair value.

(3) Excludes loans guaranteed by U.S. government-sponsored entities.

(4) Consists of residential first mortgages that are guaranteed by U.S. government-sponsored entities that are 30–89 days past due of \$0.2 billion and 90 days or more past due of \$0.7 billion.

(5) Includes approximately \$0.1 billion of residential first mortgage loans in process of foreclosure.

(6) Includes approximately \$0.1 billion of home equity loans in process of foreclosure.

(7) Fixed-rate home equity loans and loans extended under home equity lines of credit, which are typically in junior lien positions.

(8) Represents loans classified as consumer loans on the Consolidated Balance Sheet that are not included in GCB or Corporate/Other consumer credit metrics.

Consumer Loan Delinquency and Non-Accrual Details at December 31, 2017

In millions of dollars	Total current ⁽¹⁾⁽²⁾	30–89 day past due ⁽³⁾	≥ 90 days past due ⁽³⁾	Past due government guaranteed ⁽⁴⁾	Total loans ⁽²⁾	Total non-accrual	90 days past due and accruing
In North America offices							
Residential first mortgages ⁽⁵⁾	\$ 47,366	\$ 505	\$ 280	\$ 1,225	\$49,376	\$ 665	\$ 941
Home equity loans ⁽⁶⁾⁽⁷⁾	14,268	207	352	—	14,827	750	—
Credit cards	136,588	1,528	1,613	—	139,729	—	1,596
Installment and other	3,395	45	16	—	3,456	22	1
Commercial banking loans	9,395	51	65	—	9,511	213	—
Total	\$ 211,012	\$ 2,336	\$ 2,326	\$ 1,225	\$216,899	\$ 1,650	\$ 2,538
In offices outside North America							
Residential first mortgages ⁽⁵⁾	\$ 37,062	\$ 209	\$ 148	\$ —	\$37,419	\$ 400	\$ —
Credit cards	24,934	427	366	—	25,727	323	259
Installment and other	25,634	275	123	—	26,032	157	—
Commercial banking loans	27,449	57	72	—	27,578	160	—
Total	\$ 115,079	\$ 968	\$ 709	\$ —	\$116,756	\$ 1,040	\$ 259
Total GCB and Corporate/Other— Consumer	\$ 326,091	\$ 3,304	\$ 3,035	\$ 1,225	\$333,655	\$ 2,690	\$ 2,797
Other ⁽⁸⁾	1	—	—	—	1	—	—
Total Citigroup	\$ 326,092	\$ 3,304	\$ 3,035	\$ 1,225	\$333,656	\$ 2,690	\$ 2,797

(1) Loans less than 30 days past due are presented as current.

(2) Includes \$25 million of residential first mortgages recorded at fair value.

(3) Excludes loans guaranteed by U.S. government-sponsored entities.

(4) Consists of residential first mortgages that are guaranteed by U.S. government-sponsored entities that are 30–89 days past due of \$0.2 billion and 90 days or more past due of \$1.0 billion.

(5) Includes approximately \$0.1 billion of residential first mortgage loans in process of foreclosure.

(6) Includes approximately \$0.1 billion of home equity loans in process of foreclosure.

(7) Fixed-rate home equity loans and loans extended under home equity lines of credit, which are typically in junior lien positions.

(8) Represents loans classified as consumer loans on the Consolidated Balance Sheet that are not included in GCB or Corporate/Other consumer credit metrics.

Consumer Credit Scores (FICO)

The following tables provide details on the FICO scores for Citi's U.S. consumer loan portfolio based on end-of-period receivables (commercial banking loans are excluded from the table since they are business based and FICO scores are not a primary driver in their credit evaluation). FICO scores are updated monthly for substantially all of the portfolio or, otherwise, on a quarterly basis for the remaining portfolio.

FICO score distribution in U.S. portfolio⁽¹⁾⁽²⁾ June 30, 2018

In millions of dollars	Less than 620	≥ 620 but less than 660	≥ 660 but less than 720	Equal to or greater than 720
Residential first mortgages	\$1,707	\$1,626	\$6,421	\$35,465
Home equity loans	1,085	906	2,946	7,274
Credit cards	8,682	11,129	38,544	74,911
Installment and other	147	242	708	1,685
Total	\$11,621	\$13,903	\$48,619	\$119,335

FICO score distribution in U.S. portfolio⁽¹⁾⁽²⁾ December 31, 2017

In millions of dollars	Less than 620	≥ 620 but less than 660	≥ 660 but less than 720	Equal to or greater than 720
Residential first mortgages	\$2,100	\$1,932	\$6,931	\$35,334
Home equity loans	1,379	1,081	3,446	8,530
Credit cards	9,079	11,651	37,916	77,661
Installment and other	276	250	667	1,818
Total	\$12,834	\$14,914	\$48,960	\$123,343

(1) Excludes loans guaranteed by U.S. government entities, loans subject to long-term standby commitments (LTSC) with U.S. government-sponsored entities and loans recorded at fair value.

(2) Excludes balances where FICO was not available. Such amounts are not material.

Loan to Value (LTV) Ratios

The following tables provide details on the LTV ratios for Citi's U.S. consumer mortgage portfolios. LTV ratios are updated monthly using the most recent Core Logic Home Price Index data available for substantially all of the portfolio applied at the Metropolitan Statistical Area level, if available, or the state level if not. The remainder of the portfolio is updated in a similar manner using the Federal Housing Finance Agency indices.

LTV distribution in U.S. portfolio⁽¹⁾⁽²⁾ June 30, 2018

In millions of dollars	> 80%		
	Less than or equal to 80%	but less than or equal to 100%	Greater than 100%
Residential first mortgages	\$42,778	\$2,382	\$ 189
Home equity loans	9,972	1,610	553
Total	\$52,750	\$3,992	\$ 742

LTV distribution in U.S. portfolio⁽¹⁾⁽²⁾ December 31, 2017

In millions of dollars	> 80%		
	Less than or equal to 80%	but less than or equal to 100%	Greater than 100%
Residential first mortgages	\$43,626	\$2,578	\$ 247
Home equity loans	11,403	2,147	800
Total	\$55,029	\$4,725	\$ 1,047

(1) Excludes loans guaranteed by U.S. government entities, loans subject to LTSCs with U.S. government-sponsored entities and loans recorded at fair value.

(2) Excludes balances where LTV was not available. Such amounts are not material.

Impaired Consumer Loans

The following tables present information about impaired consumer loans and interest income recognized on impaired consumer loans:

In millions of dollars	Balance at June 30, 2018			Average carrying value ⁽⁴⁾	Three Months Ended June 30, 2018		Six Months Ended June 30, 2018	
	Recorded investment ⁽¹⁾	Unpaid principal balance ⁽²⁾	Related specific allowance ⁽³⁾		Interest income recognized ⁽⁵⁾	Interest income recognized ⁽⁵⁾	Interest income recognized ⁽⁵⁾	Interest income recognized ⁽⁵⁾
Mortgage and real estate								
Residential first mortgages	\$2,489	\$2,674	\$ 233	\$ 2,831	\$ 21	\$ 32	\$ 42	\$ 68
Home equity loans	730	1,073	136	931	2	7	8	15
Credit cards	1,794	1,824	621	1,812	25	36	55	73
Installment and other								
Individual installment and other	405	434	166	427	6	5	12	13
Commercial banking	307	463	29	333	5	8	8	14
Total	\$5,725	\$6,468	\$ 1,185	\$ 6,334	\$ 59	\$ 88	\$ 125	\$ 183

(1) Recorded investment in a loan includes net deferred loan fees and costs, unamortized premium or discount and direct write-downs and includes accrued interest only on credit card loans.

(2) \$521 million of residential first mortgages, \$295 million of home equity loans and \$14 million of commercial market loans do not have a specific allowance.

(3) Included in the Allowance for loan losses.

(4) Average carrying value represents the average recorded investment ending balance for the last four quarters and does not include the related specific allowance.

(5) Includes amounts recognized on both an accrual and cash basis.

In millions of dollars	Balance, December 31, 2017			Average carrying value ⁽⁴⁾
	Recorded investment ⁽¹⁾	Unpaid principal balance ⁽²⁾	Related specific allowance ⁽³⁾	
Mortgage and real estate				
Residential first mortgages	\$2,877	\$ 3,121	\$ 278	\$ 3,155
Home equity loans	1,151	1,590	216	1,181
Credit cards	1,787	1,819	614	1,803
Installment and other				
Individual installment and other	431	460	175	415
Commercial banking	334	541	51	429
Total	\$6,580	\$ 7,531	\$ 1,334	\$ 6,983

(1) Recorded investment in a loan includes net deferred loan fees and costs, unamortized premium or discount and direct write-downs and includes accrued interest only on credit card loans.

(2) \$607 million of residential first mortgages, \$370 million of home equity loans and \$10 million of commercial market loans do not have a specific allowance.

(3) Included in the Allowance for loan losses.

(4) Average carrying value represents the average recorded investment ending balance for the last four quarters and does not include the related specific allowance.

Consumer Troubled Debt Restructurings

		At and for the three months ended June 30, 2018						
In millions of dollars except number of loans modified		Number of loans modified	Post-modification recorded investment	Deferred principal	Contingent principal forgiveness	Principal forgiveness	Average interest rate reduction	
			(1)(2)	(3)	(4)	(5)	(6)	
North America								
Residential first mortgages	495	\$ 77	\$ 1	\$ —	\$ —	—	—	%
Home equity loans	380	37	1	—	—	1	1	
Credit cards	55,459	220	—	—	—	17	17	
Installment and other revolving	292	2	—	—	—	5	5	
Commercial banking ⁽⁶⁾	17	1	—	—	—	—	—	
Total ⁽⁸⁾	56,643	\$ 337	\$ 2	\$ —	\$ —	—	—	
International								
Residential first mortgages	624	\$ 22	\$ —	\$ —	\$ —	—	—	%
Credit cards	17,782	78	—	—	2	16	16	
Installment and other revolving	7,172	43	—	—	2	11	11	
Commercial banking ⁽⁶⁾	157	22	—	—	—	—	—	
Total ⁽⁸⁾	25,735	\$ 165	\$ —	\$ —	\$ 4	4	4	
		At and for the three months ended June 30, 2017						
In millions of dollars except number of loans modified		Number of loans modified	Post-modification recorded investment	Deferred principal	Contingent principal forgiveness	Principal forgiveness	Average interest rate reduction	
			(1)(7)	(3)	(4)	(5)	(6)	
North America								
Residential first mortgages	806	\$ 116	\$ 1	\$ —	\$ 1	1	1	%
Home equity loans	677	58	5	—	—	2	2	
Credit cards	53,080	203	—	—	—	17	17	
Installment and other revolving	250	2	—	—	—	5	5	
Commercial banking ⁽⁶⁾	30	43	—	—	—	—	—	
Total ⁽⁸⁾	54,843	\$ 422	\$ 6	\$ —	\$ 1	1	1	
International								
Residential first mortgages	755	\$ 28	\$ —	\$ —	\$ —	—	—	%
Credit cards	28,551	98	—	—	2	12	12	
Installment and other revolving	11,622	64	—	—	2	9	9	
Commercial banking ⁽⁶⁾	53	6	—	—	—	—	—	
Total ⁽⁸⁾	40,981	\$ 196	\$ —	\$ —	\$ 4	4	4	

(1) Post-modification balances include past due amounts that are capitalized at the modification date.

Post-modification balances in North America include \$8 million of residential first mortgages and \$3 million of home equity loans to borrowers who have gone through Chapter 7 bankruptcy in the three months ended June 30, 2018. These amounts include \$5 million of residential first mortgages and \$3 million of home equity loans that were newly classified as TDRs in the three months ended June 30, 2018, based on previously received OCC guidance.

Represents portion of contractual loan principal that is non-interest bearing, but still due from the borrower. Such (3) deferred principal is charged off at the time of permanent modification to the extent that the related loan balance exceeds the underlying collateral value.

Represents portion of contractual loan principal that is non-interest bearing and, depending upon borrower performance, eligible for forgiveness. (4)

(5) Represents portion of contractual loan principal that was forgiven at the time of permanent modification.

(6) Commercial banking loans are generally borrower-specific modifications and incorporate changes in the amount and/or timing of principal and/or interest.

(7) Post-modification balances in North America include \$15 million of residential first mortgages and \$5 million of home equity loans to borrowers who have gone through Chapter 7 bankruptcy in the three months ended June 30, 2017. These amounts include \$11 million of residential first mortgages and \$4 million of home equity loans that were newly classified as TDRs in the three months ended June 30, 2017, based on previously received OCC guidance.

(8) The above tables reflect activity for loans outstanding as of the end of the reporting period that were considered TDRs.

In millions of dollars except number of loans modified	At and for the six months ended June 30, 2018						
	Number of loans modified	Post-modification recorded investment	Deferred principal ⁽³⁾	Contingent principal forgiveness ⁽⁴⁾	Principal forgiveness ⁽⁵⁾	Average interest rate reduction ⁽⁵⁾	
North America							
Residential first mortgages	1,083	\$ 166	\$ 1	\$ —	—	—	%
Home equity loans	836	78	3	—	—	1	
Credit cards	118,662	464	—	—	—	17	
Installment and other revolving	634	5	—	—	—	5	
Commercial banking ⁽⁶⁾	26	2	—	—	—	—	
Total ⁽⁸⁾	121,241	\$ 715	\$ 4	\$ —	—		
International							
Residential first mortgages	1,173	\$ 41	\$ —	\$ —	—	—	%
Credit cards	41,176	173	—	—	5	16	
Installment and other revolving	16,497	102	—	—	4	10	
Commercial banking ⁽⁶⁾	302	50	—	—	—	(1)	
Total ⁽⁸⁾	59,148	\$ 366	\$ —	\$ —	9		
In millions of dollars except number of loans modified	At and for the six months ended June 30, 2017						
	Number of loans modified	Post-modification recorded investment	Deferred principal ⁽³⁾	Contingent principal forgiveness ⁽⁴⁾	Principal forgiveness ⁽⁵⁾	Average interest rate reduction ⁽⁵⁾	
North America							
Residential first mortgages	1,772	\$ 246	\$ 4	\$ —	1	1	%
Home equity loans	1,356	114	8	—	—	1	
Credit cards	112,417	433	—	—	—	17	
Installment and other revolving	471	4	—	—	—	5	
Commercial banking ⁽⁶⁾	56	48	—	—	—	—	
Total ⁽⁸⁾	116,072	\$ 845	\$ 12	\$ —	1		
International							
Residential first mortgages	1,368	\$ 54	\$ —	\$ —	—	—	%
Credit cards	53,788	183	—	—	4	13	
Installment and other revolving	22,929	124	—	—	6	7	
Commercial banking ⁽⁶⁾	85	19	—	—	—	(1)	
Total ⁽⁸⁾	78,170	\$ 380	\$ —	\$ —	10		

(1) Post-modification balances include past due amounts that are capitalized at the modification date.

Post-modification balances in North America include \$19 million of residential first mortgages and \$7 million of home equity loans to borrowers who have gone through Chapter 7 bankruptcy in the six months ended June 30, 2018. These amounts include \$13 million of residential first mortgages and \$6 million of home equity loans that were newly classified as TDRs in the six months ended June 30, 2018, based on previously received OCC guidance.

Represents portion of contractual loan principal that is non-interest bearing but still due from the borrower. Such (3) deferred principal is charged off at the time of permanent modification to the extent that the related loan balance exceeds the underlying collateral value.

Represents portion of contractual loan principal that is non-interest bearing and, depending upon borrower performance, eligible for forgiveness. (4)

Represents portion of contractual loan principal that was forgiven at the time of permanent modification. (5)

(6) Commercial banking loans are generally borrower-specific modifications and incorporate changes in the amount and/or timing of principal and/or interest.

(7) Post-modification balances in North America include \$30 million of residential first mortgages and \$11 million of home equity loans to borrowers who have gone through Chapter 7 bankruptcy in the six months ended June 30, 2017. These amounts include \$21 million of residential first mortgages and \$10 million of home equity loans that were newly classified as TDRs in the six months ended June 30, 2017, based on previously received OCC guidance.

(8) The above tables reflect activity for loans outstanding as of the end of the reporting period that were considered TDRs.

The following table presents consumer TDRs that defaulted for which the payment default occurred within one year of a permanent modification. Default is defined as 60 days past due, except for classifiably managed commercial banking loans, where default is defined as 90 days past due.

	Three Months Ended June 30, 2018		Six Months Ended June 30, 2017	
In millions of dollars				
North America				
Residential first mortgages	\$30	\$48	\$74	\$99
Home equity loans	6	8	16	17
Credit cards	57	57	116	109
Installment and other revolving	1	1	1	1
Commercial banking	13	1	21	2
Total	\$107	\$115	\$228	\$228
International				
Residential first mortgages	\$2	\$3	\$4	\$5
Credit cards	55	46	108	88
Installment and other revolving	20	23	44	46
Commercial banking	9	—	10	—
Total	\$86	\$72	\$166	\$139

Corporate Loans

Corporate loans represent loans and leases managed by ICG. The following table presents information by corporate loan type:

In millions of dollars	June 30, 2018	December 31, 2017
In U.S. offices		
Commercial and industrial	\$53,260	\$ 51,319
Financial institutions	42,867	39,128
Mortgage and real estate ⁽¹⁾	46,310	44,683
Installment, revolving credit and other	32,663	33,181
Lease financing	1,445	1,470
	\$176,545	\$ 169,781
In offices outside the U.S.		
Commercial and industrial	\$98,068	\$ 93,750
Financial institutions	38,312	35,273
Mortgage and real estate ⁽¹⁾	7,261	7,309
Installment, revolving credit and other	22,755	22,638
Lease financing	139	190
Governments and official institutions	5,270	5,200
	\$171,805	\$ 164,360
Total corporate loans	\$348,350	\$ 334,141
Net unearned income	\$(802)	\$(763)
Corporate loans, net of unearned income	\$347,548	\$ 333,378

(1) Loans secured primarily by real estate.

The Company sold and/or reclassified to held-for-sale \$0.4 billion and \$0.5 billion of corporate loans during the three and six months ended June 30, 2018, respectively, and \$0 billion and \$0.5 billion during the three and six months ended June 30, 2017, respectively. The Company did not have significant purchases of corporate loans classified as held-for-investment for the three and six months ended June 30, 2018 or 2017.

Corporate Loan Delinquency and Non-Accrual Details at June 30, 2018

In millions of dollars	30–89 days past due and accruing ⁽¹⁾	≥ 90 days past due and accruing ⁽¹⁾	Total past due and accruing	Total non-accrual ⁽²⁾	Total current ⁽³⁾	Total loans ⁽⁴⁾
Commercial and industrial	\$ 618	\$ 39	\$ 657	\$ 1,095	\$147,195	\$148,947
Financial institutions	177	54	231	134	80,182	80,547
Mortgage and real estate	140	9	149	267	53,135	53,551
Leases	3	—	3	41	1,541	1,585
Other	59	19	78	86	59,776	59,940
Loans at fair value						2,978
Total	\$ 997	\$ 121	\$ 1,118	\$ 1,623	\$341,829	\$347,548

Corporate Loan Delinquency and Non-Accrual Details at December 31, 2017

In millions of dollars	30–89 days past due and accruing ⁽¹⁾	≥ 90 days past due and accruing ⁽¹⁾	Total past due and accruing	Total non-accrual ⁽²⁾	Total current ⁽³⁾	Total loans ⁽⁴⁾
Commercial and industrial	\$ 249	\$ 13	\$ 262	\$ 1,506	\$139,554	\$141,322
Financial institutions	93	15	108	92	73,557	73,757
Mortgage and real estate	147	59	206	195	51,563	51,964
Leases	68	8	76	46	1,533	1,655
Other	70	13	83	103	60,145	60,331
Loans at fair value						4,349
Total	\$ 627	\$ 108	\$ 735	\$ 1,942	\$326,352	\$333,378

(1) Corporate loans that are 90 days past due are generally classified as non-accrual. Corporate loans are considered past due when principal or interest is contractually due but unpaid.

Non-accrual loans generally include those loans that are ≥ 90 days past due or those loans for which Citi believes, based on actual experience and a forward-looking assessment of the collectability of the loan in full, that the payment of interest or principal is doubtful.

(3) Loans less than 30 days past due are presented as current.

(4) Total loans include loans at fair value, which are not included in the various delinquency columns.

Corporate Loans Credit Quality Indicators

In millions of dollars	Recorded investment in loans ⁽¹⁾	
	June 30, 2018	December 31, 2017
Investment grade ⁽²⁾		
Commercial and industrial	\$ 106,631	\$ 101,313
Financial institutions	68,604	60,404
Mortgage and real estate	23,633	23,213
Leases	1,055	1,090
Other	55,196	56,306
Total investment grade	\$ 255,119	\$ 242,326
Non-investment grade ⁽²⁾		
Accrual		
Commercial and industrial	\$ 41,221	\$ 38,503
Financial institutions	11,808	13,261
Mortgage and real estate	3,211	2,881
Leases	490	518
Other	4,658	3,924
Non-accrual		
Commercial and industrial	1,095	1,506
Financial institutions	134	92
Mortgage and real estate	267	195
Leases	41	46
Other	86	103
Total non-investment grade	\$ 63,011	\$ 61,029
Non-rated private bank loans managed on a delinquency basis ⁽²⁾	\$ 26,440	\$ 25,674
Loans at fair value	2,978	4,349
Corporate loans, net of unearned income	\$ 347,548	\$ 333,378

(1) Recorded investment in a loan includes net deferred loan fees and costs, unamortized premium or discount, less any direct write-downs.

(2) Held-for-investment loans are accounted for on an amortized cost basis.

Non-Accrual Corporate Loans

The following tables present non-accrual loan information by corporate loan type and interest income recognized on non-accrual corporate loans:

	June 30, 2018		Three Months Ended June 30, 2018		Six Months Ended June 30, 2018	
In millions of dollars	Recorded investment ⁽¹⁾	Unpaid principal balance	Related specific allowance	Average carrying value ⁽²⁾	Interest income recognized ⁽³⁾	Interest income recognized ⁽³⁾
Non-accrual corporate loans						
Commercial and industrial	\$ 1,095	\$ 1,246	\$ 248	\$ 1,332	\$ 13	\$ 16
Financial institutions	134	149	53	134	—	—
Mortgage and real estate	267	420	29	206	—	1
Lease financing	41	41	—	48	—	—
Other	86	194	2	102	—	—
Total non-accrual corporate loans	\$ 1,623	\$ 2,050	\$ 332	\$ 1,822	\$ 13	\$ 17

	December 31, 2017		Three Months Ended December 31, 2017		Six Months Ended December 31, 2017	
In millions of dollars	Recorded investment ⁽¹⁾	Unpaid principal balance	Related specific allowance	Average carrying value ⁽²⁾	Interest income recognized ⁽³⁾	Interest income recognized ⁽³⁾
Non-accrual corporate loans						
Commercial and industrial	\$ 1,506	\$ 1,775	\$ 368	\$ 1,547	\$ 13	\$ 16
Financial institutions	92	102	41	212	—	—
Mortgage and real estate	195	324	11	183	—	1
Lease financing	46	46	4	59	—	—
Other	103	212	2	108	—	—
Total non-accrual corporate loans	\$ 1,942	\$ 2,459	\$ 426	\$ 2,109	\$ 13	\$ 17

	June 30, 2018		December 31, 2017	
In millions of dollars	Recorded investment ⁽¹⁾	Related specific allowance	Recorded investment ⁽¹⁾	Related specific allowance
Non-accrual corporate loans with valuation allowances				
Commercial and industrial	\$ 660	\$ 248	\$ 1,017	\$ 368
Financial institutions	98	53	88	41
Mortgage and real estate	124	29	51	11
Lease financing	—	—	46	4
Other	10	2	13	2
Total non-accrual corporate loans with specific allowance	\$ 892	\$ 332	\$ 1,215	\$ 426
Non-accrual corporate loans without specific allowance				
Commercial and industrial	\$ 435		\$ 489	
Financial institutions	36		4	
Mortgage and real estate	143		144	
Lease financing	41		—	
Other	76		90	
Total non-accrual corporate loans without specific allowance	\$ 731	N/A	\$ 727	N/A

(1) Recorded investment in a loan includes net deferred loan fees and costs, unamortized premium or discount, less any direct write-downs.

(2) Average carrying value represents the average recorded investment balance and does not include related specific allowance.

(3) Interest income recognized for the three and six months ended June 30, 2017 was \$17 million and \$19 million.

N/A Not applicable

Corporate Troubled Debt Restructurings

At and for the three months ended June 30, 2018:

In millions of dollars	Carrying Value	TDRs involving changes in the amount and/or timing of principal payments ⁽¹⁾	TDRs involving changes in the amount and/or timing of interest payments ⁽²⁾	TDRs involving changes in the amount and/or timing of both principal and interest payments
Commercial and industrial	\$ 39	\$ 3	\$ 4	\$ 32
Mortgage and real estate	2	—	—	2
Total	\$ 41	\$ 3	\$ 4	\$ 34

At and for the three months ended June 30, 2017:

In millions of dollars	Carrying Value	TDRs involving changes in the amount and/or timing of principal payments ⁽¹⁾	TDRs involving changes in the amount and/or timing of interest payments ⁽²⁾	TDRs involving changes in the amount and/or timing of both principal and interest payments
Commercial and industrial	\$ 233	\$ 32	\$	—\$ 201
Mortgage and real estate	3	—	—	3
Total	\$ 236	\$ 32	\$	—\$ 204

At and for the six months ended June 30, 2018:

In millions of dollars	Carrying Value	TDRs involving changes in the amount and/or timing of principal payments ⁽¹⁾	TDRs involving changes in the amount and/or timing of interest payments ⁽²⁾	TDRs involving changes in the amount and/or timing of both principal and interest payments
Commercial and industrial	\$ 41	\$ 3	\$ 4	\$ 34
Mortgage and real estate	3	—	—	3

Total \$ 44 \$ 3 \$ 4 \$ 37

At and for the six months ended June 30, 2017:

In millions of dollars	Carrying Value	TDRs involving changes in the amount and/or timing of principal payments ⁽¹⁾	TDRs involving changes in the amount and/or timing of interest payments ⁽²⁾	TDRs involving changes in the amount and/or timing of both principal and interest payments
Commercial and industrial	\$ 288	\$ 32	\$	—\$ 256
Mortgage and real estate	15	—	—	15
Other	4	—	—	4
Total	\$ 307	\$ 32	\$	—\$ 275

TDRs involving changes in the amount or timing of principal payments may involve principal forgiveness or deferral of periodic and/or final principal payments. Because forgiveness of principal is rare for corporate loans, modifications typically have little to no impact on the loans' projected cash flows and thus little to no impact on the allowance established for the loans. Charge-offs for amounts deemed uncollectable may be recorded at the time of the restructuring or may have already been recorded in prior periods such that no charge-off is required at the time of the modification.

(2) TDRs involving changes in the amount or timing of interest payments may involve a below-market interest rate.

The following table presents total corporate loans modified in a TDR as well as those TDRs that defaulted and for which the payment default occurred within one year of a permanent modification. Default is defined as 60 days past due, except for classifiably managed commercial banking loans, where default is defined as 90 days past due.

In millions of dollars	TDR balances at June 30, 2018	TDR loans in payment default during the three months ended June 30, 2018	TDR loans in payment default six months ended June 30, 2018	TDR balances at June 30, 2017	TDR loans in payment default during the three months ended June 30, 2017	TDR loans in payment default during the six months ended June 30, 2017
Commercial and industrial	\$ 440	\$ 11	\$ 70	\$ 591	\$ 3	\$ 12
Financial institutions	34	—	—	24	—	3
Mortgage and real estate	87	—	—	74	—	—
Other	37	—	—	166	—	—
Total ⁽¹⁾	\$ 598	\$ 11	\$ 70	\$ 855	\$ 3	\$ 15

(1) The above tables reflect activity for loans outstanding as of the end of the reporting period that were considered TDRs.

14. ALLOWANCE FOR CREDIT LOSSES

	Three Months Ended June 30,		Six Months Ended June 30,	
In millions of dollars	2018	2017	2018	2017
Allowance for loan losses at beginning of period	\$12,354	\$12,030	\$12,355	\$12,060
Gross credit losses	(2,109)	(2,130)	(4,405)	(4,274)
Gross recoveries ⁽¹⁾	405	420	834	855
Net credit losses (NCLs)	\$(1,704)	\$(1,710)	\$(3,571)	\$(3,419)
NCLs	\$1,704	\$1,710	\$3,571	\$3,419
Net reserve builds (releases)	31	67	133	47
Net specific reserve releases	60	(111)	(106)	(125)
Total provision for loan losses	\$1,795	\$1,666	\$3,598	\$3,341
Other, net (see table below)	(319)	39	(256)	43
Allowance for loan losses at end of period	\$12,126	\$12,025	\$12,126	\$12,025
Allowance for credit losses on unfunded lending commitments at beginning of period	\$1,290	\$1,377	\$1,258	\$1,418
Provision (release) for unfunded lending commitments	(4)	28	24	(15)
Other, net	(8)	1	(4)	3
Allowance for credit losses on unfunded lending commitments at end of period ⁽²⁾	\$1,278	\$1,406	\$1,278	\$1,406
Total allowance for loans, leases and unfunded lending commitments	\$13,404	\$13,431	\$13,404	\$13,431

(1) Recoveries have been reduced by certain collection costs that are incurred only if collection efforts are successful.

(2) Represents additional credit loss reserves for unfunded lending commitments and letters of credit recorded in Other liabilities on the Consolidated Balance Sheet.

	Three Months Ended June 30,		Six Months Ended June 30,	
In millions of dollars	2018	2017	2018	2017
Sales or transfers of various consumer loan portfolios to HFS				
Transfer of real estate loan portfolios	\$(33)	\$(19)	\$(86)	\$(56)
Transfer of other loan portfolios	(104)	—	(106)	(124)
Sales or transfers of various consumer loan portfolios to HFS	\$(137)	\$(19)	\$(192)	\$(180)
FX translation, consumer	(164)	50	(46)	214
Other	(18)	8	(18)	9
Other, net	\$(319)	\$39	\$(256)	\$43

Allowance for Credit Losses and Investment in Loans

	Three Months Ended June 30, 2018			June 30, 2017		
In millions of dollars	Corporate	Consumer	Total	Corporate	Consumer	Total
Allowance for loan losses at beginning of period	\$2,315	\$10,039	\$12,354	\$2,535	\$9,495	\$12,030
Charge-offs	(20)	(2,089)	(2,109)	(96)	(2,034)	(2,130)
Recoveries	22	383	405	19	401	420
Replenishment of net charge-offs	(2)	1,706	1,704	77	1,633	1,710

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Net reserve builds (releases)	(30)61	31	(4)71	67
Net specific reserve builds (releases)	63	(3)60	(27)84)(111
Other	(18)(301)(319)6	33	39
Ending balance	\$2,330	\$9,796	\$12,126	\$2,510	\$9,515	\$12,025

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In millions of dollars	Six Months Ended					
	June 30, 2018			June 30, 2017		
	Corporate	Consumer	Total	Corporate	Consumer	Total
Allowance for loan losses at beginning of period	\$2,486	\$ 9,869	\$12,355	\$2,702	\$ 9,358	\$12,060
Charge-offs	(159)	(4,246)	(4,405)	(199)	(4,075)	(4,274)
Recoveries	65	769	834	85	770	855
Replenishment of net charge-offs	94	3,477	3,571	114	3,305	3,419
Net reserve builds (releases)	(49)	182	133	(170)	217	47
Net specific reserve builds (releases)	(92)	(14)	(106)	(39)	(86)	(125)
Other	(15)	(241)	(256)	17	26	43
Ending balance	\$2,330	\$ 9,796	\$12,126	\$2,510	\$ 9,515	\$12,025

In millions of dollars	June 30, 2018			December 31, 2017		
	Corporate	Consumer	Total	Corporate	Consumer	Total
Allowance for loan losses						
Collectively evaluated in accordance with ASC 450	\$1,998	\$ 8,608	\$10,606	\$2,060	\$ 8,531	\$10,591
Individually evaluated in accordance with ASC 310-10-35	332	1,185	1,517	426	1,334	1,760
Purchased credit-impaired in accordance with ASC 310-30	—	3	3	—	4	4
Total allowance for loan losses	\$2,330	\$ 9,796	\$12,126	\$2,486	\$ 9,869	\$12,355
Loans, net of unearned income						
Collectively evaluated in accordance with ASC 450	\$343,000	\$317,736	\$660,736	\$327,142	\$326,884	\$654,026
Individually evaluated in accordance with ASC 310-10-35	1,570	5,725	7,295	1,887	6,580	8,467
Purchased credit-impaired in accordance with ASC 310-30	—	149	149	—	167	167
Held at fair value	2,978	22	3,000	4,349	25	4,374
Total loans, net of unearned income	\$347,548	\$323,632	\$671,180	\$333,378	\$333,656	\$667,034

15. GOODWILL AND INTANGIBLE ASSETS

Goodwill impairment testing is performed at the level below each business segment (referred to as a reporting unit). See Note 3 for further information on business segments. For additional information regarding Citi's goodwill impairment testing process, see Notes 1 and 16 to the Consolidated Financial Statements in Citi's 2017 Annual Report on Form 10-K. There were no triggering events identified and no goodwill was impaired during the three and six months ended June 30, 2018.

Goodwill

The changes in Goodwill were as follows:

In millions of dollars	Global Consumer Banking	Institutional Clients Group	Corporate/Other	Total
Balance at December 31, 2017	\$ 12,784	\$ 9,456	\$ 16	\$ 22,256
Foreign currency translation and other	\$ 184	\$ 235	\$ —	\$ 419
Divestiture ⁽¹⁾	—	—	(16)	(16)
Balance at March 31, 2018	\$ 12,968	\$ 9,691	\$ —	\$ 22,659
Foreign exchange translation and other	\$ (226)	\$ (375)	\$ —	\$ (601)
Divestiture ⁽¹⁾	—	—	—	—
Balance at June 30, 2018	\$ 12,742	\$ 9,316	\$ —	\$ 22,058

Goodwill allocated to the sale of the Citi Colombia consumer business, the only remaining business in Citi (1)Holdings-Consumer Latin America reporting unit reported as part of Corporate/Other, which was classified as HFS beginning the first quarter of 2018. The sale was completed during the second quarter of 2018.

Intangible Assets

The components of intangible assets were as follows:

In millions of dollars	June 30, 2018			December 31, 2017		
	Gross carrying amount	Accumulated amortization	Net carrying amount	Gross carrying amount	Accumulated amortization	Net carrying amount
Purchased credit card relationships	\$5,726	\$ 3,838	\$ 1,888	\$5,375	\$ 3,836	\$ 1,539
Credit card contract related intangibles ⁽¹⁾	5,043	2,624	2,419	5,045	2,456	2,589
Core deposit intangibles	419	412	7	639	628	11
Other customer relationships	472	287	185	459	272	187
Present value of future profits	32	28	4	32	28	4
Indefinite-lived intangible assets	216	—	216	244	—	244
Other	95	85	10	100	86	14
Intangible assets (excluding MSRs)	\$12,003	\$ 7,274	\$ 4,729	\$11,894	\$ 7,306	\$ 4,588
Mortgage servicing rights (MSRs) ⁽²⁾	596	—	596	558	—	558
Total intangible assets	\$12,599	\$ 7,274	\$ 5,325	\$12,452	\$ 7,306	\$ 5,146

Primarily reflects contract-related intangibles associated with the American Airlines, The Home Depot, Costco, (1) Sears and AT&T credit card program agreements, which represent 97% of the aggregate net carrying amount as of June 30, 2018.

(2) For additional information on Citi's MSRs, see Note 18 to the Consolidated Financial Statements.

The changes in intangible assets were as follows:

In millions of dollars	Net carrying amount at December 31, 2017	Acquisitions/ divestitures	Amortization	FX translation and other	Net carrying amount at June 30, 2018
Purchased credit card relationships ⁽¹⁾	\$ 1,539	\$ 425	\$ (74	) \$ (2	) \$ 1,888
Credit card contract related intangibles ⁽²⁾	2,589	2	(171	) (1	) 2,419
Core deposit intangibles	11	—	(4	) —	7
Other customer relationships	187	—	(12	) 10	185
Present value of future profits	4	—	—	—	4
Indefinite-lived intangible assets	244	—	—	(28	) 216
Other	14	—	(7	) 3	10
Intangible assets (excluding MSRs)	\$ 4,588	\$ 427	\$ (268	) \$ (18	) \$ 4,729
Mortgage servicing rights (MSRs) ⁽³⁾	558				596
Total intangible assets	\$ 5,146				\$ 5,325

Reflects intangibles for the value of cardholder relationships, which are discrete from partner contract intangibles (1) and include credit card accounts primarily in the Costco, Macy's and Sears portfolios. The increase since December 31, 2017 reflects the purchase of certain rights related to credit card accounts in the Sears portfolio.

Primarily reflects contract-related intangibles associated with the American Airlines, The Home Depot, Costco, (2) Sears and AT&T credit card program agreements, which represented 97% of the aggregate net carrying amount at June 30, 2018 and December 31, 2017.

For additional information on Citi's MSRs, including the rollforward for the six months ended June 30, 2018, see (3) Note 18 to the Consolidated Financial Statements.

16. DEBT

For additional information regarding Citi's short-term borrowings and long-term debt, see Note 17 to the Consolidated Financial Statements in Citi's 2017 Annual Report on Form 10-K.

Short-Term Borrowings

In millions of dollars	June 30, 2018	December 31, 2017
Commercial paper	\$ 12,034	\$ 9,940
Other borrowings ⁽¹⁾	25,199	34,512
Total	\$ 37,233	\$ 44,452

Includes borrowings from Federal Home Loan Banks and other market participants. At June 30, 2018 and (1) December 31, 2017, collateralized short-term advances from the Federal Home Loan Banks were \$15.3 billion and \$23.8 billion, respectively.

Long-Term Debt

In millions of dollars	June 30, 2018	December 31, 2017
Citigroup Inc. ⁽¹⁾	\$ 148,601	\$ 152,163
Bank ⁽²⁾	63,951	65,856
Broker-dealer and other ⁽³⁾	24,270	18,690
Total	\$ 236,822	\$ 236,709

(1) Represents the parent holding company.

(2) Represents Citibank entities as well as other bank entities. At June 30, 2018 and December 31, 2017, collateralized long-term advances from the Federal Home Loan Banks were \$13.7 billion and \$19.3 billion, respectively.

(3) Represents broker-dealer and other non-bank subsidiaries that are consolidated into Citigroup Inc., the parent holding company.

Long-term debt outstanding includes trust preferred securities with a balance sheet carrying value of \$1.7 billion at both June 30, 2018 and December 31, 2017.

The following table summarizes Citi's outstanding trust preferred securities at June 30, 2018:

Trust	Issuance date	Securities issued	Liquidation value ⁽¹⁾	Coupon rate ⁽²⁾	Junior subordinated debentures owned by trust			
					Common shares issued to parent	Amount	Maturity	Redeemable by issuer beginning
In millions of dollars, except share amounts								
Citigroup Capital III	Dec. 1996	194,053	\$ 194	7.625	% 6,003	\$ 200	Dec. 1, 2036	Not redeemable
Citigroup Capital XIII	Sept. 2010	89,840,000	2,246	3 mo LIBOR + 637 bps	1,000	2,246	Oct. 30, 2040	Oct. 30, 2015
	June 2007	99,901	132		50	132		June 28, 2017

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Citigroup Capital XVIII	3 mo LIBOR + 88.75 bps	June 28, 2067
Total obligated	\$ 2,572	\$2,578

Note: Distributions on the trust preferred securities and interest on the subordinated debentures are payable semiannually for Citigroup Capital III and Citigroup Capital XVIII and quarterly for Citigroup Capital XIII.

(1) Represents the notional value received by investors from the trusts at the time of issuance.

(2) In each case, the coupon rate on the subordinated debentures is the same as that on the trust preferred securities.

17. CHANGES IN ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS) (AOCI)

Changes in each component of Citigroup's Accumulated other comprehensive income (loss) were as follows:
Three Months Ended June 30, 2018

In millions of dollars	Net unrealized gains (losses) on investment securities	Debt valuation adjustment (DVA)	Cash flow hedges ⁽¹⁾	Benefit plans ⁽²⁾	Foreign currency translation adjustment (CTA), net of hedges ⁽³⁾	Excluded Component of fair value hedges ⁽⁴⁾	Accumulated other comprehensive income (loss)
Balance, March 31, 2018	\$ (2,219)	\$ (793)	\$ (920)	\$ (6,095)	\$ (24,588)	\$ (4)	\$ (34,619)
Other comprehensive income before reclassifications	(433)	316	(36)	261	(2,867)	(28)	(2,787)
Increase (decrease) due to amounts reclassified from AOCI	(65)	2	(65)	40	—	—	(88)
Change, net of taxes	\$ (498)	\$ 318	\$ (101)	\$ 301	\$ (2,867)	\$ (28)	\$ (2,875)
Balance at June 30, 2018	\$ (2,717)	\$ (475)	\$ (1,021)	\$ (5,794)	\$ (27,455)	\$ (32)	\$ (37,494)

Six Months Ended June 30, 2018

In millions of dollars	Net unrealized gains (losses) on investment securities	Debt valuation adjustment (DVA)	Cash flow hedges ⁽¹⁾	Benefit plans ⁽²⁾	Foreign currency translation adjustment (CTA), net of hedges ⁽³⁾	Excluded Component of fair value hedges ⁽⁴⁾	Accumulated other comprehensive income (loss)
Balance, December 31, 2017	\$ (1,158)	\$ (921)	\$ (698)	\$ (6,183)	\$ (25,708)	\$ —	\$ (34,668)
Adjustment to opening balance, net of taxes ⁽⁵⁾	(3)	—	—	—	—	—	(3)
Adjusted balance, beginning of period	\$ (1,161)	\$ (921)	\$ (698)	\$ (6,183)	\$ (25,708)	\$ —	\$ (34,671)
Other comprehensive income before reclassifications	(1,383)	417	(279)	302	(1,747)	(32)	(2,722)
Increase (decrease) due to amounts reclassified from AOCI	(173)	29	(44)	87	—	—	(101)
Change, net of taxes	\$ (1,556)	\$ 446	\$ (323)	\$ 389	\$ (1,747)	\$ (32)	\$ (2,823)
Balance at June 30, 2018	\$ (2,717)	\$ (475)	\$ (1,021)	\$ (5,794)	\$ (27,455)	\$ (32)	\$ (37,494)

Note: Footnotes to the tables above appear on the following page.

Three Months Ended June 30, 2017

In millions of dollars	Net unrealized gains (losses) on investment securities	Debt valuation adjustment (DVA)	Cash flow hedges ⁽¹⁾	Benefit plans ⁽²⁾	Foreign currency translation adjustment (CTA), net of hedges ⁽³⁾	Excluded Component of fair value hedges ⁽⁴⁾	Accumulated other comprehensive income (loss)
Balance, March 31, 2017	\$ (75)	\$ (412)	\$ (562)	\$ (5,176)	\$ (24,188)	\$ —	—\$ (30,413)
Other comprehensive income before reclassifications	101	(79)	62	(173)	643	—	554
Increase (decrease) due to amounts reclassified from AOCI	(128)	(5)	55	38	—	—	(40)
Change, net of taxes	\$ (27)	\$ (84)	\$ 117	\$ (135)	\$ 643	\$ —	—\$ 514
Balance, June 30, 2017	\$ (102)	\$ (496)	\$ (445)	\$ (5,311)	\$ (23,545)	\$ —	—\$ (29,899)

Six Months Ended June 30, 2017

In millions of dollars	Net unrealized gains (losses) on investment securities	Debt valuation adjustment (DVA)	Cash flow hedges ⁽¹⁾	Benefit plans ⁽²⁾	Foreign currency translation adjustment (CTA), net of hedges ⁽³⁾	Excluded Component of fair value hedges ⁽⁴⁾	Accumulated other comprehensive income (loss)
Balance, December 31, 2016	\$ (799)	\$ (352)	\$ (560)	\$ (5,164)	\$ (25,506)	\$ —	—\$ (32,381)
Adjustment to opening balance, net of taxes ⁽⁶⁾	504	—	—	—	—	—	504
Adjusted balance, beginning of period	\$ (295)	\$ (352)	\$ (560)	\$ (5,164)	\$ (25,506)	\$ —	—\$ (31,877)
Other comprehensive income before reclassifications	435	(134)	86	(222)	2,108	—	2,273
Increase (decrease) due to amounts reclassified from AOCI	(242)	(10)	29	75	(147)	—	(295)
Change, net of taxes	\$ 193	\$ (144)	\$ 115	\$ (147)	\$ 1,961	\$ —	—\$ 1,978
Balance, June 30, 2017	\$ (102)	\$ (496)	\$ (445)	\$ (5,311)	\$ (23,545)	\$ —	—\$ (29,899)

(1) Primarily driven by Citigroup's pay fixed/receive floating interest rate swap programs that hedge the floating rates on liabilities.

Primarily reflects adjustments based on the quarterly actuarial valuations of the Company's Significant pension and postretirement plans, annual actuarial valuations of all other plans and amortization of amounts previously recognized in other comprehensive income.

(3) Primarily reflects the movements in (by order of impact) the Mexican peso, Brazilian real, Euro, and Korean won against the U.S. dollar and changes in related tax effects and hedges for the three months ended June 30, 2018. Primarily reflects the movements in (by order of impact) the Brazilian real, Indian rupee, Argentine peso, and Korean won against the U.S. dollar and changes in related tax effects and hedges for the six months ended June 30, 2018. Primarily reflects the movements in (by order of impact) the Mexican peso, Euro, Polish zloty, and British pound sterling against the U.S. dollar and changes in related tax effects and hedges for the three months ended June 30, 2017. Primarily reflects the movements in (by order of impact) the Mexican peso, Euro, Korean won, and Polish zloty against the U.S. dollar and changes in related tax effects and hedges for the quarter and six months ended June 30, 2017. Amounts recorded in the CTA component of AOCI remain in AOCI until the sale or substantial liquidation of the foreign entity, at which point such amounts related to the foreign entity are

reclassified into earnings.

(4) Beginning in the first quarter of 2018, changes in the excluded component of fair value hedges are reflected as a component of AOCI, pursuant to the early adoption of ASU No. 2017-12, Targeted Improvements to Accounting for Hedging Activities. See Note 1 to the Consolidated Financial Statements for further information regarding this change.

(5) Citi adopted ASU 2016-01 and ASU 2018-03 on January 1, 2018. Upon adoption, a cumulative effect adjustment was recorded from AOCI to retained earnings for net unrealized gains on former AFS equity securities. For additional information, see Note 1 to the Consolidated Financial Statements.

(6) In the second quarter of 2017, Citi early adopted ASU 2017-08, Receivables—Nonrefundable Fees and Other Costs (Subtopic 310-20): Premium Amortization on Purchased Callable Debt Securities. Upon adoption, a cumulative effect adjustment was recorded to reduce retained earnings, effective January 1, 2017, for the incremental amortization of cumulative fair value hedge adjustments on callable state and municipal debt securities. For additional information, see Note 1 to the Consolidated Financial Statements.

The pretax and after-tax changes in each component of Accumulated other comprehensive income (loss) were as follows:

Three Months Ended June 30, 2018

In millions of dollars	Pretax	Tax effect ⁽¹⁾	After-tax
Balance, March 31, 2018	\$(41,519)	\$6,900	\$(34,619)
Change in net unrealized gains (losses) on AFS debt securities	(671)	)173	(498)
Debt valuation adjustment (DVA)	418	(100)	)318
Cash flow hedges	(132)	)31	(101)
Benefit plans	403	(102)	)301
Foreign currency translation adjustment	(2,869)	)2	(2,867)
Excluded component of fair value hedges	(37)	)9	(28)
Change	\$(2,888)	)\$13	\$(2,875)
Balance, June 30, 2018	\$(44,407)	\$6,913	\$(37,494)

Six Months Ended June 30, 2018

In millions of dollars	Pretax	Tax effect ⁽¹⁾	After-tax
Balance, December 31, 2017 ⁽¹⁾	\$(41,228)	\$6,560	\$(34,668)
Adjustment to opening balance ⁽²⁾	(4)	)1	(3)
Adjusted balance, beginning of period	\$(41,232)	\$6,561	\$(34,671)
Change in net unrealized gains (losses) on investment securities	(2,051)	)495	(1,556)
Debt valuation adjustment (DVA)	585	(139)	)446
Cash flow hedges	(422)	)99	(323)
Benefit plans	494	(105)	)389
Foreign currency translation adjustment	(1,739)	)8	(1,747)
Excluded component of fair value hedges	(42)	)10	(32)
Change	\$(3,175)	)\$352	\$(2,823)
Balance, June 30, 2018	\$(44,407)	\$6,913	\$(37,494)

(1) Includes the impact of ASU 2018-02, which transferred amounts from AOCI to Retained Earnings. For additional information, see Note 19 to the Consolidated Financial Statements in Citi's 2017 Annual Report on Form 10-K.

Citi adopted ASU 2016-01 and ASU 2018-03 on January 1, 2018. Upon adoption, a cumulative effect adjustment (2) was recorded from AOCI to retained earnings for net unrealized gains on former AFS equity securities. For additional information, see Note 1 to the Consolidated Financial Statements.

Three Months Ended June 30, 2017

In millions of dollars	Pretax	Tax effect	After-tax
Balance, March 31, 2017	\$(39,514)	\$9,101	\$(30,413)
Change in net unrealized gains (losses) on investment securities	(45)	18	(27)
Debt valuation adjustment (DVA)	(132)	48	(84)
Cash flow hedges	185	(68)	117
Benefit plans	(219)	84	(135)
Foreign currency translation adjustment	619	24	643
Excluded component of fair value hedges	—	—	—
Change	\$408	\$106	\$514
Balance, June 30, 2017	\$(39,106)	\$9,207	\$(29,899)

Six Months Ended June 30, 2017

In millions of dollars	Pretax	Tax effect	After-tax
Balance, December 31, 2016	\$(42,035)	\$9,654	\$(32,381)
Adjustment to opening balance ⁽¹⁾	803	(299)	504
Adjusted balance, beginning of period	\$(41,232)	\$9,355	\$(31,877)
Change in net unrealized gains (losses) on investment securities	301	(108)	193
Debt valuation adjustment (DVA)	(227)	83	(144)
Cash flow hedges	186	(71)	115
Benefit plans	(221)	74	(147)
Foreign currency translation adjustment	2,087	(126)	1,961
Excluded component of fair value hedges	—	—	—
Change	\$2,126	\$(148)	\$1,978
Balance, June 30, 2017	\$(39,106)	\$9,207	\$(29,899)

In the second quarter of 2017, Citi early adopted ASU 2017-08. Upon adoption, a cumulative effect adjustment was recorded to reduce retained earnings, effective January 1, 2017, for the incremental amortization of cumulative fair value hedge adjustments on callable state and municipal debt securities. See Note 1 to the Consolidated Financial Statements.

The Company recognized pretax gains (losses) related to amounts in AOCI reclassified to the Consolidated Statement of Income as follows:

	Increase (decrease) in AOCI due to amounts reclassified to Consolidated Statement of Income	
	Three Months Ended June 30, 2018	Six Months Ended June 30, 2018
In millions of dollars		
Realized (gains) losses on sales of investments	\$(102)	\$(272)
Gross impairment losses	15	43
Subtotal, pretax	\$(87)	\$(229)
Tax effect	22	56
Net realized (gains) losses on investments after-tax ⁽¹⁾	\$(65)	\$(173)
Realized DVA (gains) losses on fair value option liabilities	\$2	\$37
Subtotal, pretax	\$2	\$37
Tax effect	—	(8)
Net realized debt valuation adjustment, after-tax	\$2	\$29
Interest rate contracts	\$(82)	\$(51)
Foreign exchange contracts	(4)	(6)
Subtotal, pretax	\$(86)	\$(57)
Tax effect	21	13
Amortization of cash flow hedges, after-tax ⁽²⁾	\$(65)	\$(44)
Amortization of unrecognized		
Prior service cost (benefit)	\$(11)	\$(22)
Net actuarial loss	64	133
Curtailment/settlement impact ⁽³⁾	2	6
Subtotal, pretax	\$55	\$117
Tax effect	(15)	(30)
Amortization of benefit plans, after-tax ⁽³⁾	\$40	\$87
Foreign currency translation adjustment	\$—	\$—
Tax effect	—	—
Foreign currency translation adjustment	\$—	\$—
Total amounts reclassified out of AOCI, pretax	\$(116)	\$(132)
Total tax effect	28	31
Total amounts reclassified out of AOCI, after-tax	\$(88)	\$(101)

The pretax amount is reclassified to Realized gains (losses) on sales of investments, net and Gross impairment (1) losses in the Consolidated Statement of Income. See Note 12 to the Consolidated Financial Statements for additional details.

(2) See Note 19 to the Consolidated Financial Statements for additional details.

(3) See Note 8 to the Consolidated Financial Statements for additional details.

The Company recognized pretax gains (losses) related to amounts in AOCI reclassified to the Consolidated Statement of Income as follows:

	Increase (decrease) in AOCI due to amounts reclassified to Consolidated Statement of Income	
	Three Months Ended June 30, 2017	Six Months Ended June 30, 2017
In millions of dollars		
Realized (gains) losses on sales of investments	\$(221)	\$(413)
OTTI gross impairment losses	20	32
Subtotal, pretax	\$(201)	\$(381)
Tax effect	73	139
Net realized (gains) losses on investment securities, after-tax ⁽¹⁾	\$(128)	\$(242)
Realized DVA (gains) losses on fair value option liabilities	\$(8)	\$(16)
Subtotal, pretax	\$(8)	\$(16)
Tax effect	\$3	\$6
Net realized debt valuation adjustment, after-tax	\$(5)	\$(10)
Interest rate contracts	\$90	\$46
Foreign exchange contracts	(2)	1
Subtotal, pretax	\$88	\$47
Tax effect	(33)	(18)
Amortization of cash flow hedges, after-tax ⁽²⁾	\$55	\$29
Amortization of unrecognized		
Prior service cost (benefit)	\$(12)	\$(22)
Net actuarial loss	66	133
Curtailment/settlement impact ⁽³⁾	7	7
Subtotal, pretax	\$61	\$118
Tax effect	(23)	(43)
Amortization of benefit plans, after-tax ⁽³⁾	\$38	\$75
Foreign currency translation adjustment	\$—	\$(232)
Tax effect	—	85
Foreign currency translation adjustment	\$—	\$(147)
Total amounts reclassified out of AOCI, pretax	\$(60)	\$(464)
Total tax effect	20	169
Total amounts reclassified out of AOCI, after-tax	\$(40)	\$(295)

The pretax amount is reclassified to Realized gains (losses) on sales of investments, net and Gross impairment (1) losses on the Consolidated Statement of Income. See Note 12 to the Consolidated Financial Statements for additional details.

(2) See Note 19 to the Consolidated Financial Statements for additional details.

(3) See Note 8 to the Consolidated Financial Statements for additional details.

18. SECURITIZATIONS AND VARIABLE INTEREST ENTITIES

For additional information regarding Citi's use of special purpose entities (SPEs) and variable interest entities (VIEs), see Note 21 to the Consolidated Financial Statements in Citi's 2017 Annual Report on Form 10-K.

Citigroup's involvement with consolidated and unconsolidated VIEs with which the Company holds significant variable interests or has continuing involvement through servicing a majority of the assets in a VIE is presented below:

As of June 30, 2018

In millions of dollars	Total involvement with SPE assets	Consolidated VIE/SPE assets	Significant unconsolidated VIE assets ⁽³⁾	Maximum exposure to loss in significant unconsolidated VIEs ⁽¹⁾		Funding commitments	Guarantees and derivatives	Total
				Funded exposures ⁽²⁾	Equity investments			
Credit card securitizations	\$46,520	\$ 46,520	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Mortgage securitizations ⁽⁴⁾								
U.S. agency-sponsored	110,826	—	110,826	3,014	—	—	97	3,111
Non-agency-sponsored	22,812	1,724	21,088	422	—	—	1	423
Citi-administered asset-backed commercial paper conduits (ABCP)	18,548	18,548	—	—	—	—	—	—
Collateralized loan obligations (CLOs)	16,687	—	16,687	5,148	—	—	9	5,157
Asset-based financing	64,970	627	64,343	19,360	568	7,249	—	27,177
Municipal securities tender option bond trusts (TOBs)	7,671	2,158	5,513	—	—	3,752	—	3,752
Municipal investments	18,321	3	18,318	2,609	3,767	2,237	—	8,613
Client intermediation	667	442	225	124	—	—	6	130
Investment funds	1,836	581	1,255	8	7	7	2	24
Other	662	35	627	38	8	24	46	116
Total	\$309,520	\$ 70,638	\$ 238,882	\$ 30,723	\$ 4,350	\$ 13,269	\$ 161	\$ 48,503

As of December 31, 2017

In millions of dollars	Total involvement with SPE assets	Consolidated VIE/SPE assets	Significant unconsolidated VIE assets ⁽³⁾	Maximum exposure to loss in significant unconsolidated VIEs ⁽¹⁾		Funding commitments	Guarantees and derivatives	Total
				Funded exposures ⁽²⁾	Equity investments			
Credit card securitizations	\$50,795	\$ 50,795	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Mortgage securitizations ⁽⁴⁾								
U.S. agency-sponsored	116,610	—	116,610	2,647	—	—	74	2,721
Non-agency-sponsored	22,251	2,035	20,216	330	—	—	1	331
Citi-administered asset-backed commercial paper conduits (ABCP)	19,282	19,282	—	—	—	—	—	—
Collateralized loan obligations (CLOs)	20,588	—	20,588	5,956	—	—	9	5,965
Asset-based financing	60,472	633	59,839	19,478	583	5,878	—	25,939
	6,925	2,166	4,759	138	—	3,035	—	3,173

Municipal securities tender option bond trusts (TOBs)

Municipal investments	19,119	7	19,112	2,709	3,640	2,344	—	8,693
Client intermediation	958	824	134	32	—	—	9	41
Investment funds	1,892	616	1,276	14	7	13	—	34
Other	677	36	641	27	9	34	47	117
Total	\$319,569	\$ 76,394	\$ 243,175	\$ 31,331	\$ 4,239	\$ 11,304	\$ 140	\$47,014

(1) The definition of maximum exposure to loss is included in the text that follows this table.

(2) Included on Citigroup's June 30, 2018 and December 31, 2017 Consolidated Balance Sheet.

(3) A significant unconsolidated VIE is an entity in which the Company has any variable interest or continuing involvement considered to be significant, regardless of the likelihood of loss.

(4) Citigroup mortgage securitizations also include agency and non-agency (private-label) re-securitization activities. These SPEs are not consolidated. See "Re-securitizations" below for further discussion.

The previous tables do not include:

- certain venture capital investments made by some of the Company's private equity subsidiaries, as the Company accounts for these investments in accordance with the Investment Company Audit Guide (codified in ASC 946);
- certain investment funds for which the Company provides investment management services and personal estate trusts for which the Company provides administrative, trustee and/or investment management services;
- certain VIEs structured by third parties in which the Company holds securities in inventory, as these investments are made on arm's-length terms;
- certain positions in mortgage-backed and asset-backed securities held by the Company, which are classified as Trading account assets or Investments, in which the Company has no other involvement with the related securitization entity deemed to be significant (for more information on these positions, see Notes 12 and 20 to the Consolidated Financial Statements);
- certain representations and warranties exposures in legacy ICG-sponsored mortgage-backed and asset-backed securitizations in which the Company has no variable interest or continuing involvement as servicer. The outstanding balance of mortgage loans securitized during 2005 to 2008 in which the Company has no variable interest or continuing involvement as servicer was approximately \$8 billion and \$9 billion at June 30, 2018 and December 31, 2017, respectively;
- certain representations and warranties exposures in Citigroup residential mortgage securitizations, where the original mortgage loan balances are no longer outstanding; and
- VIEs such as trust preferred securities trusts used in connection with the Company's funding activities. The Company does not have a variable interest in these trusts.

The asset balances for consolidated VIEs represent the carrying amounts of the assets consolidated by the Company. The carrying amount may represent the amortized cost or the current fair value of the assets depending on the legal form of the asset (e.g., loan or security) and the Company's standard accounting policies for the asset type and line of business.

The asset balances for unconsolidated VIEs in which the Company has significant involvement represent the most current information available to the Company. In most cases, the asset balances represent an amortized cost basis without regard to impairments, unless fair value information is readily available to the Company.

The maximum funded exposure represents the balance sheet carrying amount of the Company's investment in the VIE. It reflects the initial amount of cash invested in the VIE, adjusted for any accrued interest and cash principal payments received. The carrying amount may also be adjusted for increases or declines in fair value or any impairment in value recognized in earnings. The maximum exposure of unfunded positions represents the remaining undrawn committed amount, including liquidity and credit facilities provided by the Company or the notional amount of a derivative instrument considered to be a variable interest. In certain transactions, the Company has entered into derivative instruments or other arrangements that are not considered variable interests in the VIE (e.g., interest rate swaps, cross-currency swaps or where the Company is the purchaser of credit protection under a credit default swap or total return swap where the Company pays the total return on certain assets to the SPE). Receivables under such arrangements are not included in the maximum exposure amounts.

Funding Commitments for Significant Unconsolidated VIEs—Liquidity Facilities and Loan Commitments

The following table presents the notional amount of liquidity facilities and loan commitments that are classified as funding commitments in the VIE tables above:

In millions of dollars	June 30, 2018		December 31, 2017	
	Liquidity facilities	Loan/equity commitments	Liquidity facilities	Loan/equity commitments
Asset-based financing	\$—	\$ 7,249	\$—	\$ 5,878
Municipal securities tender option bond trusts (TOBs)	3,752	—	3,035	—
Municipal investments	—	2,237	—	2,344
Investment funds	—	7	—	13
Other	—	24	—	34
Total funding commitments	\$3,752	\$ 9,517	\$3,035	\$ 8,269

Significant Interests in Unconsolidated VIEs—Balance Sheet Classification

The following table presents the carrying amounts and classification of significant variable interests in unconsolidated VIEs:

In billions of dollars	June 30, December 31,	
	2018	2017
Cash	\$ —	\$ —
Trading account assets	8.0	8.5
Investments	4.6	4.4
Total loans, net of allowance	22.0	22.2
Other	0.5	0.5
Total assets	\$ 35.1	\$ 35.6

Credit Card Securitizations

Substantially all of the Company's credit card securitization activity is through two trusts—Citibank Credit Card Master Trust (Master Trust) and Citibank Omni Master Trust (Omni

Trust), with the substantial majority through the Master Trust. These trusts are consolidated entities.

The following table reflects amounts related to the Company's securitized credit card receivables:

In billions of dollars	June 30, December 31,	
	2018	2017
Ownership interests in principal amount of trust credit card receivables		
Sold to investors via trust-issued securities	\$ 27.3	\$ 28.8
Retained by Citigroup as trust-issued securities	7.6	7.6
Retained by Citigroup via non-certificated interests	11.7	14.4
Total	\$ 46.6	\$ 50.8

The following tables summarize selected cash flow information related to Citigroup's credit card securitizations:

In billions of dollars	Three Months Ended June 30,	
	2018	2017
Proceeds from new securitizations	\$1.1	\$5.1
Pay down of maturing notes	(2.6)	(0.8)
In billions of dollars	Six Months Ended June 30,	
	2018	2017

Proceeds from new securitizations \$3.9 \$7.6
 Pay down of maturing notes (5.4)(2.8)

Master Trust Liabilities (at Par Value)

The weighted average maturity of the third-party term notes issued by the Master Trust was 2.8 years as of June 30, 2018 and 2.6 years as of December 31, 2017.

In billions of dollars	Jun. 30, 2018	Dec. 31, 2017
Term notes issued to third parties	\$ 26.3	\$ 27.8
Term notes retained by Citigroup affiliates	5.7	5.7
Total Master Trust liabilities	\$ 32.0	\$ 33.5

Omni Trust Liabilities (at Par Value)

The weighted average maturity of the third-party term notes issued by the Omni Trust was 1.4 years as of June 30, 2018 and 1.9 years as of December 31, 2017.

In billions of dollars	Jun. 30, 2018	Dec. 31, 2017
Term notes issued to third parties	\$ 1.0	\$ 1.0
Term notes retained by Citigroup affiliates	1.9	1.9
Total Omni Trust liabilities	\$ 2.9	\$ 2.9

Mortgage Securitizations

The following tables summarize selected cash flow information and retained interests related to Citigroup mortgage securitizations:

In billions of dollars	Three Months Ended June 30,			
	2018		2017	
	U.S. agency-sponsored mortgages	Non-agency-sponsored mortgages	U.S. agency-sponsored mortgages	Non-agency-sponsored mortgages
Proceeds from new securitizations	\$7.7	\$ 2.8	\$ 7.3	\$ 1.4
Contractual servicing fees received	—	—	0.1	—
In billions of dollars	Six Months Ended June 30,			
	2018		2017	
	U.S. agency-sponsored mortgages	Non-agency-sponsored mortgages	U.S. agency-sponsored mortgages	Non-agency-sponsored mortgages
Proceeds from new securitizations	\$15.8	\$ 6.1	\$ 14.5	\$ 2.8
Contractual servicing fees received	0.1	—	0.1	—

Gains recognized on the securitization of U.S. agency-sponsored mortgages were \$7 million and \$12 million for the three and six months ended June 30, 2018, respectively. For the three and six months ended June 30, 2018, gains recognized on the securitization of non-agency sponsored mortgages were \$17 million and \$35 million, respectively.

Gains recognized on the securitization of U.S. agency-sponsored mortgages were \$18 million and \$47 million for the three and six months ended June 30, 2017, respectively. For the three and six months ended June 30, 2017, gains recognized on the securitization of non-agency sponsored mortgages were \$26 million and \$46 million, respectively.

In millions of dollars	June 30, 2018			December 31, 2017		
	Non-agency-sponsored mortgages ⁽¹⁾			Non-agency-sponsored mortgages ⁽¹⁾		
	U.S. agency-sponsored mortgages	Senior interests	Subordinated interests	U.S. agency-sponsored mortgages	Senior interests	Subordinated interests
Carrying value of retained interests	\$2,152	\$ 277	\$ 109	\$1,634	\$ 214	\$ 139

(1) Disclosure of non-agency-sponsored mortgages as senior and subordinated interests is indicative of the interests' position in the capital structure of the securitization.

Key assumptions used in measuring the fair value of retained interests at the date of sale or securitization of mortgage receivables were as follows:

Discount rate	Three Months Ended June 30, 2018		
	U.S. agency-sponsored mortgages	Senior interests	Subordinated interests
	3.1% to 9.5%	1.6% to 4.2%	3.5 %

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Weighted average discount rate	5.7	% 3.4	% 3.5	%
Constant prepayment rate	3.5% to 12.9%	8.0	% 8.0	%
Weighted average constant prepayment rate	8.0	% 8.0	% 8.0	%
Anticipated net credit losses ⁽²⁾	NM	4.6	% 4.6	%
Weighted average anticipated net credit losses	NM	4.6	% 4.6	%
Weighted average life	5.0 to 18.9 years	3.4 to 9.9 years	3.4 years	

Three Months Ended June 30, 2017			
	U.S. agency-sponsored mortgages	Non-agency-sponsored mortgages ⁽¹⁾	
		Senior interests	Subordinated interests
Discount rate	2.5% to 14.0%	2.0% to 3.3%	3.5% to 19.1%
Weighted average discount rate	7.6	% 2.7	% 4.3 %
Constant prepayment rate	6.5% to 16.1%	—	—
Weighted average constant prepayment rate	10.6	% —	—
Anticipated net credit losses ⁽²⁾	NM	—	69.0% to 69.1%
Weighted average anticipated net credit losses	NM	—	69.1 %
Weighted average life	4.9 to 14.5 years	4.9 to 10.0 years	8.6 to 10.0 years

Six Months Ended June 30, 2018			
	U.S. agency-sponsored mortgages	Non-agency-sponsored mortgages ⁽¹⁾	
		Senior interests	Subordinated interests
Discount rate	3.0% to 11.4%	1.6% to 4.5%	3.0% to 3.5%
Weighted average discount rate	6.0	% 3.4	% 3.2 %
Constant prepayment rate	3.5% to 16.0%	8.0% to 12.0%	8.0% to 12.0%
Weighted average constant prepayment rate	8.2	% 9.8	% 9.9 %
Anticipated net credit losses ⁽²⁾	NM	2.0% to 6.7%	2.0% to 4.6%
Weighted average anticipated net credit losses	NM	4.9	% 3.3 %
Weighted average life	5.0 to 18.9 years	2.5 to 9.9 years	2.5 to 3.4 years

Six Months Ended June 30, 2017			
	U.S. agency-sponsored mortgages	Non-agency-sponsored mortgages ⁽¹⁾	
		Senior interests	Subordinated interests
Discount rate	2.4% to 19.9%	2.0% to 3.3%	3.5% to 19.1%
Weighted average discount rate	9.5	% 2.7	% 4.3 %
Constant prepayment rate	3.8% to 16.1%	—	—
Weighted average constant prepayment rate	9.1	% —	—
Anticipated net credit losses ⁽²⁾	NM	—	67.3% to 69.1%
Weighted average anticipated net credit losses	NM	—	68.5 %
Weighted average life	4.9 to 14.5 years	4.9 to 10.0 years	8.6 to 10.0 years

(1) Disclosure of non-agency-sponsored mortgages as senior and subordinated interests is indicative of the interests' position in the capital structure of the securitization.

(2) Anticipated net credit losses represent estimated loss severity associated with defaulted mortgage loans underlying the mortgage securitizations disclosed above. Anticipated net credit losses, in this instance, do not represent total credit losses incurred to date, nor do they represent credit losses expected on retained interests in mortgage securitizations.

NM Anticipated net credit losses are not meaningful due to U.S. agency guarantees.

The interests retained by the Company range from highly rated and/or senior in the capital structure to unrated and/or residual interests.

The key assumptions used to value retained interests, and the sensitivity of the fair value to adverse changes of 10% and 20% in each of the key assumptions, are set forth in the tables

below. The negative effect of each change is calculated independently, holding all other assumptions constant. Because the key assumptions may not be independent, the net effect of simultaneous adverse changes in the key assumptions may be less than the sum of the individual effects shown below.

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June 30, 2018			
	U.S. agency-sponsored mortgages	Non-agency-sponsored mortgages ⁽¹⁾	
		Senior interests	Subordinated interests
Discount rate	2.4% to 48.6%	9.5	% 3.9% to 8.5%
Weighted average discount rate	5.7	% 9.5	% 7.2 %
Constant prepayment rate	3.3% to 21.2%	5.0	% 7.5% to 9.5%
Weighted average constant prepayment rate	9.2	% 5.0	% 8.5 %
Anticipated net credit losses ⁽²⁾	NM	41.0	% 28.0% to 56.3%
Weighted average anticipated net credit losses	NM	41.0	% 41.1 %
Weighted average life	0.5 to 27.3 years	6.9 years	1.9 to 10.3 years
December 31, 2017			
	U.S. agency-sponsored mortgages	Non-agency-sponsored mortgages ⁽¹⁾	
		Senior interests	Subordinated interests
Discount rate	1.8% to 84.2%	5.8% to 100.0%	2.8% to 35.1%
Weighted average discount rate	7.1	% 5.8	% 9.0 %
Constant prepayment rate	6.9% to 27.8%	8.9% to 15.5%	8.6% to 13.1%
Weighted average constant prepayment rate	11.6	% 8.9	% 10.6 %
Anticipated net credit losses ⁽²⁾	NM	0.4% to 46.9%	35.1% to 52.1%
Weighted average anticipated net credit losses	NM	46.9	% 44.9 %
Weighted average life	0.1 to 27.8 years	4.8 to 5.3 years	0.2 to 18.6 years

(1) Disclosure of non-agency-sponsored mortgages as senior and subordinated interests is indicative of the interests' position in the capital structure of the securitization.

(2) Anticipated net credit losses represent estimated loss severity associated with defaulted mortgage loans underlying the mortgage securitizations disclosed above. Anticipated net credit losses, in this instance, do not represent total credit losses incurred to date, nor do they represent credit losses expected on retained interests in mortgage securitizations.

NM Anticipated net credit losses are not meaningful due to U.S. agency guarantees.

June 30, 2018			
Non-agency-sponsored mortgages			
U.S. agency-sponsored mortgages			
In millions of dollars	Senior interests	Subordinated interests	
Discount rates			
Adverse change of 10%	\$(61)	\$ —	(1)
Adverse change of 20%	(119)	—	(2)
Constant prepayment rate			
Adverse change of 10%	(34)	—	(1)
Adverse change of 20%	(68)	—	(1)
Anticipated net credit losses			
Adverse change of 10%	NM	—	—

Adverse change of 20% NM — —

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In millions of dollars	December 31, 2017	
	Non-agency-sponsored mortgages	
	U.S. agency-sponsored mortgages	Subordinated interests
Discount rates		
Adverse change of 10%	\$(44) \$ (2)	\$ (3)
Adverse change of 20%	(85) (4)	(5)
Constant prepayment rate		
Adverse change of 10%	(41) (1)	(1)
Adverse change of 20%	(84) (1)	(2)
Anticipated net credit losses		
Adverse change of 10%	NM (3)	—
Adverse change of 20%	NM (7)	—

NM Anticipated net credit losses are not meaningful due to U.S. agency guarantees.

Mortgage Servicing Rights (MSRs)

The fair value of Citi's capitalized MSRs was \$596 million and \$560 million at June 30, 2018 and 2017, respectively.

The MSRs correspond to principal loan balances of \$63 billion and \$71 billion as of June 30, 2018 and 2017, respectively. The following tables summarize the changes in capitalized MSRs:

In millions of dollars	Three Months Ended June 30,	
	2018	2017
Balance, as of March 31	\$587	\$567
Originations	15	21
Changes in fair value of MSRs due to changes in inputs and assumptions	11	(11)
Other changes ⁽¹⁾	(16)	(17)
Sale of MSRs	(1)	—
Balance, as of June 30	\$596	\$560
In millions of dollars	Six Months Ended June 30,	
	2018	2017
Balance, beginning of year	\$558	\$1,564
Originations	32	56
Changes in fair value of MSRs due to changes in inputs and assumptions	57	56
Other changes ⁽¹⁾	(33)	(70)
Sale of MSRs ⁽²⁾	(18)	(1,046)
Balance, as of June 30	\$596	\$560

(1) Represents changes due to customer payments and passage of time.

(2) See Note 2 to the Consolidated Financial Statements in Citi's 2017 Annual Report on Form 10-K for more information on the exit of the U.S. mortgage servicing operations and sale of MSRs in 2017.

The Company receives fees during the course of servicing previously securitized mortgages. The amounts of these fees were as follows:

	Three Months Ended June 30, 2018		Six Months Ended June 30, 2018		Three Months Ended June 30, 2017		Six Months Ended June 30, 2017	
In millions of dollars	2018	2017	2018	2017	2018	2017	2018	2017
Servicing fees	\$43	\$65	\$89	\$171				
Late fees	1	3	2	6				
Ancillary fees	3	4	6	8				
Total MSR fees	\$47	\$72	\$97	\$185				

In the Consolidated Statement of Income these fees are primarily classified as Commissions and fees, and changes in MSR fair values are classified as Other revenue.

Re-securitizations

The Company engages in re-securitization transactions in which debt securities are transferred to a VIE in exchange for new beneficial interests. Citi did not transfer non-agency (private-label) securities to re-securitization entities during the quarters ended June 30, 2018 and 2017. These securities are backed by either residential or commercial mortgages and are often structured on behalf of clients.

As of June 30, 2018, the fair value of Citi-retained interests in private-label re-securitization transactions structured by Citi totaled approximately \$90 million (all related to re-securitization transactions executed prior to 2016), which has been recorded in Trading account assets. Of this amount, approximately \$33 million was related to senior beneficial interests and approximately \$57 million was related to subordinated beneficial interests. As of December 31, 2017, the fair value of Citi-retained interests in private-label re-securitization transactions structured by Citi totaled approximately \$79 million (all related to re-securitization transactions executed prior to 2016). Of this amount, substantially all was related to subordinated beneficial interests. The original par value of private-label re-securitization transactions in which Citi holds a retained interest as of June 30, 2018 and December 31, 2017 was approximately \$548 million and \$887 million, respectively.

The Company also re-securitizes U.S. government-agency guaranteed mortgage-backed (agency) securities. During the three and six months ended June 30, 2018, Citi transferred agency securities with a fair value of approximately \$6.6 billion and \$13.6 billion, respectively, to re-securitization entities compared to approximately \$5.6 billion and \$10.1 billion for the three and six months ended June 30, 2017.

As of June 30, 2018, the fair value of Citi-retained interests in agency re-securitization transactions structured by Citi totaled approximately \$2.5 billion (including \$1.2 billion related to re-securitization transactions executed in 2018) compared to \$2.1 billion as of December 31, 2017 (including \$854 million related to re-securitization transactions executed in 2017), which is recorded in Trading account assets. The original fair value of agency re-securitization transactions in which Citi holds a retained interest as of June 30, 2018 and December 31, 2017 was approximately \$64.2 billion and \$68.3 billion, respectively.

As of June 30, 2018 and December 31, 2017, the Company did not consolidate any private-label or agency re-securitization entities.

Citi-Administered Asset-Backed Commercial Paper Conduits

At June 30, 2018 and December 31, 2017, the commercial paper conduits administered by Citi had approximately \$18.5 billion and \$19.3 billion of purchased assets outstanding, respectively, and had incremental funding commitments with clients of approximately \$15.8 billion and \$14.5 billion, respectively.

Substantially all of the funding of the conduits is in the form of short-term commercial paper. At June 30, 2018 and December 31, 2017, the weighted average remaining lives of the commercial paper issued by the conduits were approximately 47 and 51 days, respectively.

The primary credit enhancement provided to the conduit investors is in the form of transaction-specific credit enhancements described above. In addition to the transaction-specific credit enhancements, the conduits, other than the government guaranteed loan conduit, have obtained a letter of credit from the Company, which is equal to at least 8% to 10% of the conduit's assets with a minimum of \$200 million. The letters of credit provided by the Company to the conduits total approximately \$1.7 billion as of June 30, 2018 and December 31, 2017. The net result across multi-seller conduits administered by the Company is that, in the event defaulted assets exceed the transaction-specific credit enhancements described above, any losses in each conduit are allocated first to the Company and then the commercial paper investors.

At June 30, 2018 and December 31, 2017, the Company owned \$6.5 billion and \$9.3 billion, respectively, of the commercial paper issued by its administered conduits. The Company's investments were not driven by market illiquidity and the Company is not obligated under any agreement to purchase the commercial paper issued by the conduits.

Collateralized Loan Obligations

The following tables summarize selected cash flow information and retained interests related to Citigroup CLOs:

	Three	
	Months	
	Ended	
	June 30,	
In billions of dollars	2018	2017
Proceeds from new securitizations	\$2.2	\$1.1
	Six	
	Months	
	Ended	
	June 30,	
In billions of dollars	2018	2017
Proceeds from new securitizations	\$3.6	\$1.4
	Jun.	Dec.
In millions of dollars	30,	31,
	2018	2017
Carrying value of retained interests	\$3,461	\$4,079

Citi held no retained interests in CLOs purchased during the three and six months ended June 30, 2018 and 2017.

Asset-Based Financing

The primary types of Citi's asset-based financings, total assets of the unconsolidated VIEs with significant involvement, and Citi's maximum exposure to loss are shown below. For Citi to realize the maximum loss, the VIE (borrower) would have to default with no recovery from the assets held by the VIE.

In millions of dollars	June 30, 2018	
	Total unconsolidated assets	Maximum exposure to unconsolidated VIEs

Type

Commercial and other real estate	\$15,795	\$ 5,177
Corporate loans	8,567	6,748
Hedge funds and equities	469	55
Airplanes, ships and other assets	39,512	15,197
Total	\$64,343	\$ 27,177

In millions of dollars	December 31, 2017	
	Total unconsolidated assets	Maximum exposure to unconsolidated VIEs

Type

Commercial and other real estate	\$15,370	\$ 5,445
Corporate loans	4,725	3,587
Hedge funds and equities	542	58
Airplanes, ships and other assets	39,202	16,849
Total	\$59,839	\$ 25,939

Municipal Securities Tender Option Bond (TOB) Trusts

At June 30, 2018 and December 31, 2017, none of the municipal bonds owned by non-customer TOB trusts were subject to a credit guarantee provided by the Company.

At June 30, 2018 and December 31, 2017, liquidity agreements provided with respect to customer TOB trusts totaled \$3.8 billion and \$3.2 billion, respectively, of which \$1.9 billion and \$2.0 billion, respectively, were offset by reimbursement agreements. For the remaining exposure related to TOB transactions, where the residual owned by the customer was at least 25% of the bond value at the inception of the transaction, no reimbursement agreement was executed.

The Company also provides other liquidity agreements or letters of credit to customer-sponsored municipal investment funds, which are not variable interest entities, and municipality-related issuers that totaled \$6.3 billion and \$6.1 billion as of June 30, 2018 and December 31, 2017, respectively. These liquidity agreements and letters of credit are offset by reimbursement agreements with various term-out provisions.

Client Intermediation

The proceeds from new securitizations related to the Company's client intermediation transactions for the three and six months ended June 30, 2018 totaled approximately \$0.3 billion and \$0.5 billion, respectively, compared to \$0.2 billion and \$0.7 billion for the three and six months ended June 30, 2017.

19. DERIVATIVES ACTIVITIES

As of January 1, 2018, Citigroup early adopted ASU 2017-12, Targeted Improvements to Accounting for Hedge Activities. This standard primarily impacts Citi's accounting for derivatives designated as cash flow hedges and fair value hedges. Refer to the respective sections below for details.

In the ordinary course of business, Citigroup enters into various types of derivative transactions. All derivatives are recorded in Trading account assets/Trading account liabilities on the Consolidated Balance Sheet. For additional information regarding Citi's use of and accounting for derivatives, see Note 22 to the Consolidated Financial Statements in Citi's 2017 Annual Report on Form 10-K.

Information pertaining to Citigroup's derivative activities, based on notional amounts, is presented in the table below. Derivative notional amounts are reference amounts from which contractual payments are derived and do not represent a complete measure of Citi's exposure to derivative transactions. Rather, Citi's derivative exposure arises primarily from market fluctuations (i.e., market risk), counterparty failure (i.e., credit risk) and/or periods of high volatility or financial stress (i.e., liquidity risk), as well as any market valuation adjustments that may be required on the transactions. Moreover, notional amounts do not reflect the netting of offsetting trades. For example, if Citi enters into a receive-fixed interest rate swap with \$100 million notional, and offsets this risk with an identical but opposite pay-fixed position with a different counterparty, \$200 million in derivative notionals is reported, although these offsetting positions may result in de minimis overall market risk. In addition, aggregate derivative notional amounts can fluctuate from period to period in the normal course of business based on Citi's market share, levels of client activity and other factors.

Derivative Notionals

In millions of dollars	Hedging instruments under ASC 815		Trading derivative instruments	
	June 30, 2018	December 31, 2017	June 30, 2018	December 31, 2017
Interest rate contracts				
Swaps	\$ 222,057	\$ 189,779	\$ 20,721,169	\$ 18,754,219
Futures and forwards	—	—	8,073,755	6,460,539
Written options	—	—	4,391,594	3,516,131
Purchased options	—	—	3,857,093	3,234,025
Total interest rate contract notionals	\$ 222,057	\$ 189,779	\$ 37,043,611	\$ 31,964,914
Foreign exchange contracts				
Swaps	\$ 56,971	\$ 37,162	\$ 7,020,783	\$ 5,576,357
Futures, forwards and spot	37,911	33,103	5,424,415	3,097,700
Written options	2,503	3,951	1,738,131	1,127,728
Purchased options	2,908	6,427	1,720,287	1,148,686
Total foreign exchange contract notionals	\$ 100,293	\$ 80,643	\$ 15,903,616	\$ 10,950,471
Equity contracts				
Swaps	\$ —	\$ —	\$ 253,135	\$ 215,834
Futures and forwards	—	—	56,968	72,616
Written options	—	—	410,955	389,961
Purchased options	—	—	317,718	328,154
Total equity contract notionals	\$ —	\$ —	\$ 1,038,776	\$ 1,006,565
Commodity and other contracts				
Swaps	\$ —	\$ —	\$ 106,646	\$ 82,039
Futures and forwards	113	23	163,593	153,248
Written options	—	—	72,359	62,045
Purchased options	—	—	71,368	60,526
Total commodity and other contract notionals	\$ 113	\$ 23	\$ 413,966	\$ 357,858
Credit derivatives ⁽¹⁾				
Protection sold	\$ —	\$ —	\$ 703,904	\$ 735,142
Protection purchased	—	—	749,562	777,713
Total credit derivatives	\$ —	\$ —	\$ 1,453,466	\$ 1,512,855
Total derivative notionals	\$ 322,463	\$ 270,445	\$ 55,853,435	\$ 45,792,663

Credit derivatives are arrangements designed to allow one party (protection buyer) to transfer the credit risk of a “reference asset” to another party (protection seller). These arrangements allow a protection seller to assume the (1) credit risk associated with the reference asset without directly purchasing that asset. The Company enters into credit derivative positions for purposes such as risk management, yield enhancement, reduction of credit concentrations and diversification of overall risk.

The following tables present the gross and net fair values of the Company's derivative transactions and the related offsetting amounts as of June 30, 2018 and December 31, 2017. Gross positive fair values are offset against gross negative fair values by counterparty, pursuant to enforceable master netting agreements. Under ASC 815-10-45, payables and receivables in respect of cash collateral received from or paid to a given counterparty pursuant to a credit support annex are included in the offsetting amount, if a legal opinion supporting the enforceability of netting and collateral rights has been obtained. GAAP does not permit similar offsetting for security collateral.

In addition, the following tables reflect rule changes adopted by clearing organizations that require or allow entities to treat certain derivative assets, liabilities and the related variation margin as settlement of the related derivative fair values for legal and accounting purposes, as opposed to presenting gross derivative assets and liabilities that are subject to collateral, whereby the counterparties would record a related collateral payable or receivable. As a result, the table reflects a reduction of approximately \$110 billion and \$100 billion as of June 30, 2018 and December 31, 2017, respectively, of derivative assets and derivative liabilities that previously would have been reported on a gross basis, but are now settled and not subject to collateral. The tables also present amounts that are not permitted to be offset, such as security collateral or cash collateral posted at third-party custodians, but which would be eligible for offsetting to the extent that an event of default occurred and a legal opinion supporting enforceability of the netting and collateral rights has been obtained.

Derivative Mark-to-Market (MTM) Receivables/Payables

In millions of dollars at June 30, 2018

	Derivatives classified in Trading account assets/liabilities ⁽¹⁾⁽²⁾	
	Assets	Liabilities
Derivatives instruments designated as ASC 815 hedges		
Over-the-counter	\$1,537	\$204
Cleared	338	124
Interest rate contracts	\$1,875	\$328
Over-the-counter	\$2,044	\$1,297
Foreign exchange contracts	\$2,044	\$1,297
Total derivatives instruments designated as ASC 815 hedges	\$3,919	\$1,625
Derivatives instruments not designated as ASC 815 hedges		
Over-the-counter	\$170,608	\$147,232
Cleared	4,580	10,206
Exchange traded	225	223
Interest rate contracts	\$175,413	\$157,661
Over-the-counter	\$170,158	\$165,898
Cleared	5,349	5,394
Exchange traded	81	263
Foreign exchange contracts	\$175,588	\$171,555
Over-the-counter	\$17,898	\$22,444
Cleared	28	18
Exchange traded	9,323	9,438
Equity contracts	\$27,249	\$31,900
Over-the-counter	\$16,907	\$20,340
Exchange traded	675	723
Commodity and other contracts	\$17,582	\$21,063
Over-the-counter	\$10,353	\$10,504
Cleared	5,948	6,055
Credit derivatives	\$16,301	\$16,559
Total derivatives instruments not designated as ASC 815 hedges	\$412,133	\$398,738
Total derivatives	\$416,052	\$400,363
Cash collateral paid/received ⁽³⁾	\$11,894	\$15,634
Less: Netting agreements ⁽⁴⁾	(332,207)	(332,207)
Less: Netting cash collateral received/paid ⁽⁵⁾	(39,595)	(30,377)
Net receivables/payables included on the Consolidated Balance Sheet ⁽⁶⁾	\$56,144	\$53,413
Additional amounts subject to an enforceable master netting agreement, but not offset on the Consolidated Balance Sheet		
Less: Cash collateral received/paid	\$(763)	\$(128)
Less: Non-cash collateral received/paid	(13,820)	(7,880)
Total net receivables/payables ⁽⁶⁾	\$41,561	\$45,405

(1) The derivatives fair values are also presented in Note 20 to the Consolidated Financial Statements.

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

(2) 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.

(3)

Reflects the net amount of the \$42,271 million and \$55,229 million of gross cash collateral paid and received, respectively. Of the gross cash collateral paid, \$30,377 million was used to offset trading derivative liabilities and, of the gross cash collateral received, \$39,595 million was used to offset trading derivative assets.

Represents the netting of derivative receivable and payable balances with the same counterparty under enforceable (4) netting agreements. Approximately \$311 billion, \$12 billion and \$9 billion of the netting against trading account asset/liability balances is attributable to each of the OTC, cleared and exchange-traded derivatives, respectively.

Represents the netting of cash collateral paid and received by counterparty under enforceable credit support (5) agreements. Substantially all cash collateral received and paid is netted against OTC derivative assets and liabilities, respectively.

- (6) The net receivables/payables include approximately \$7 billion of derivative asset and \$8 billion of derivative liability fair values not subject to enforceable master netting agreements, respectively.

In millions of dollars at December 31, 2017	Derivatives classified in	
	Trading account assets/liabilities ⁽¹⁾⁽²⁾	
	Assets	Liabilities
Derivatives instruments designated as ASC 815 hedges		
Over-the-counter	\$1,969	\$134
Cleared	110	92
Interest rate contracts	\$2,079	\$226
Over-the-counter	\$1,143	\$1,150
Foreign exchange contracts	\$1,143	\$1,150
Total derivatives instruments designated as ASC 815 hedges	\$3,222	\$1,376
Derivatives instruments not designated as ASC 815 hedges		
Over-the-counter	\$195,677	\$173,937
Cleared	7,129	10,381
Exchange traded	102	95
Interest rate contracts	\$202,908	\$184,413
Over-the-counter	\$119,092	\$117,473
Cleared	1,690	2,028
Exchange traded	34	121
Foreign exchange contracts	\$120,816	\$119,622
Over-the-counter	\$17,221	\$21,201
Cleared	21	25
Exchange traded	9,736	10,147
Equity contracts	\$26,978	\$31,373
Over-the-counter	\$13,499	\$16,362
Exchange traded	604	665
Commodity and other contracts	\$14,103	\$17,027
Over-the-counter	\$12,972	\$12,958
Cleared	7,562	8,575
Credit derivatives	\$20,534	\$21,533
Total derivatives instruments not designated as ASC 815 hedges	\$385,339	\$373,968
Total derivatives	\$388,561	\$375,344
Cash collateral paid/received ⁽³⁾	\$7,541	\$14,308
Less: Netting agreements ⁽⁴⁾	(306,401)	(306,401)
Less: Netting cash collateral received/paid ⁽⁵⁾	(38,532)	(35,666)
Net receivables/payables included on the Consolidated Balance Sheet ⁽⁶⁾	\$51,169	\$47,585
Additional amounts subject to an enforceable master netting agreement, but not offset on the Consolidated Balance Sheet		
Less: Cash collateral received/paid	\$(872)	\$(121)
Less: Non-cash collateral received/paid	(12,739)	(6,929)
Total net receivables/payables ⁽⁶⁾	\$37,558	\$40,535

- The derivatives fair values are presented in Note 20 to the Consolidated Financial Statements. Derivative (1)mark-to-market receivables/payables previously reported within Other assets/Other liabilities have been reclassified to Trading account assets/Trading account liabilities to conform with the current period presentation. (2)Over-the-counter (OTC) derivatives are derivatives executed and settled bilaterally with counterparties without the use of an organized exchange or central clearing house. 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.

Reflects the net amount of the \$43,207 million and \$52,840 million of gross cash collateral paid and received, (3) respectively. Of the gross cash collateral paid, \$35,666 million was used to offset trading derivative liabilities and, of the gross cash collateral received, \$38,532 million was used to offset trading derivative assets.

Represents the netting of derivative receivable and payable balances with the same counterparty under enforceable (4) netting agreements. Approximately \$283 billion, \$14 billion and \$9 billion of the netting against trading account asset/liability balances is attributable to each of the OTC, cleared and exchange-traded derivatives, respectively.

Represents the netting of cash collateral paid and received by counterparty under enforceable credit support (5) agreements. Substantially all cash collateral received and paid is netted against OTC derivative assets and liabilities, respectively.

(6) The net receivables/payables include approximately \$6 billion of derivative asset and \$8 billion of derivative liability fair values not subject to enforceable master netting agreements, respectively.

For the three and six months ended June 30, 2018 and 2017, the amounts recognized in Principal transactions in the Consolidated Statement of Income related to derivatives not designated in a qualifying hedging relationship, as well as the underlying non-derivative instruments, are presented in Note 6 to the Consolidated Financial Statements.

Citigroup presents this disclosure by business classification, showing derivative gains and losses related to its trading activities together with gains and losses related to non-derivative instruments within the same trading portfolios, as this represents how these portfolios are risk managed.

The amounts recognized in Other revenue in the Consolidated Statement of Income related to derivatives not designated in a qualifying hedging relationship are shown below. The table below does not include any offsetting gains (losses) on the economically hedged items to the extent such amounts are also recorded in Other revenue.

		Gains (losses) included in Other revenue			
		Three Months Ended June 30,		Six Months Ended June 30,	
In millions of dollars		2018	2017	2018	2017
Interest rate contracts		\$(15)	\$(14)	\$(43)	\$(67)
Foreign exchange		(517)	1,109	(13)	1,301
Credit derivatives		(25)	(97)	(71)	(376)
Total		\$(557)	\$998	\$(127)	\$858

Fair Value Hedge

Hedging of Benchmark Interest Rate Risk

Citigroup's fair value hedges are primarily hedges of fixed-rate long-term debt or assets, such as available-for-sale debt securities or loans.

For qualifying fair value hedges of interest rate risk, the changes in the fair value of the derivative and the change in the fair value of the hedged item attributable to the hedged risk, either total cash flows or benchmark only cash flows are presented within Interest revenue or Interest expense based on whether the hedged item is an asset or a liability. Prior to the adoption of ASU 2017-12, the fair value of the derivative was presented in Other revenue or Principal transactions and the difference between the changes in the hedged item and the derivative was defined as ineffectiveness.

Hedging of Foreign Exchange Risk

Citigroup hedges the change in fair value attributable to foreign exchange rate movements in available-for-sale debt securities and long-term debt that are denominated in currencies other than the functional currency of the entity holding the securities or issuing the debt, which may be within or outside the U.S. The hedging instrument may be a forward foreign exchange contract or a cross currency swap contract. Citigroup considers the premium associated with forward contracts (i.e., the differential between the spot and contractual forward rates) as the cost of hedging; this amount is excluded from the assessment of hedge effectiveness and reflected directly in earnings over the life of the hedge. Beginning January 1, 2018, Citi excludes changes in cross-currency basis associated with cross-currency swaps from the assessment of hedge effectiveness and records it in Other comprehensive income.

Hedging of Commodity Price Risk

Citigroup hedges the change in fair value attributable to spot price movements in physical commodities inventory. The hedging instrument is a futures contract to sell the underlying commodity. In this hedge, the change in the value of the hedged inventory is reflected in earnings, which offsets the change in the fair value of the futures contract that is also reflected in earnings. Although the change in the fair value of the hedging instrument recorded in earnings includes changes in forward rates, Citigroup excludes the differential between the spot and the contractual forward rates under the futures contract from the assessment of hedge effectiveness and amortizes directly into earnings over the life of the hedge.

The following table summarizes the gains (losses) on the Company's fair value hedges:

In millions of dollars	Gains (losses) on fair value hedges ⁽¹⁾					
	Three Months Ended June 30, 2018			Six Months Ended June 30, 2018		
	Other revenue	Net interest revenue	Other revenue	Other revenue	Net interest revenue	Other revenue
Gain (loss) on the derivatives in designated and qualifying fair value hedges						
Interest rate hedges	\$—	\$ (518)	\$ (71)	\$—	\$ 360	\$ (376)
Foreign exchange hedges	320	—	(555)	499	—	(637)
Commodity hedges	2	—	(11)	—	—	(9)
Total gain (loss) on the derivatives in designated and qualifying fair value hedges	\$322	\$ (518)	\$ (637)	\$499	\$ 360	\$ (1,022)
Gain (loss) on the hedged item in designated and qualifying fair value hedges						
Interest rate hedges	\$—	\$ 520	\$ 47	\$—	\$ (346)	\$ 343
Foreign exchange hedges	(347)	—	570	(596)	—	766
Commodity hedges	—	—	11	1	—	10
Total gain (loss) on the hedged item in designated and qualifying fair value hedges	\$ (347)	\$ 520	\$ 628	\$ (595)	\$ (346)	\$ 1,119
Net gain (loss) excluded from assessment of the effectiveness of fair value hedges						
Interest rate hedges	\$—	\$ (5)	\$ (8)	\$—	\$ (5)	\$ (7)
Foreign exchange hedges ⁽²⁾	33	—	28	56	—	80
Commodity hedges	1	—	—	2	—	1
Total net gain (loss) excluded from assessment of the effectiveness of fair value hedges	\$34	\$ (5)	\$ 20	\$ 58	\$ (5)	\$ 74

Beginning January 1, 2018, gain (loss) amounts for interest rate risk hedges are included in Interest income/Interest expense while the remaining amounts including the amounts for interest rate hedges prior to January 1, 2018 are

(1) included in Other revenue or Principal transactions on the Consolidated Statement of Income. The accrued interest income on fair value hedges both prior to and after January 1, 2018 is recorded in Net interest revenue and is excluded from this table.

Amounts relate to the premium associated with forward contracts (differential between spot and contractual forward rates). These amounts are excluded from the assessment of hedge effectiveness and are reflected directly in earnings. After January 1, 2018, amounts include cross-currency basis which is recognized in accumulated other comprehensive income. The amount of cross currency basis that was included in accumulated other comprehensive income was \$37 million and \$42 million for the three and six months ended June 30, 2018, none of which was recognized in earnings.

Hedge ineffectiveness recognized in earnings on designated and qualifying fair value hedges for the three months ended June 30, 2017 was \$(16) million for interest rate hedges and \$(13) million for foreign exchange hedges, for a total of \$(29) million. Hedge ineffectiveness recognized in earnings on designated and qualifying fair value hedges for the six months ended June 30, 2017 was \$(26) million for interest rate hedges and \$49 million for foreign exchange hedges, for a total of \$23 million.

Cumulative Basis Adjustment

Upon electing to apply ASC 815 fair value hedge accounting, the carrying value of the hedged item is adjusted to reflect the cumulative impact of changes in the hedged risk. The hedge basis adjustment, whether arising from an

active or de-designated hedge relationship, remains with the hedged item until the hedged item is de-recognized from the balance sheet. The table below presents the carrying amount of Citi's hedged assets and liabilities under qualifying fair value hedges at June 30, 2018, along with the cumulative hedge basis adjustments included within the carrying value of those hedged assets and liabilities.

In millions of dollars as of June 30, 2018

Balance sheet line item in which hedged item is recorded	Carrying amount of hedged asset/ liability	Cumulative fair value hedging adjustment increasing (decreasing) the carrying amount	
		Active	De-designated
Debt securities			
AFS	\$ 81,735	\$(73)	\$ (320)
Long-term debt	153,857	(347)	1,614

Cash Flow Hedges

Citigroup hedges the variability of forecasted cash flows associated with floating-rate assets/liabilities and other forecasted transactions. Variable cash flows from those liabilities are synthetically converted to fixed-rate cash flows by entering into receive-variable, pay-fixed interest rate swaps and receive-variable, pay-fixed forward-starting interest rate swaps. Variable cash flows associated with certain assets are synthetically converted to fixed-rate cash flows by entering into receive-fixed, pay-variable interest rate swaps. These cash flow hedging relationships use either regression analysis or dollar-offset ratio analysis to assess whether the hedging relationships are highly effective at inception and on an ongoing basis. Prior to the adoption of ASU 2017-12, Citigroup designated the risk being hedged as the risk of overall variability in the hedged cash flows for certain items.

With the adoption of ASU 2017-12, Citigroup hedges the variability from changes in a contractually specified rate and recognizes the entire change in fair value of the cash flow hedging instruments in AOCI. Prior to the adoption of ASU 2017-12, to the extent these derivatives were not fully effective, changes in their fair values in excess of changes in the value of the hedged transactions were immediately included in Other revenue. The adoption of ASU 2017-12 no longer requires such amounts to be immediately recognized in income, but instead requires the full change in the value of the hedging instrument to be recognized in AOCI, and then recognized in earnings in the same period that the cash flows impact earnings. The pretax change in AOCI from cash flow hedges is presented below:

In millions of dollars	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2018	2017	2018	2017
Amount of gain (loss) recognized in AOCI on derivative				
Interest rate contracts ⁽¹⁾	\$(222)	\$ 97	\$(544)	\$ 139
Foreign exchange contracts	5	—	(1)	—
Total gain (loss) recognized in AOCI	\$(217)	\$ 97	\$(545)	\$ 139
Amount of gain (loss) reclassified from AOCI to earnings				
	Other revenue	Net interest revenue	Other revenue	Net interest revenue
Interest rate contracts ⁽¹⁾	\$—	\$(88)	\$(90)	\$(119)
Foreign exchange contracts	(6)	—	(4)	—
Total gain (loss) reclassified from AOCI into earnings	\$(6)	\$(88)	\$(88)	\$(119)

After January 1, 2018, all amounts reclassified into earnings for interest rate contracts are included in Interest income/Interest expense (Net interest revenue). For all other hedges, including interest rate hedges prior to January 1, 2018, the amounts reclassified to earnings are included primarily in Other revenue and Net interest revenue on the Consolidated Income Statement.

For cash flow hedges, the changes in the fair value of the hedging derivative remain in AOCI on the Consolidated Balance Sheet and will be included in the earnings of future periods to offset the variability of the hedged cash flows when such cash flows affect earnings. The net gain (loss) associated with cash flow hedges expected to be reclassified from AOCI within 12 months of June 30, 2018 is approximately \$410 million. The maximum length of time over which forecasted cash flows are hedged is 10 years.

The after-tax impact of cash flow hedges on AOCI is shown in Note 17 to the Consolidated Financial Statements.

Net Investment Hedges

The pretax gain (loss) recorded in the Foreign currency translation adjustment account within AOCI, related to net investment hedges, is \$1,633 million and \$1,143 million for the three and six months ended June 30, 2018 and \$(32) million and \$(1,748) million for the three and six months ended June 30, 2017, respectively.

Credit Derivatives

The following tables summarize the key characteristics of Citi's credit derivatives portfolio by counterparty and derivative form:

In millions of dollars at June 30, 2018	Fair values		Notionals	
	Receivable ⁽¹⁾	Payable ⁽²⁾	Protection purchased	Protection sold
By industry/counterparty				
Banks	\$5,441	\$ 4,970	\$233,888	\$252,428
Broker-dealers	1,765	1,595	62,868	70,253
Non-financial	75	117	2,077	2,349
Insurance and other financial institutions	9,020	9,877	450,729	378,874
Total by industry/counterparty	\$16,301	\$16,559	\$749,562	\$703,904
By instrument				
Credit default swaps and options	\$15,777	\$15,905	\$725,671	\$691,039
Total return swaps and other	524	654	23,891	12,865
Total by instrument	\$16,301	\$16,559	\$749,562	\$703,904
By rating				
Investment grade	\$7,836	\$ 7,748	\$580,678	\$537,864
Non-investment grade	8,465	8,811	168,884	166,040
Total by rating	\$16,301	\$16,559	\$749,562	\$703,904
By maturity				
Within 1 year	\$2,249	\$ 2,055	\$228,075	\$215,284
From 1 to 5 years	12,235	12,644	472,038	447,616
After 5 years	1,817	1,860	49,449	41,004
Total by maturity	\$16,301	\$16,559	\$749,562	\$703,904

(1) The fair value amount receivable is composed of \$3,848 million under protection purchased and \$12,453 million under protection sold.

(2) The fair value amount payable is composed of \$13,014 million under protection purchased and \$3,545 million under protection sold.

In millions of dollars at December 31, 2017	Fair values		Notionals	
	Receivable ⁽¹⁾	Payable ⁽²⁾	Protection purchased	Protection sold
By industry/counterparty				
Banks	\$7,471	\$ 6,669	\$264,414	\$273,711
Broker-dealers	2,325	2,285	73,273	83,229
Non-financial	70	91	1,288	1,140
Insurance and other financial institutions	10,668	12,488	438,738	377,062
Total by industry/counterparty	\$20,534	\$ 21,533	\$777,713	\$735,142
By instrument				
Credit default swaps and options	\$20,251	\$ 20,554	\$754,114	\$724,228
Total return swaps and other	283	979	23,599	10,914
Total by instrument	\$20,534	\$ 21,533	\$777,713	\$735,142
By rating				
Investment grade	\$10,473	\$ 10,616	\$588,324	\$557,987
Non-investment grade	10,061	10,917	189,389	177,155
Total by rating	\$20,534	\$ 21,533	\$777,713	\$735,142
By maturity				
Within 1 year	\$2,477	\$ 2,914	\$231,878	\$218,097
From 1 to 5 years	16,098	16,435	498,606	476,345
After 5 years	1,959	2,184	47,229	40,700
Total by maturity	\$20,534	\$ 21,533	\$777,713	\$735,142

(1) The fair value amount receivable is composed of \$3,195 million under protection purchased and \$17,339 under protection sold.

(2) The fair value amount payable is composed of \$3,147 million under protection purchased and \$18,386 million under protection sold.

Credit Risk-Related Contingent Features in Derivatives

Certain derivative instruments contain provisions that require the Company 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 the Company. These events, which are defined by the existing derivative contracts, are primarily downgrades in the credit ratings of the Company and its affiliates.

The fair value (excluding CVA) of all derivative instruments with credit risk-related contingent features that were in a net liability position at both June 30, 2018 and December 31, 2017 was \$30 billion and \$29 billion, respectively. The Company posted \$27 billion and \$28 billion as collateral for this exposure in the normal course of business as of June 30, 2018 and December 31, 2017, respectively.

A downgrade could trigger additional collateral or cash settlement requirements for the Company and certain affiliates. In the event that Citigroup and Citibank were downgraded a single notch by all three major rating agencies as of June 30, 2018, the Company could be required to post an additional \$1.0 billion as either collateral or settlement of the derivative transactions. Additionally, the Company could be required to segregate with third-party custodians collateral previously received from existing derivative counterparties in the amount of \$0.2 billion upon the single notch downgrade, resulting in aggregate cash obligations and collateral requirements of approximately \$1.2 billion.

Derivatives Accompanied by Financial Asset Transfers

For transfers of financial assets accounted for as a sale by the Company and for which the Company has retained substantially all of the economic exposure to the transferred asset through a total return swap executed with the same counterparty in contemplation of the initial sale (and still outstanding), both the asset amounts derecognized and the gross cash proceeds received as of the date of derecognition were \$2.9 billion and \$3.0 billion as of June 30, 2018 and December 31, 2017, respectively.

At June 30, 2018, the fair value of these previously derecognized assets was \$2.9 billion. The fair value of the total return swaps as of June 30, 2018 was \$51 million recorded as gross derivative assets and \$20 million recorded as gross derivative liabilities. At December 31, 2017, the fair value of these previously derecognized assets was \$3.1 billion and the fair value of the total return swaps was \$89 million, recorded as gross derivative assets, and \$15 million recorded as gross derivative liabilities.

The balances for the total return swaps are on a gross basis, before the application of counterparty and cash collateral netting, and are included primarily as equity derivatives in the tabular disclosures in this Note.

20. FAIR VALUE MEASUREMENT

For additional information regarding fair value measurement at Citi, see Note 24 to the Consolidated Financial Statements in Citi's 2017 Annual Report on Form 10-K.

Market Valuation Adjustments

The table below summarizes the credit valuation adjustments (CVA) and funding valuation adjustments (FVA) applied to the fair value of derivative instruments at June 30, 2018 and December 31, 2017:

	Credit and funding valuation adjustments contra-liability (contra-asset)	
In millions of dollars	June 30, 2018	December 31, 2017
Counterparty CVA	\$(1,023)	\$(970)
Asset FVA	(398)	(447)
Citigroup (own-credit) CVA	384	287
Liability FVA	62	47
Total CVA—derivative instruments	\$(975)	\$(1,083)

(1) FVA is included with CVA for presentation purposes.

The table below summarizes pretax gains (losses) related to changes in CVA on derivative instruments, net of hedges, FVA on derivatives and debt valuation adjustments (DVA) on Citi's own fair value option (FVO) liabilities for the periods indicated:

	Credit/funding/debt valuation adjustments gain (loss)			
	Three Months Ended June 30,		Six Months Ended June 30,	
In millions of dollars	2018	2017	2018	2017
Counterparty CVA	\$—	\$80	\$23	\$170
Asset FVA	40	(13)	49	79
Own-credit CVA	24	(53)	99	(125)
Liability FVA	22	16	15	6
Total CVA—derivative instruments	\$86	\$30	\$186	\$130
DVA related to own FVO liabilities ⁽¹⁾	\$418	\$(132)	\$585	\$(227)
Total CVA and DVA ⁽²⁾	\$504	\$(102)	\$771	\$(97)

(1) See Note 1 and Note 17 to the Consolidated Financial Statements.

(2) FVA is included with CVA for presentation purposes.

Items Measured at Fair Value on a Recurring Basis

The following tables present for each of the fair value hierarchy levels the Company's assets and liabilities that are measured at fair value on a recurring basis at June 30, 2018 and December 31, 2017. The Company may hedge positions that have been classified in the Level 3 category with other financial instruments (hedging instruments) that may be

classified as Level 3, but also with financial instruments classified as Level 1 or Level 2 of the fair value hierarchy. The effects of these hedges are presented gross in the following tables:

Fair Value Levels

In millions of dollars at June 30, 2018	Level 1 ⁽¹⁾	Level 2 ⁽¹⁾	Level 3	Gross inventory	Netting ⁽²⁾	Net balance
Assets						
Federal funds sold and securities borrowed or purchased under agreements to resell	\$—	\$221,357	\$66	\$221,423	\$(52,310)	\$169,113
Trading non-derivative assets						
Trading mortgage-backed securities						
U.S. government-sponsored agency guaranteed Residential	—	24,250	99	24,349	—	24,349
Commercial	—	693	132	825	—	825
Total trading mortgage-backed securities	—	1,420	51	1,471	—	1,471
U.S. Treasury and federal agency securities	\$—	\$26,363	\$282	\$26,645	\$—	\$26,645
State and municipal	\$22,866	\$4,058	\$7	\$26,931	\$—	\$26,931
Foreign government	—	3,146	226	3,372	—	3,372
Corporate	48,875	19,598	36	68,509	—	68,509
Equity securities	318	13,496	520	14,334	—	14,334
Asset-backed securities	44,031	7,257	293	51,581	—	51,581
Other trading assets ⁽³⁾	—	1,696	1,688	3,384	—	3,384
Total trading non-derivative assets	5	11,502	542	12,049	—	12,049
Trading derivatives	\$116,095	\$87,116	\$3,594	\$206,805	\$—	\$206,805
Interest rate contracts	\$266	\$174,771	\$2,251	\$177,288		
Foreign exchange contracts	3	177,017	612	177,632		
Equity contracts	2,109	24,842	298	27,249		
Commodity contracts	20	16,911	651	17,582		
Credit derivatives	—	15,445	856	16,301		
Total trading derivatives	\$2,398	\$408,986	\$4,668	\$416,052		
Cash collateral paid ⁽⁴⁾				\$11,894		
Netting agreements					\$(332,207)	
Netting of cash collateral received					(39,595)	
Total trading derivatives	\$2,398	\$408,986	\$4,668	\$427,946	\$(371,802)	\$56,144
Investments						
Mortgage-backed securities						
U.S. government-sponsored agency guaranteed Residential	\$—	\$42,938	\$34	\$42,972	\$—	\$42,972
Commercial	—	1,858	—	1,858	—	1,858
Total investment mortgage-backed securities	—	273	6	279	—	279
U.S. Treasury and federal agency securities	\$—	\$45,069	\$40	\$45,109	\$—	\$45,109
State and municipal	\$106,316	\$11,955	\$—	\$118,271	\$—	\$118,271
	—	9,002	762	9,764	—	9,764

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Foreign government	59,220	38,551	54	97,825	—	97,825
Corporate	4,172	8,361	68	12,601	—	12,601
Equity securities	190	13	1	204	—	204
Asset-backed securities	—	1,414	456	1,870	—	1,870
Other debt securities	—	3,591	—	3,591	—	3,591
Non-marketable equity securities ⁽⁵⁾	—	207	611	818	—	818
Total investments	\$ 169,898	\$ 118,163	\$ 1,992	\$ 290,053	\$ —	\$ 290,053

Table continues on the next page.

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In millions of dollars at June 30, 2018	Level 1 ⁽¹⁾	Level 2 ⁽¹⁾	Level 3	Gross inventory	Netting ⁽²⁾	Net balance
Loans	\$—	\$2,619	\$381	\$3,000	\$—	\$3,000
Mortgage servicing rights	—	—	596	596	—	596
Non-trading derivatives and other financial assets measured on a recurring basis	\$16,779	\$4,924	\$—	\$21,703	\$—	\$21,703
Total assets	\$305,170	\$843,165	\$11,297	\$1,171,526	\$(424,112)	\$747,414
Total as a percentage of gross assets ⁽⁶⁾	26.3	% 72.7	% 1.0	%		
Liabilities						
Interest-bearing deposits	\$—	\$1,308	\$320	\$1,628	\$—	\$1,628
Federal funds purchased and securities loaned or sold under agreements to repurchase	—	100,590	966	101,556	(52,310)	49,246
Trading account liabilities						
Securities sold, not yet purchased	75,843	9,836	189	85,868	—	85,868
Other trading liabilities	—	1,464	—	1,464	—	1,464
Total trading liabilities	\$75,843	\$11,300	\$189	\$87,332	\$—	\$87,332
Trading derivatives						
Interest rate contracts	\$256	\$155,568	\$2,165	\$157,989		
Foreign exchange contracts	6	172,473	373	172,852		
Equity contracts	2,334	27,822	1,744	31,900		
Commodity contracts	6	18,500	2,557	21,063		
Credit derivatives	—	14,855	1,704	16,559		
Total trading derivatives	\$2,602	\$389,218	\$8,543	\$400,363		
Cash collateral received ⁽⁷⁾				\$15,634		
Netting agreements					\$(332,207)	
Netting of cash collateral paid					(30,377)	
Total trading derivatives	\$2,602	\$389,218	\$8,543	\$415,997	\$(362,584)	\$53,413
Short-term borrowings	\$—	\$4,003	\$90	\$4,093	\$—	\$4,093
Long-term debt	—	21,681	13,781	35,462	—	35,462
Total non-trading derivatives and other financial liabilities measured on a recurring basis	\$17,657	\$162	\$—	\$17,819	\$—	\$17,819
Total liabilities	\$96,102	\$528,262	\$23,889	\$663,887	\$(414,894)	\$248,993
Total as a percentage of gross liabilities ⁽⁶⁾	14.8	% 81.5	% 3.7	%		

For the three and six months ended June 30, 2018, the Company transferred assets of approximately \$0.9 billion and \$1.6 billion from Level 1 to Level 2, primarily related to foreign government securities and equity securities not traded in active markets. During the three and six months ended June 30, 2018, the Company transferred assets of approximately \$1.3 billion and \$5.3 billion from Level 2 to Level 1, primarily related to foreign government bonds, foreign corporate securities, and equity securities traded with sufficient frequency to constitute an active market. For the three and six months ended June 30, 2018, there were \$0.1 billion and \$0.2 billion transfers of liabilities from Level 1 to Level 2. During the three and six months ended June 30, 2018, the Company transferred liabilities of approximately \$0.3 billion and \$0.5 billion, from Level 2 to Level 1.

Represents netting of (i) the amounts due under securities purchased under agreements to resell and the amounts owed under securities sold under agreements to repurchase and (ii) derivative exposures covered by a qualifying master netting agreement and cash collateral offsetting.

Includes positions related to investments in unallocated precious metals, as discussed in Note 21 to the Consolidated Financial Statements. Also includes physical commodities accounted for at the lower of cost or fair value and unfunded credit products.

(4)

Reflects the net amount of \$42,271 million gross cash collateral paid, of which \$30,377 million was used to offset trading derivative liabilities.

Amounts exclude \$0.4 billion of investments measured at Net Asset Value (NAV) in accordance with ASU (5)2015-07, Fair Value Measurement (Topic 820): Disclosures for Investments in Certain Entities That Calculate Net Asset Value per Share (or Its Equivalent).

Because the amount of the cash collateral paid/received has not been allocated to the Level 1, 2 and 3 subtotals, (6) these percentages are calculated based on total assets and liabilities measured at fair value on a recurring basis, excluding the cash collateral paid/received on derivatives.

(7) Reflects the net amount \$55,229 million of gross cash collateral received, of which \$39,595 million was used to offset trading derivative assets.

Fair Value Levels

In millions of dollars at December 31, 2017	Level 1 ⁽¹⁾	Level 2 ⁽¹⁾	Level 3	Gross inventory	Netting ⁽²⁾	Net balance
Assets						
Federal funds sold and securities borrowed or purchased under agreements to resell	\$—	\$188,571	\$16	\$188,587	\$(55,638)	\$132,949
Trading non-derivative assets						
Trading mortgage-backed securities						
U.S. government-sponsored agency guaranteed	—	22,801	163	22,964	—	22,964
Residential	—	649	164	813	—	813
Commercial	—	1,309	57	1,366	—	1,366
Total trading mortgage-backed securities	\$—	\$24,759	\$384	\$25,143	\$—	\$25,143
U.S. Treasury and federal agency securities	\$17,524	\$3,613	\$—	\$21,137	\$—	\$21,137
State and municipal	—	4,426	274	4,700	—	4,700
Foreign government	39,347	20,843	16	60,206	—	60,206
Corporate	301	15,129	275	15,705	—	15,705
Equity securities	53,305	6,794	120	60,219	—	60,219
Asset-backed securities	—	1,198	1,590	2,788	—	2,788
Other trading assets ⁽³⁾	3	11,105	615	11,723	—	11,723
Total trading non-derivative assets	\$110,480	\$87,867	\$3,274	\$201,621	\$—	\$201,621
Trading derivatives						
Interest rate contracts	\$145	\$203,134	\$1,708	\$204,987		
Foreign exchange contracts	19	121,363	577	121,959		
Equity contracts	2,364	24,170	444	26,978		
Commodity contracts	282	13,252	569	14,103		
Credit derivatives	—	19,624	910	20,534		
Total trading derivatives	\$2,810	\$381,543	\$4,208	\$388,561		
Cash collateral paid ⁽⁴⁾				\$7,541		
Netting agreements					\$(306,401)	
Netting of cash collateral received					(38,532)	
Total trading derivatives	\$2,810	\$381,543	\$4,208	\$396,102	\$(344,933)	\$51,169
Investments						
Mortgage-backed securities						
U.S. government-sponsored agency guaranteed	\$—	\$41,717	\$24	\$41,741	\$—	\$41,741
Residential	—	2,884	—	2,884	—	2,884
Commercial	—	329	3	332	—	332
Total investment mortgage-backed securities	\$—	\$44,930	\$27	\$44,957	\$—	\$44,957
U.S. Treasury and federal agency securities	\$106,964	\$11,182	\$—	\$118,146	\$—	\$118,146
State and municipal	—	8,028	737	8,765	—	8,765
Foreign government	56,456	43,985	92	100,533	—	100,533
Corporate	1,911	12,127	71	14,109	—	14,109
Equity securities	176	11	2	189	—	189
Asset-backed securities	—	3,091	827	3,918	—	3,918
Other debt securities	—	297	—	297	—	297
Non-marketable equity securities ⁽⁵⁾	—	121	681	802	—	802
Total investments	\$165,507	\$123,772	\$2,437	\$291,716	\$—	\$291,716

Table continues on the next page.

In millions of dollars at December 31, 2017	Level 1 ⁽¹⁾	Level 2 ⁽¹⁾	Level 3	Gross inventory	Netting ⁽²⁾	Net balance
Loans	\$—	\$3,824	\$550	\$4,374	\$—	\$4,374
Mortgage servicing rights	—	—	558	558	—	558
Non-trading derivatives and other financial assets measured on a recurring basis	\$13,903	\$4,640	\$16	\$18,559	\$—	\$18,559
Total assets	\$292,700	\$790,217	\$11,059	\$1,101,517	\$(400,571)	\$700,946
Total as a percentage of gross assets ⁽⁶⁾	26.8	% 72.2	% 1.0	%		
Liabilities						
Interest-bearing deposits	\$—	\$1,179	\$286	\$1,465	\$—	\$1,465
Federal funds purchased and securities loaned or sold under agreements to repurchase	—	95,550	726	96,276	(55,638)	40,638
Trading account liabilities						
Securities sold, not yet purchased	65,843	10,306	22	76,171	—	76,171
Other trading liabilities	—	1,409	5	1,414	—	1,414
Total trading liabilities	\$65,843	\$11,715	\$27	\$77,585	\$—	\$77,585
Trading account derivatives						
Interest rate contracts	\$137	\$182,372	\$2,130	\$184,639		
Foreign exchange contracts	9	120,316	447	120,772		
Equity contracts	2,430	26,472	2,471	31,373		
Commodity contracts	115	14,482	2,430	17,027		
Credit derivatives	—	19,824	1,709	21,533		
Total trading derivatives	\$2,691	\$363,466	\$9,187	\$375,344		
Cash collateral received ⁽⁷⁾				\$14,308		
Netting agreements					\$(306,401)	
Netting of cash collateral paid					(35,666)	
Total trading derivatives	\$2,691	\$363,466	\$9,187	\$389,652	\$(342,067)	\$47,585
Short-term borrowings	\$—	\$4,609	\$18	\$4,627	\$—	\$4,627
Long-term debt	—	18,310	13,082	31,392	—	31,392
Non-trading derivatives and other financial liabilities measured on a recurring basis	\$13,903	\$50	\$8	\$13,961	\$—	\$13,961
Total liabilities	\$82,437	\$494,879	\$23,334	\$614,958	\$(397,705)	\$217,253
Total as a percentage of gross liabilities ⁽⁶⁾	13.7	% 82.4	% 3.9	%		

In 2017, the Company transferred assets of approximately \$4.8 billion from Level 1 to Level 2, primarily related to foreign government securities and equity securities not traded in active markets. In 2017, the Company transferred assets of approximately \$4.0 billion from Level 2 to Level 1, primarily related to foreign government bonds and equity securities traded with sufficient frequency to constitute a liquid market. In 2017, the Company transferred liabilities of approximately \$0.4 billion from Level 1 to Level 2. In 2017, the Company transferred liabilities of approximately \$0.3 billion from Level 2 to Level 1.

Represents netting of (i) the amounts due under securities purchased under agreements to resell and the amounts owed under securities sold under agreements to repurchase and (ii) derivative exposures covered by a qualifying master netting agreement and cash collateral offsetting.

Includes positions related to investments in unallocated precious metals, as discussed in Note 21 to the Consolidated Financial Statements. Also includes physical commodities accounted for at the lower of cost or fair value and unfunded credit products.

Reflects the net amount of \$43,207 million of gross cash collateral paid, of which \$35,666 million was used to offset trading derivative liabilities.

(5)

Amounts exclude \$0.4 billion of investments measured at Net Asset Value (NAV) in accordance with ASU No. 2015-07, Fair Value Measurement (Topic 820): Disclosures for Investments in Certain Entities That Calculate Net Asset Value per Share (or Its Equivalent).

Because the amount of the cash collateral paid/received has not been allocated to the Level 1, 2 and 3 subtotals, (6) these percentages are calculated based on total assets and liabilities measured at fair value on a recurring basis, excluding the cash collateral paid/received on derivatives.

(7) Reflects the net amount of \$52,840 million of gross cash collateral received, of which \$38,532 million was used to offset trading derivative assets.

Changes in Level 3 Fair Value Category

The following tables present the changes in the Level 3 fair value category for the three and six months ended June 30, 2018 and 2017. The gains and losses presented below include changes in the fair value related to both observable and unobservable inputs.

The Company often hedges positions with offsetting positions that are classified in a different level. For example,

the gains and losses for assets and liabilities in the Level 3 category presented in the tables below do not reflect the effect of offsetting losses and gains on hedging instruments that may be classified in the Level 1 or Level 2 categories. In addition, the Company hedges items classified in the Level 3 category with instruments also classified in Level 3 of the fair value hierarchy. The hedged items and related hedges are presented gross in the following tables:

Level 3 Fair Value Rollforward

In millions of dollars	Mar. 31, 2018	Net realized/unrealized gains (losses) incl. in		Transfers		Purchases	Issuances	Sales	Settlements	Jun. 30, 2018	Unrealized gains (losses) still held ⁽³⁾
		Principal transactions	Other	into Level 3	out of Level 3						
Assets											
Federal funds sold and securities borrowed or purchased under agreements to resell	\$16	\$ 1	\$	\$49	\$—	\$—	\$	\$—	\$—	\$66	\$—
Trading non-derivative assets											
Trading mortgage-backed securities											
U.S. government-sponsored agency guaranteed	206	1	—	3	(41)	37	—	(107)	—	99	1
Residential	143	(17)	—	23	(11)	45	—	(51)	—	132	(4)
Commercial	35	(2)	—	7	(2)	23	—	(10)	—	51	(1)
Total trading mortgage-backed securities	\$384	\$ (18)	\$	\$33	\$(54)	\$ 105	\$	\$(168)	\$—	\$282	\$(4)
U.S. Treasury and federal agency securities	\$—	\$—	\$	\$6	\$—	\$ 1	\$	\$—	\$—	\$7	\$—
State and municipal	211	4	—	—	—	13	—	(2)	—	226	2
Foreign government	21	(1)	—	—	(5)	32	—	(11)	—	36	(1)
Corporate	252	52	—	12	(19)	245	—	(22)	—	520	248
Equity securities	237	7	—	16	(5)	74	—	(36)	—	293	30
Asset-backed securities	1,597	17	—	27	(32)	373	—	(294)	—	1,688	(16)
Other trading assets	716	(52)	—	27	(32)	45	—	(158)	(4)	542	(21)
Total trading non-derivative assets	\$3,418	\$ 9	\$	\$121	\$(147)	\$ 888	\$	\$(691)	\$(4)	\$3,594	\$ 238
Trading derivatives, net ⁽⁴⁾											
Interest rate contracts	\$(6)	\$ 206	\$	\$—	\$(109)	\$ 1	\$	\$—	\$(6)	\$86	\$ 270
Foreign exchange contracts	88	167	—	(12)	(5)	6	—	(5)	—	239	146
Equity contracts	(1,741)	34	—	(16)	279	4	—	(4)	(2)	(1,446)	469
Commodity contracts	(1,909)	(141)	—	4	90	7	—	—	43	(1,906)	(118)

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Credit derivatives	(859)	(36)	—	(10)	14	—	—	—	43	(848)	(29)					
Total trading derivatives, net ⁽⁴⁾	\$	(4,427)	\$	230	\$	—	\$(34)	\$	269	\$	18	\$	—	\$(9)	\$	78	\$	(3,875)	\$	738

Table continues on the next page.

In millions of dollars	Net realized/unrealized gains (losses) incl. in		Transfers					Unrealized gains (losses) still held ⁽³⁾	
	Mar. 31, 2018	Principal Other ⁽¹⁾⁽²⁾ transactions	Level 3	Level 3	Purchases	Issuances	Sales	Settlements	Jun. 30, 2018
Investments									
Mortgage-backed securities									
U.S. government-sponsored agency guaranteed	\$23	\$ — \$ 11	\$ — \$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$34 \$ 12
Residential	—	— —	— —	—	—	—	—	—	—
Commercial	5	— —	1 —	—	—	—	—	6	—
Total investment mortgage-backed securities	\$28	\$ — \$ 11	\$ 1 \$ —	\$ —	\$ —	\$ —	\$ —	\$40	\$ 12
U.S. Treasury and federal agency securities	\$ —	\$ — \$ —	\$ — \$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
State and municipal	682	— 3	— (9)	111	—	(25)	—	762	3
Foreign government	70	— (3)	1 —	5	—	(19)	—	54	(3)
Corporate	76	— —	— (2)	—	—	(6)	—	68	—
Equity securities	1	— —	— —	—	—	—	—	1	—
Asset-backed securities	497	— (25)	1 (2)	11	—	(26)	—	456	(25)
Other debt securities	—	— —	— —	—	—	—	—	—	—
Non-marketable equity securities	734	— (54)	— —	—	—	(33)	(36)	611	(23)
Total investments	\$2,088	\$ — \$ (68)	\$ 3 \$ (13)	\$ 127	\$ —	\$ (109)	\$ (36)	\$1,992	\$ (36)
Loans	\$554	\$ — \$ (274)	\$ — \$ 60	\$ 47	\$ —	\$ (6)	\$ —	\$381	\$ 40
Mortgage servicing rights	587	— 11	— —	—	15	(1)	(16)	596	11
Other financial assets measured on a recurring basis	13	— 14	— (11)	—	—	(4)	(12)	—	14
Liabilities									
Interest-bearing deposits	\$292	\$ — \$ (3)	\$ — \$ —	\$ —	\$ 25	\$ —	\$ —	\$320	\$ (6)
Federal funds purchased and securities loaned or sold under agreements to repurchase	857	25 —	— —	—	96	—	38	966	16
Trading account liabilities									
Securities sold, not yet purchased	48	(142)	4 (12)	—	—	6	1	189	(50)
Other trading liabilities	—	— —	— —	—	—	—	—	—	—
Short-term borrowings	81	(6) —	3 (21)	—	24	—	(3)	90	10
Long-term debt	13,484	(7) —	815 (540)	—	4	—	11	13,781	92
Other financial liabilities measured on a recurring basis	3	— (2)	1 (5)	—	—	—	(1)	—	(3)

Changes in fair value of available-for-sale debt securities are recorded in AOCI, unless related to

(1) other-than-temporary impairment, while gains and losses from sales are recorded in Realized gains (losses) from sales of investments on the Consolidated Statement of Income.

(2) Unrealized gains (losses) on MSRs are recorded in Other revenue on the Consolidated Statement of Income.

Represents the amount of total gains or losses for the period, included in earnings (and AOCI for changes in fair value of available-for-sale debt securities), attributable to the change in fair value relating to assets and liabilities classified as Level 3 that are still held at June 30, 2018.

(4) Total Level 3 trading derivative assets and liabilities have been netted in these tables for presentation purposes only.

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In millions of dollars	Dec. 31, 2017	Net realized/unrealized gains (losses) incl. in		Transfers		Purchases	Issuances	Sales	Settlements	Jun. 30, 2018	Unrealized gains (losses) still held ⁽³⁾
		Principal transactions	Other ⁽¹⁾	into Level 3	out of Level 3						
Assets											
Federal funds sold and securities borrowed or purchased under agreements to resell	16	19	—	49	—	—	—	—	(18)	66	10
Trading non-derivative assets											
Trading mortgage-backed securities											
U.S. government-sponsored agency guaranteed	163	2	—	89	(90)	153	—	(218)	—	99	1
Residential	164	5	—	58	(88)	91	—	(98)	—	132	(4)
Commercial	57	(1)	—	11	(37)	38	—	(17)	—	51	3
Total trading mortgage-backed securities	384	6	—	158	(215)	282	—	(333)	—	282	—
U.S. Treasury and federal agency securities	—	—	—	6	—	1	—	—	—	7	—
State and municipal	274	10	—	—	(44)	13	—	(27)	—	226	1
Foreign government	16	(1)	—	2	(5)	46	—	(22)	—	36	(1)
Corporate	275	95	—	61	(91)	279	—	(99)	—	520	251
Equity securities	120	82	—	17	(20)	242	—	(148)	—	293	26
Asset-backed securities	1,590	75	—	45	(47)	689	—	(664)	—	1,688	39
Other trading assets	615	83	—	85	(42)	157	5	(352)	(9)	542	(11)
Total trading non-derivative assets	3,274	350	—	374	(464)	1,709	5	(1,645)	(9)	3,594	305
Trading derivatives, net ⁽⁴⁾											
Interest rate contracts	(422)	587	—	5	(72)	8	—	(16)	(4)	86	529
Foreign exchange contracts	130	105	—	(13)	3	7	—	(5)	12	239	27
Equity contracts	(2,027)	(102)	—	(73)	751	17	—	(11)	(1)	(1,446)	203
Commodity contracts	(1,861)	(174)	—	(43)	98	27	—	—	47	(1,906)	(32)
Credit derivatives	(799)	(98)	—	(9)	12	2	—	1	43	(848)	(219)
Total trading derivatives, net ⁽⁴⁾	(4,979)	318	—	(133)	792	61	—	(31)	97	(3,875)	508
Investments											
Mortgage-backed securities											
U.S. government-sponsored agency guaranteed	24	—	10	—	—	—	—	—	—	34	(12)
Residential	—	—	—	—	—	—	—	—	—	—	—
Commercial	3	—	2	1	—	—	—	—	—	6	—
Total investment mortgage-backed securities	27	—	12	1	—	—	—	—	—	40	(12)
U.S. Treasury and federal agency securities	—	—	—	—	—	—	—	—	—	—	—
State and municipal	737	—	(13)	—	(18)	140	—	(84)	—	762	(22)
Foreign government	92	—	(4)	1	(2)	62	—	(95)	—	54	(3)
Corporate	71	—	(1)	3	(2)	3	—	(6)	—	68	—

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Equity securities	2	—	—	—	—	—	—	(1)—	1	—
Asset-backed securities	827	—	(15) 3	(344)	11	—	(26)—	456	(25)
Other debt securities	—	—	—	—	—	—	—	—	—	—	—
Non-marketable equity securities	681	—	(30	) 30	—	15	—	(33	)(52	) 611	(7)
Total investments	2,437	—	(51	) 38	(366)	231	—	(245	)(52	) 1,992	(69)

175

In millions of dollars	Dec. 31, 2017	Net realized/unrealized gains (losses) incl. in		Transfers		Purchases	Issuances	Sales	Settlements	Jun. 30, 2018	Unrealized gains (losses) still held ⁽³⁾
		Principal transactions	Other ⁽¹⁾	into Level 3	out of Level 3						
Loans	550	—	(255)	—	59	51	—	(22)	(2)	381	175
Mortgage servicing rights	558	—	57	—	—	—	32	(18)	(33)	596	57
Other financial assets measured on a recurring basis	16	—	22	—	(11)	4	12	(4)	(39)	—	33
Liabilities											
Interest-bearing deposits	286	—	23	12	—	—	45	—	—	320	(60)
Federal funds purchased and securities loaned or sold under agreements to repurchase	726	39	—	—	—	—	243	—	36	966	29
Trading account liabilities											
Securities sold, not yet purchased	22	(247)	—	7	(31)	—	—	9	(65)	189	(46)
Other trading liabilities	5	5	—	—	—	—	—	—	—	—	—
Short-term borrowings	18	1	—	48	(21)	—	49	—	(3)	90	(9)
Long-term debt	13,082	(243)	—	1,755	(1,304)	36	7	(44)	6	13,781	(735)
Other financial liabilities measured on a recurring basis	8	—	(2)	1	(10)	—	2	—	(3)	—	(4)

Changes in fair value of available-for-sale debt securities are recorded in AOCI, unless related to

(1) other-than-temporary impairment, while gains and losses from sales are recorded in Realized gains (losses) from sales of investments on the Consolidated Statement of Income.

(2) Unrealized gains (losses) on MSRs are recorded in Other revenue on the Consolidated Statement of Income.

Represents the amount of total gains or losses for the period, included in earnings (and AOCI for changes in fair value of available-for-sale debt securities), attributable to the change in fair value relating to assets and liabilities classified as Level 3 that are still held at December 31, 2017.

(4) Total Level 3 trading derivative assets and liabilities have been netted in these tables for presentation purposes only.

In millions of dollars	Mar. 31, 2017	Net realized/unrealized gains (losses) incl. in				Transfers		Purchases	Issuances	Sales	Settlements	Jun. 30, 2017	Unrealized gains (losses) still held ⁽³⁾
		Principal transactions	Other ⁽¹⁾	into Level 3	out of Level 3								
Assets													
Federal funds sold and securities borrowed or purchased under agreements to resell	\$1,187	\$ 54	\$ —	\$ —	\$(239)	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$1,002	\$ —
Trading non-derivative assets													
Trading mortgage-backed securities													
U.S. government-sponsored agency guaranteed	\$271	\$(1)	\$ —	\$29	\$(48)	\$103	\$ —	\$(150)	\$ —	\$ —	\$204	\$ —	
Residential	368	22	—	30	(20)	16	—	(89)	—	—	327	19	
Commercial	266	5	—	27	(16)	244	—	(208)	—	—	318	(3))
Total trading mortgage-backed securities	\$905	\$ 26	\$ —	\$86	\$(84)	\$363	\$ —	\$(447)	\$ —	\$ —	\$849	\$ 16	
U.S. Treasury and federal agency securities	\$1	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$(1)	\$ —	\$ —	\$ —	\$ —	
State and municipal	270	3	—	22	(1)	7	—	(17)	—	—	284	(1))
Foreign government	126	3	—	6	(77)	83	—	(33)	—	—	108	1	
Corporate	296	124	—	89	(21)	158	—	(245)	—	—	401	132	
Equity securities	110	14	—	130	(1)	2	—	(15)	—	—	240	13	
Asset-backed securities	1,941	(23)	—	3	(65)	313	—	(599)	—	—	1,570	(19))
Other trading assets	1,888	(43)	—	222	(243)	366	—	(383)	(4)	)	1,803	(17))
Total trading non-derivative assets	\$5,537	\$ 104	\$ —	\$558	\$(492)	\$1,292	\$ —	\$(1,740)	\$(4)	)	\$5,255	\$ 125	
Trading derivatives, net ⁽⁴⁾													
Interest rate contracts	(773)	\$(155)	—	10	632	59	—	(92)	31		(288)	\$(60))
Foreign exchange contracts	48	93	—	(2)	(39)	4	—	(2)	82		184	88	
Equity contracts	(1,524)	\$(101)	—	18	42	64	—	(113)	(33)	)	(1,647)	\$(158))
Commodity contracts	(2,074)	\$(153)	—	12	51	—	—	—	140		(2,024)	\$(152))
Credit derivatives	(1,123)	\$(293)	—	(44)	(16)	(2)	—	2	137		(1,339)	\$(325))
Total trading derivatives, net ⁽⁴⁾	\$(5,446)	\$(609)	\$ —	\$(6)	\$670	\$ 125	\$ —	\$(205)	\$ 357		\$(5,114)	\$(607))
Investments													
Mortgage-backed securities													
U.S. government-sponsored agency guaranteed	\$55	\$ —	\$ 1	\$ —	\$(6)	\$ —	\$ —	\$ —	\$ —	\$ —	\$50	\$ —	
Residential	—	—	—	—	—	—	—	—	—	—	—	—	
Commercial	—	—	—	—	—	—	—	—	—	—	—	—	
Total investment mortgage-backed securities	\$55	\$ —	\$ 1	\$ —	\$(6)	\$ —	\$ —	\$ —	\$ —	\$ —	\$50	\$ —	
U.S. Treasury and federal agency securities	\$1	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$1	\$ —	

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State and municipal	1,233	—	27	12	(3)22	—	(6)—	1,285	28
Foreign government	235	—	10	—	(1)191	—	(77)—	358	7
Corporate	339	—	(137	)5	—	92	—	(143	)—	156	9
Equity securities	9	—	—	—	—	—	—	—	—	9	—
Asset-backed securities	712	—	173	4	(13	)334	—	(182	)—	1,028	171
Other debt securities	—	—	—	—	—	10	—	—	—	10	—
Non-marketable equity securities	1,082	—	31	2	—	1	—	(154	)(23	)939	66
Total investments	\$3,666	\$—	\$105	\$23	\$(23	)\$650	\$	\$(562	)\$ (23	)\$3,836	\$281

In millions of dollars	Net realized/unrealized gains (losses) Transfers										Unrealized gains (losses) still held ⁽³⁾
	Mar. 31, 2017	Principal transactions	Other ⁽¹⁾⁽²⁾	into Level 3	out of Level 3	Purchases	Issuances	Sales	Settlements	Jun. 30, 2017	
Loans	\$ 580	\$ —	\$ (12)	\$ 15	\$ —	\$ 30	\$ —	\$ (33)	\$ (3)	\$ 577	\$ 42
Mortgage servicing rights	567	—	(11)	—	—	—	21	—	(17)	560	3
Other financial assets measured on a recurring basis	27	—	29	—	(7)	—	27	(4)	(55)	17	26
Liabilities											
Interest-bearing deposits	\$ 302	\$ —	\$ —	\$ 20	\$ —	\$ —	\$ —	\$ —	\$ (22)	\$ 300	\$ 5
Federal funds purchased and securities loaned or sold under agreements to repurchase	809	2	—	—	—	—	—	—	—	807	2
Trading account liabilities											
Securities sold, not yet purchased	1,151	(60)	—	2	(29)	—	—	76	(117)	1,143	5
Short-term borrowings	60	40	—	1	—	—	8	—	—	29	11
Long-term debt	10,176	(618)	—	321	(558)	—	1,353	—	(79)	11,831	(73)
Other financial liabilities measured on a recurring basis	4	—	2	—	—	—	1	—	(1)	2	2

In millions of dollars	Dec. 31, 2016	Net realized/unrealized gains (losses) incl. in					Transfers			Settlements	Jun. 30, 2017	Unrealized gains (losses) still held ⁽³⁾
		Principal transactions	Other	into Level 3	out of Level 3	Purchases	Issuances	Sales				
Assets												
Federal funds sold and securities borrowed or purchased under agreements to resell	\$1,496	\$ (2	)\$ —	\$ —	\$ (491	)\$ —	\$ —	\$ —	\$ (1	)\$1,002	\$ —	
Trading non-derivative assets												
Trading mortgage-backed securities												
U.S. government-sponsored agency guaranteed	176	4	—	79	(65	)264	—	(254	)—	204	1	
Residential	399	37	—	47	(49	)66	—	(173	)—	327	29	
Commercial	206	(3	)—	44	(29	)434	—	(334	)—	318	(10)
Total trading mortgage-backed securities	\$781	\$38	\$ —	\$170	\$(143	)\$764	\$ —	\$(761	)\$ —	\$849	\$20	
U.S. Treasury and federal agency securities	\$1	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$(1)\$ —	\$ —	\$ —	
State and municipal	296	5	—	24	(48	)88	—	(81	)—	284	2	
Foreign government	40	7	—	84	(90	)127	—	(60	)—	108	8	
Corporate	324	215	—	116	(73	)276	—	(457	)—	401	177	
Equity securities	127	29	—	132	(13	)9	—	(44	)—	240	21	
Asset-backed securities	1,868	137	—	23	(81	)704	—	(1,081	)—	1,570	52	
Other trading assets	2,814	(50	)—	432	(774	)653	1	(1,258	) (15	)1,803	(38)
Total trading non-derivative assets	\$6,251	\$381	\$ —	\$981	\$(1,222)	\$2,621	\$ 1	\$(3,743)	\$(15	)\$5,255	\$242	
Trading derivatives, net ⁽⁴⁾												
Interest rate contracts	\$(663	)\$(192	)\$ —	\$(28	)\$651	\$65	\$ —	\$(205	)\$84	\$(288	)\$(12)
Foreign exchange contracts	413	(297	)—	53	(59	)38	—	(34	)70	184	43	
Equity contracts	(1,557	) (103	)—	18	26	149	—	(137	) (43	) (1,647	) (139)
Commodity contracts	(1,945	) (328	)—	58	49	—	—	—	142	(2,024	) (358)
Credit derivatives	(1,001	) (385	)—	(68	) (24	) (2	)—	2	139	(1,339	) (745)
Total trading derivatives, net ⁽⁴⁾	\$(4,753)	\$(1,305	)\$ —	\$33	\$643	\$250	\$ —	\$(374	)\$392	\$(5,114)	\$(1,211)
Investments												
Mortgage-backed securities												
U.S. government-sponsored agency guaranteed	\$101	\$ —	\$ 3	\$1	\$(55)\$ —	\$ —	\$ —	\$ —	\$50	\$2	

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Residential	50	—	2	—	(47)—	—	(5)—	—	—
Commercial	—	—	—	—	—	8	—	(8)—	—	—
Total investment mortgage-backed securities	\$151	\$—	\$ 5	\$1	\$(102)\$8	\$ —	\$(13)\$—	\$50	\$2
U.S. Treasury and federal agency securities	\$2	\$—	\$ —	\$—	\$—	\$—	\$ —	\$(1	)\$—	\$1	\$—
State and municipal	1,211	—	39	49	(33	)76	—	(57	)—	1,285	35
Foreign government	186	—	11	2	(19	)333	—	(155	)—	358	7
Corporate	311	—	(135	) 64	(4	)183	—	(263	)—	156	9
Equity securities	9	—	—	—	—	—	—	—	—	9	—
Asset-backed securities	660	—	182	21	(13	)360	—	(182	)—	1,028	171
Other debt securities	—	—	—	—	—	21	—	(11	)—	10	—
Non-marketable equity securities	1,331	—	(63	) 2	—	9	—	(227	)(113	)939	79
Total investments	\$3,861	\$—	\$ 39	\$139	\$(171	)\$990	\$ —	\$(909	)\$(113	)\$3,836	\$303

In millions of dollars	Net realized/unrealized gains (losses) Transfers										Unrealized gains (losses) still held ⁽³⁾
	Dec. 31, 2016	Principal transactions	Other ⁽¹⁾⁽²⁾	Level 3	Level 3	Purchases	Issuances	Sales	Settlements	Jun. 30, 2017	
Loans	\$568	\$ —	\$ (16)	\$ 80	\$ (16)	\$ 42	\$ —	\$ (76)	\$ (5)	\$ 577	\$ 58
Mortgage servicing rights	1,564	—	56	—	—	—	56	(1,046)	(70)	560	(40)
Other financial assets measured on a recurring basis	34	—	(160)	3	(8)	—	260	(4)	(108)	17	(57)
Liabilities											
Interest-bearing deposits	\$293	\$ —	\$ 11	\$ 40	\$ —	\$ —	\$ —	\$ —	\$ (22)	\$ 300	\$ 31
Federal funds purchased and securities loaned or sold under agreements to repurchase	849	8	—	—	—	—	—	—	(34)	807	8
Trading account liabilities											
Securities sold, not yet purchased	1,177	(6)	—	13	(43)	—	—	177	(187)	1,143	(3)
Short-term borrowings	42	31	—	1	—	—	19	—	(2)	29	5
Long-term debt	9,744	(601)	—	521	(967)	—	2,282	—	(350)	11,831	(747)
Other financial liabilities measured on a recurring basis	8	—	—	—	—	(1)	2	—	(7)	2	—

Changes in fair value of available-for-sale investments are recorded in AOCI, unless related to

(1) other-than-temporary impairment, while gains and losses from sales are recorded in Realized gains (losses) from sales of investments on the Consolidated Statement of Income.

(2) Unrealized gains (losses) on MSRs are recorded in Other revenue on the Consolidated Statement of Income.

Represents the amount of total gains or losses for the period, included in earnings (and AOCI for changes in fair value of available-for-sale investments), attributable to the change in fair value relating to assets and liabilities classified as Level 3 that are still held at June 30, 2017.

(4) Total Level 3 derivative assets and liabilities have been netted in these tables for presentation purposes only.

Level 3 Fair Value Rollforward

The following were the significant Level 3 transfers for the period December 31, 2017 to June 30, 2018:

During the three and six months ended June 30, 2018, transfers of Long-term debt of \$0.8 billion and \$1.8 billion from Level 2 to Level 3, and of \$0.5 billion and \$1.3 billion from Level 3 to Level 2, mainly related to structured debt, reflecting changes in the significance of unobservable inputs as well as certain underlying market inputs becoming less or more observable.

The were no significant Level 3 transfers for the period from March 31, 2017 to June 30, 2017.

The following were the significant Level 3 transfers for the period December 31, 2016 to June 30, 2017:

Transfers of Long-term debt of \$0.5 billion from Level 2 to Level 3, and of \$1.0 billion from Level 3 to Level 2, mainly related to structured debt, reflecting changes in the significance of unobservable inputs as well as certain underlying market inputs becoming less or more observable.

Valuation Techniques and Inputs for Level 3 Fair Value Measurements

The following tables present the valuation techniques covering the majority of Level 3 inventory and the most significant unobservable inputs used in Level 3 fair value measurements. Differences between this table and amounts presented in the Level 3 Fair Value Rollforward table represent individually immaterial items that have been measured using a variety of valuation techniques other than those listed.

As of June 30, 2018	Fair value ⁽¹⁾ (in millions)	Methodology	Input	Low ⁽²⁾⁽³⁾	High ⁽²⁾⁽³⁾	Weighted average ⁽⁴⁾	
Assets							
Federal funds sold and securities borrowed or purchased under agreements to resell	\$ 66	Model-based	Interest rate	2.06	% 3.67	% 3.51	%
Mortgage-backed securities	\$ 156	Price-based	Price	\$0.01	\$109.48	\$83.75	
	110	Yield analysis	Yield	2.71	% 8.81	% 4.56	%
	39	Model-based					
State and municipal, foreign government, corporate and other debt securities	\$ 1,103	Model-based	Price	\$2.34	\$129.50	\$92.65	
	895	Price-based	Credit spread	35 bps	500 bps	238 bps	
Equity securities ⁽⁵⁾	\$ 206	Price-based	Price	\$—	\$456.89	\$41.58	
	87	Model-based	Equity volatility	3.93	% 12.42	% 9.20	%
			Forward price	80.20	% 124.54	% 105.47	%
Asset-backed securities	\$ 2,058	Price-based	Price	\$3.00	\$100.89	\$72.24	
Non-marketable equities	\$ 505	Comparables analysis	EBITDA multiples	7.30x	10.40x	8.88x	
	76	Price-based	Discount to price	—	% 100.00	% 15.37	%
Derivatives—gross							
Interest rate contracts (gross)	\$ 4,344	Model-based	Mean reversion	1.00	% 20.00	% 10.50	%
			Inflation volatility	0.21	% 2.63	% 0.75	%
			IR normal volatility	0.10	% 78.22	% 51.57	%
Foreign exchange contracts (gross)	\$ 889	Model-based	FX volatility	2.40	% 18.05	% 10.79	%
			IR-IR correlation	(51.00)	% 40.00	% 34.08	%
			FX rate	\$—	\$0.04	\$0.04	
			IR-FX correlation	40.00	% 60.00	% 50.00	%
			Credit spread	34 bps	2,568 bps	300 bps	
			IR basis	(0.47)	% 0.36	% (0.19))%
Equity contracts (gross)	\$ 2,038	Model-based	Equity volatility	3.26	% 74.93	% 26.61	%

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			Forward price	63.07	%	159.10	%	100.93	%
			Equity-equity correlation	(81.06)	%	100.00	%	55.36	%
			Equity-FX correlation	(83.00)	%	54.00	%	(37.30)	%
			WAL	2.00		4.43		2.90	
			years	years		years		years	
Commodity and other contracts (gross)	\$ 3,095	Model-based	Forward price	28.57	%	454.29	%	108.29	%
			Commodity volatility	9.33	%	46.05	%	21.51	%
			Commodity correlation	(52.24)	%	91.44	%	22.32	%
Credit derivatives (gross)	\$ 1,778	Model-based	Credit correlation	25.00	%	80.00	%	42.67	%
	781	Price-based	Upfront points	1.67	%	97.99	%	56.21	%

As of June 30, 2018	Fair value ⁽¹⁾ (in millions)	Methodology	Input	Low ⁽²⁾⁽³⁾	High ⁽²⁾⁽³⁾	Weighted average ⁽⁴⁾	
			Credit spread	4 bps	1,266 bps	110 bps	
			Price	\$10.31	\$225.00	\$88.72	
			Recovery rate	5.00	% 65.00	% 50.48	%
Loans and leases	\$ 241	Model-based	Credit spread	143 bps	143 bps	143 bps	
	139	Price-based	Price	\$0.76	\$238.35	\$41.60	
			Yield	4.09	% 4.09	% 4.09	%
Mortgage servicing rights	\$ 508	Cash flow	Yield	4.34	% 12.14	% 8.33	%
	87	Model-based	WAL	4.09 years	7.74 years	6.64 years	
Liabilities							
Interest-bearing deposits	\$ 320	Model-based	Mean reversion	—	% 20.00	% 7.85	%
			Equity volatility	3.93	% 12.42	% 9.20	%
			Forward price	80.20	% 124.54	% 105.47	%
Federal funds purchased and securities loaned or sold under agreement to repurchase	\$ 966	Model-based	Interest rate	2.06	% 3.24	% 2.99	%
Trading account liabilities							
Securities sold, not yet purchased	\$ 165	Model-based	Forward price	28.57	% 454.29	% 104.11	%
	\$ 23	Price-based	Equity volatility	3.26	% 74.93	% 15.37	%
			IR normal volatility	15.02	% 31.88	% 19.85	%
			Equity-equity correlation	(81.06)	% 100.00	% 55.40	%
			Equity-FX correlation	(82.74)	% 54.00	% (37.34)	%
			Price	\$—	\$456.89	\$93.88	
Short-term borrowings and long-term debt	\$ 13,928	Model-based	Mean reversion	1.00	% 20.00	% 10.50	%
			Forward price	63.07	% 195.78	% 104.83	%
			Equity volatility	3.26	% 74.93	% 12.05	%
			IR normal volatility	8.49	% 78.22	% 51.93	%
As of December 31, 2017	Fair value ⁽¹⁾ (in millions)	Methodology	Input	Low ⁽²⁾⁽³⁾	High ⁽²⁾⁽³⁾	Weighted average ⁽⁴⁾	
Assets							
Federal funds sold and securities borrowed or purchased under agreements to resell	\$ 16	Model-based	Interest rate	1.43	% 2.16	% 2.09	%
Mortgage-backed securities	\$ 214	Price-based	Price	\$ 2.96	\$101.00	\$56.52	
	184	Yield analysis	Yield	2.52	% 14.06	% 5.97	%
State and municipal, foreign government, corporate and other debt securities	\$ 949	Model-based	Price	\$ —	\$184.04	\$91.74	

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	914	Price-based	Credit spread	35 bps	500 bps	249 bps
			Yield	2.36	% 14.25	% 6.03
Equity securities ⁽⁵⁾	\$ 65	Price-based	Price	\$ —	\$25,450.00	\$2,526.62
	55	Model-based	WAL	2.50	2.50 years	2.50 years
Asset-backed securities	\$ 2,287	Price-based	Price	\$ 4.25	\$100.60	\$74.57

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As of December 31, 2017	Fair value ⁽¹⁾ (in millions)	Methodology	Input	Low ⁽²⁾⁽³⁾	High ⁽²⁾⁽³⁾	Weighted average ⁽⁴⁾	
Non-marketable equity	\$ 423	Comparables analysis	EBITDA multiples	6.90 x	12.80 x	8.66 x	
	223	Price-based	Discount to price	—	% 100.00	% 11.83	%
			Price-to-book ratio	0.05 x	1.00 x	0.32 x	
Derivatives—gross							
Interest rate contracts (gross)	\$ 3,818	Model-based	IR normal volatility	9.40	% 77.40	% 58.86	%
			Mean reversion	1.00	% 20.00	% 10.50	%
Foreign exchange contracts (gross)	\$ 940	Model-based	Foreign exchange (FX) volatility	4.58	% 15.02	% 8.16	%
			Interest rate	(0.55)	% 0.28	% 0.04	%
			IR-IR correlation	(51.00)	% 40.00	% 36.56	%
			IR-FX correlation	(7.34)	% 60.00	% 49.04	%
			Credit spread	11 bps	717 bps	173 bps	
Equity contracts (gross) ⁽⁷⁾	\$ 2,897	Model-based	Equity volatility	3.00	% 68.93	% 24.66	%
			Forward price	69.74	% 154.19	% 92.80	%
Commodity contracts (gross)	\$ 2,937	Model-based	Forward price	3.66	% 290.59	% 114.16	%
			Commodity volatility	8.60	% 66.73	% 25.04	%
			Commodity correlation	(37.64)	% 91.71	% 15.21	%
Credit derivatives (gross)	\$ 1,797	Model-based	Credit correlation	25.00	% 90.00	% 44.64	%
	823	Price-based	Upfront points	6.03	% 97.26	% 62.88	%
			Credit spread	3 bps	1,636 bps	173 bps	
			Price	\$ 1.00	\$ 100.24	\$ 57.63	
Nontrading derivatives and other financial assets and liabilities measured on a recurring basis (gross) ⁽⁶⁾	\$ 24	Model-based	Recovery rate	25.00	% 40.00	% 31.56	%
			Redemption rate	10.72	% 99.50	% 74.24	%
			Credit spread	38 bps	275 bps	127 bps	
			Upfront points	61.00	% 61.00	% 61.00	%
Loans and leases	\$ 391	Model-based	Equity volatility	3.00	% 68.93	% 22.52	%
	148	Price-based	Credit spread	134 bps	500 bps	173 bps	
			Yield	3.09	% 4.40	% 3.13	%
Mortgage servicing rights	\$ 471	Cash flow	Yield	8.00	% 16.38	% 11.47	%
	87	Model-based	WAL	3.83 years	6.89 years	5.93 years	
Liabilities							
Interest-bearing deposits	\$ 286	Model-based	Mean reversion	1.00	% 20.00	% 10.50	%
			Forward price	99.56	% 99.95	% 99.72	%
	\$ 726	Model-based	Interest rate	1.43	% 2.16	% 2.09	%

Federal funds purchased and securities
loaned or sold under agreements to
repurchase

Trading account liabilities

Securities sold, not yet purchased	\$ 21	Price-based	Price	\$1.00	\$287.64	\$88.19
Short-term borrowings and long-term debt \$ 13,100	Model-based	Forward price	69.74	% 161.11	% 100.70	%

(1) The fair value amounts presented in these tables represent the primary valuation technique or techniques for each class of assets or liabilities.

(2) Some inputs are shown as zero due to rounding.

(3) When the low and high inputs are the same, there is either a constant input applied to all positions, or the methodology involving the input applies to only one large position.

(4) Weighted averages are calculated based on the fair values of the instruments.

(5) For equity securities, the price inputs are expressed on an absolute basis, not as a percentage of the notional amount.

- (6) Both trading and nontrading account derivatives—assets and liabilities—are presented on a gross absolute value basis.
(7) Includes hybrid products.

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Items Measured at Fair Value on a Nonrecurring Basis

Certain assets and liabilities are measured at fair value on a nonrecurring basis and therefore are not included in the tables above. These include assets measured at cost that have been written down to fair value during the periods as a result of an impairment. These also include non-marketable equity investments that have been measured using the measurement alternative and are either (i) written down to fair value during the periods as a result of an impairment or (ii) adjusted upward or downward to fair value as a result of a transaction observed during the periods for the identical or similar investment of the same issuer. In addition, these assets include loans held-for-sale and other real estate owned that are measured at the lower of cost or market value.

The following table presents the carrying amounts of all assets that were still held for which a nonrecurring fair value measurement was recorded:

In millions of dollars	Fair value	Level 2	Level 3
June 30, 2018			
Loans HFS ⁽¹⁾	\$4,285	\$1,703	\$2,582
Other real estate owned	77	53	24
Loans ⁽²⁾	400	184	216
Non-marketable equity investments measured using the measurement alternative	112	107	5
Total assets at fair value on a nonrecurring basis	\$4,874	\$2,047	\$2,827

In millions of dollars	Fair value	Level 2	Level 3
December 31, 2017			
Loans HFS ⁽¹⁾	\$5,675	\$2,066	\$3,609
Other real estate owned	54	10	44
Loans ⁽²⁾	630	216	414
Total assets at fair value on a nonrecurring basis	\$6,359	\$2,292	\$4,067

(1) Net of fair value amounts on the unfunded portion of loans HFS recognized as Other liabilities on the Consolidated Balance Sheet.

(2) Represents impaired loans held for investment whose carrying amount is based on the fair value of the underlying collateral less costs to sell, primarily real estate.

Valuation Techniques and Inputs for Level 3 Nonrecurring Fair Value Measurements

The following table presents the valuation techniques covering the majority of Level 3 nonrecurring fair value measurements and the most significant unobservable inputs used in those measurements:

As of June 30, 2018	Fair value ⁽¹⁾ (in millions)	Methodology	Input	Low ⁽²⁾	High	Weighted average ⁽³⁾	
Loans held-for-sale	\$ 2,240	Price-based	Price	\$75.00	\$100.00	\$98.63	
Other real estate owned	\$ 20	Price-based	Appraised value	\$470,964	\$8,394,102	\$6,714,334	
	3	Recovery analysis	Discount to price	13.00	% 13.00	% 13.00	%
			Price	\$54.93	\$54.93	\$54.93	
Loans ⁽⁵⁾	\$ 98	Recovery analysis	Price	\$91.50	\$100.00	\$99.17	
	75	Price-based	Appraised value	\$30,653,667	\$465,594,643	\$126,532,515	
	22	Cash flow	Recovery rate	9.00	% 9.00	% 9.00	%
As of December 31, 2017	Fair value ⁽¹⁾ (in millions)	Methodology	Input	Low ⁽²⁾	High	Weighted average ⁽³⁾	
Loans held-for-sale	\$ 3,186	Price-based	Price	\$77.93	\$100.00	\$99.26	
Other real estate owned	\$ 42	Price-based	Appraised value ⁽⁴⁾	\$20,278	\$8,091,760	\$4,016,665	
			Discount to price ⁽⁶⁾	34.00	% 34.00	% 34.00	%
			Price	\$30.00	\$50.36	\$49.09	
Loans ⁽⁵⁾	\$ 133	Price-based	Price	\$2.80	\$100.00	\$62.46	
	129	Cash flow	Recovery rate	50.00	% 100.00	% 63.59	%
	127	Recovery analysis	Appraised value	\$—	\$45,500,000	\$38,785,667	

(1) The fair value amounts presented in this table represent the primary valuation technique or techniques for each class of assets or liabilities.

(2) Some inputs are shown as zero due to rounding.

(3) Weighted averages are calculated based on the fair values of the instruments.

(4) Appraised values are disclosed in whole dollars.

(5) Represents impaired loans held for investment whose carrying amounts are based on the fair value of the underlying collateral, primarily real estate secured loans.

(6) Includes estimated costs to sell.

Nonrecurring Fair Value Changes

The following table presents total nonrecurring fair value measurements for the period, included in earnings, attributable to the change in fair value relating to assets that were still held:

	Three Months Ended June 30,	2018	2017
In millions of dollars			
Loans HFS		\$(7)	\$(5)
Other real estate owned		(1)	(3)
Loans ⁽¹⁾		(33)	(30)
Non-marketable equity investments measured using the measurement alternative		(1)	—

Total nonrecurring fair value gains (losses) \$(42)\$(38)

(1) Represents loans held for investment whose carrying amount is based on the fair value of the underlying collateral, primarily real estate.

	Six	
	Months	
	Ended	
	June 30,	
In millions of dollars	2018	2017
Loans HFS	\$(8)	\$(5)
Other real estate owned	(1)	(3)
Loans ⁽¹⁾	(33)	(48)
Non-marketable equity investments measured using the measurement alternative	104	—
Total nonrecurring fair value gains (losses)	\$62	\$(56)

(1) Represents loans held for investment whose carrying amount is based on the fair value of the underlying collateral, primarily real estate.

Estimated Fair Value of Financial Instruments Not Carried at Fair Value

The following table presents the carrying value and fair value of Citigroup's financial instruments that are not carried at fair value. The table below therefore excludes items measured at fair value on a recurring basis presented in the tables above.

In billions of dollars	June 30, 2018 Carrying value	Estimated fair value fair value	Level 1	Level 2	Level 3
Assets					
Investments	\$58.8	\$ 58.3	\$ 1.1	\$55.2	\$ 2.0
Federal funds sold and securities borrowed or purchased under agreements to resell	96.4	96.4	—	91.8	4.6
Loans ⁽¹⁾⁽²⁾	654.4	648.8	—	5.6	643.2
Other financial assets ⁽²⁾⁽³⁾	265.0	265.4	187.3	33.6	64.5
Liabilities					
Deposits	\$995.1	\$ 992.8	\$ 3.0	\$844.4	\$ 145.4
Federal funds purchased and securities loaned or sold under agreements to repurchase	128.6	128.6	—	128.5	0.1
Long-term debt ⁽⁴⁾	201.4	204.6	—	186.3	18.3
Other financial liabilities ⁽⁵⁾	111.9	111.9	—	15.7	96.2

In billions of dollars	December 31, 2017 Carrying value	Estimated fair value fair value	Level 1	Level 2	Level 3
Assets					
Investments	\$60.2	\$ 60.6	\$ 0.5	\$57.5	\$ 2.6
Federal funds sold and securities borrowed or purchased under agreements to resell	99.5	99.5	—	94.4	5.1
Loans ⁽¹⁾⁽²⁾	648.6	644.9	—	6.0	638.9
Other financial assets ⁽²⁾⁽³⁾	242.6	243.0	166.4	44.1	62.5
Liabilities					
Deposits	\$958.4	\$ 955.6	\$ —	\$ 816.1	\$ 139.5
Federal funds purchased and securities loaned or sold under agreements to repurchase	115.6	115.6	—	115.6	—
Long-term debt ⁽⁴⁾	205.3	214.0	—	187.2	26.8
Other financial liabilities ⁽⁵⁾	129.9	129.9	—	15.5	114.4

The carrying value of loans is net of the Allowance for loan losses of \$12.1 billion for June 30, 2018 and \$12.4 billion for December 31, 2017. In addition, the carrying values exclude \$1.6 billion and \$1.7 billion of lease finance receivables at June 30, 2018 and December 31, 2017, respectively.

(2) Includes items measured at fair value on a nonrecurring basis.

Includes cash and due from banks, deposits with banks, brokerage receivables, reinsurance recoverables and other financial instruments included in Other assets on the Consolidated Balance Sheet, for all of which the carrying value is a reasonable estimate of fair value.

(4) The carrying value includes long-term debt balances under qualifying fair value hedges.

Includes brokerage payables, separate and variable accounts, short-term borrowings (carried at cost) and other

(5) financial instruments included in Other liabilities on the Consolidated Balance Sheet, for all of which the carrying value is a reasonable estimate of fair value.

The estimated fair values of the Company's corporate unfunded lending commitments at June 30, 2018 and December 31, 2017 were liabilities of \$4.2 billion and \$3.2 billion, respectively, substantially all of which are classified as Level 3. The Company does not estimate the fair values of consumer unfunded lending commitments, which are generally cancellable by providing notice to the borrower.

21. FAIR VALUE ELECTIONS

The Company may elect to report most financial instruments and certain other items at fair value on an instrument-by-instrument basis with changes in fair value reported in earnings, other than DVA (see below). The election is made upon the initial recognition of an eligible financial asset, financial liability or firm commitment or when certain specified reconsideration events occur. The fair value election may not be revoked once an election is made. The changes in

fair value are recorded in current earnings, other than DVA, which from January 1, 2016 are reported in AOCI. Additional discussion regarding the applicable areas in which fair value elections were made is presented in Note 20 to the Consolidated Financial Statements.

The Company has elected fair value accounting for its mortgage servicing rights. See Note 18 to the Consolidated Financial Statements for further discussions regarding the accounting and reporting of MSRs.

The following table presents the changes in fair value of those items for which the fair value option has been elected:

	Changes in fair value—gains (losses)			
	Three Months Ended June 30, 2018		Six Months Ended June 30, 2017	
In millions of dollars				
Assets				
Federal funds sold and securities borrowed or purchased under agreements to resell	\$19	\$(58)	\$3	\$(91)
Trading account assets	(85)	232	(101)	662
Investments	—	(3)	—	(3)
Loans				
Certain corporate loans	(3)	(5)	(126)	19
Certain consumer loans	—	2	—	2
Total loans	\$(3)	\$(3)	\$(126)	\$21
Other assets				
MSRs	\$11	\$(11)	\$57	\$56
Certain mortgage loans held-for-sale ⁽¹⁾	10	44	12	81
Total other assets	\$21	\$33	\$69	\$137
Total assets	\$(48)	\$201	\$(155)	\$726
Liabilities				
Interest-bearing deposits	\$10	\$(30)	\$38	\$(44)
Federal funds purchased and securities loaned or sold under agreements to repurchase	(15)	(527)	(126)	86
Trading account liabilities	(15)	18	(21)	44
Short-term borrowings	(59)	(99)	118	(80)
Long-term debt	921	(132)	1,539	(464)
Total liabilities	\$842	\$(770)	\$1,548	\$(458)

(1) Includes gains (losses) associated with interest rate lock commitments for those loans that have been originated and elected under the fair value option.

Own Debt Valuation Adjustments (DVA)

Own debt valuation adjustments are recognized on Citi's liabilities for which the fair value option has been elected using Citi's credit spreads observed in the bond market. Effective January 1, 2016, changes in fair value of fair value option liabilities related to changes in Citigroup's own credit spreads (DVA) are reflected as a component of AOCI; previously these amounts were recognized in Citigroup's Revenues and Net income along with all other changes in fair value. See Note 1 to the Consolidated Financial Statements for additional information.

Among other variables, the fair value of liabilities for which the fair value option has been elected (other than non-recourse and similar liabilities) is impacted by the narrowing or widening of the Company's credit spreads. The estimated change in the fair value of these liabilities due to such changes in the Company's own credit spread (or instrument-specific credit risk) was a gain of \$418 million and a loss of \$132 million for the three months ended June 30, 2018 and 2017, and a gain of \$585 million and a loss of \$227 million for the six months ended June 30, 2018 and 2017, respectively. Changes in fair value resulting from changes in instrument-specific credit risk were estimated by incorporating the Company's current credit spreads observable in the bond market into the relevant valuation technique used to value each liability as described above.

The Fair Value Option for Financial Assets and Financial Liabilities

Selected Portfolios of Securities Purchased Under Agreements to Resell, Securities Borrowed, Securities Sold Under Agreements to Repurchase, Securities Loaned and Certain Non-Collateralized Short-Term Borrowings

The Company elected the fair value option for certain portfolios of fixed income securities purchased under agreements to resell and fixed income securities sold under agreements to repurchase, securities borrowed, securities loaned and certain non-collateralized short-term borrowings held primarily by broker-dealer entities in the United States, United Kingdom and Japan. In each case, the election was made because the related interest rate risk is managed on a portfolio basis, primarily with offsetting derivative instruments that are accounted for at fair value through earnings.

Changes in fair value for transactions in these portfolios are recorded in Principal transactions. The related interest revenue and interest expense are measured based on the contractual rates specified in the transactions and are reported as Interest revenue and Interest expense in the Consolidated Statement of Income.

Certain Loans and Other Credit Products

Citigroup has also elected the fair value option for certain other originated and purchased loans, including certain unfunded loan products, such as guarantees and letters of credit, executed by Citigroup's lending and trading businesses. None of these credit products are highly leveraged financing commitments. Significant groups of transactions include loans and unfunded loan products that are expected to be either sold or securitized in the near term, or transactions where the economic risks are hedged with derivative instruments, such as purchased credit default swaps or total return swaps where the Company pays the total return on the underlying loans to a third party. Citigroup has elected the fair value option to mitigate accounting mismatches in cases where hedge accounting is complex and to achieve operational simplifications. Fair value was not elected for most lending transactions across the Company.

The following table provides information about certain credit products carried at fair value:

In millions of dollars	June 30, 2018		December 31, 2017	
	Trading assets	Loans	Trading assets	Loans
Carrying amount reported on the Consolidated Balance Sheet	\$9,653	\$3,000	\$8,851	\$4,374
Aggregate unpaid principal balance in excess of (less than) fair value	573	838	623	682
Balance of non-accrual loans or loans more than 90 days past due	—	1	—	1
	—	—	—	1

Aggregate unpaid principal balance in excess of fair value for non-accrual loans or loans more than 90 days past due

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In addition to the amounts reported above, \$529 million and \$508 million of unfunded commitments related to certain credit products selected for fair value accounting were outstanding as of June 30, 2018 and December 31, 2017, respectively.

Changes in the fair value of funded and unfunded credit products are classified in Principal transactions in Citi's Consolidated Statement of Income. Related interest revenue is measured based on the contractual interest rates and reported as Interest revenue on Trading account assets or loan interest depending on the balance sheet classifications of the credit products. The changes in fair value for the six months ended June 30, 2018 and 2017 due to instrument-specific credit risk totaled to a loss of \$20 million and a gain of \$25 million, respectively.

Certain Investments in Unallocated Precious Metals

Citigroup invests in unallocated precious metals accounts (gold, silver, platinum and palladium) as part of its commodity and foreign currency trading activities or to economically hedge certain exposures from issuing structured liabilities. Under ASC 815, the investment is bifurcated into a debt host contract and a commodity forward derivative instrument. Citigroup elects the fair value option for the debt host contract, and reports the debt host contract within Trading account assets on the Company's Consolidated Balance Sheet. The total carrying amount of debt host contracts across unallocated precious metals accounts was approximately \$0.4 billion and \$0.9 billion at June 30, 2018 and December 31, 2017, respectively. The amounts are expected to fluctuate based on trading activity in future periods.

As part of its commodity and foreign currency trading activities, Citi trades unallocated precious metals investments and executes forward purchase and forward sale derivative contracts with trading counterparties. When Citi sells an unallocated precious metals investment, Citi's receivable from its depository bank is repaid and Citi derecognizes its investment in the unallocated precious metal. The forward purchase or sale contract with the trading counterparty indexed to unallocated precious metals is accounted for as a derivative, at fair value through earnings. As of June 30, 2018, there were approximately \$10.8 billion and \$10.0 billion of notional amounts of such forward purchase and forward sale derivative contracts outstanding, respectively.

Certain Investments in Private Equity and Real Estate Ventures and Certain Equity Method and Other Investments

Citigroup invests in private equity and real estate ventures for the purpose of earning investment returns and for capital appreciation. The Company has elected the fair value option for certain of these ventures, because such investments are considered similar to many private equity or hedge fund activities in Citi's investment companies, which are reported at fair value. The fair value option brings consistency in the accounting and evaluation of these investments. All investments (debt and equity) in such private equity and real estate entities are accounted for at fair value. These investments are classified as Investments on Citigroup's Consolidated Balance Sheet.

Changes in the fair values of these investments are classified in Other revenue in the Company's Consolidated Statement of Income.

Citigroup also elected the fair value option for certain non-marketable equity securities, whose risk is managed with derivative instruments that are accounted for at fair value through earnings. These securities are classified as Trading account assets on Citigroup's Consolidated Balance Sheet. Changes in the fair value of these securities and the related derivative instruments are recorded in Principal transactions. Effective January 1, 2018, under ASU 2016-01 and ASU 2018-03, a fair value option election is no longer required to measure these non-marketable equity securities at fair value through earnings. See Note 1 to the Consolidated Financial Statements for additional details.

Certain Mortgage Loans Held-for-Sale (HFS)

Citigroup has elected the fair value option for certain purchased and originated prime fixed-rate and conforming adjustable-rate first mortgage loans HFS. These loans are intended for sale or securitization and are hedged with derivative instruments. The Company has elected the fair value option to mitigate accounting mismatches in cases where hedge accounting is complex and to achieve operational simplifications.

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The following table provides information about certain mortgage loans HFS carried at fair value:

In millions of dollars	June 30, 2018	December 31, 2017
Carrying amount reported on the Consolidated Balance Sheet	\$ 386	\$ 426
Aggregate fair value in excess of (less than) unpaid principal balance	11	14
Balance of non-accrual loans or loans more than 90 days past due	—	—
Aggregate unpaid principal balance in excess of fair value for non-accrual loans or loans more than 90 days past due	—	—

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The changes in the fair values of these mortgage loans are reported in Other revenue in the Company's Consolidated Statement of Income. There was no net change in fair value during the six months ended June 30, 2018 and 2017 due to instrument-specific credit risk. Related interest income continues to be measured based on the contractual interest rates and reported as Interest revenue in the Consolidated Statement of Income.

Certain Structured Liabilities

The Company has elected the fair value option for certain structured liabilities whose performance is linked to structured interest rates, inflation, currency, equity, referenced credit or commodity risks. The Company elected the fair value option because these exposures are considered to be trading-related positions and, therefore, are managed on a fair value basis. These positions will continue to be classified as debt, deposits or derivatives (Trading account liabilities) on the Company's Consolidated Balance Sheet according to their legal form.

The following table provides information about the carrying value of structured notes, disaggregated by type of embedded derivative instrument:

In billions of dollars	June 30, December 31,	
	2018	2017
Interest rate linked	\$ 16.3	\$ 13.9
Foreign exchange linked	0.3	0.3
Equity linked	14.6	13.0
Commodity linked	0.2	0.2
Credit linked	1.6	1.9
Total	\$ 33.0	\$ 29.3

Prior to 2016, the total change in the fair value of these structured liabilities was reported in Principal transactions in the Company's Consolidated Statement of Income. Beginning in the first quarter of 2016, the portion of the changes in fair value attributable to changes in Citigroup's own credit spreads (DVA) is reflected as a component of AOCI while all other changes in fair value will continue to be reported in Principal transactions. Changes in the fair value of these structured liabilities include accrued interest, which is also included in the change in fair value reported in Principal transactions.

Certain Non-Structured Liabilities

The Company has elected the fair value option for certain non-structured liabilities with fixed and floating interest rates. The Company has elected the fair value option where the interest rate risk of such liabilities may be economically hedged with derivative contracts or the proceeds are used to purchase financial assets that will also be accounted for at fair value through earnings. The elections have been made to mitigate accounting mismatches and to achieve operational simplifications. These positions are reported in Short-term borrowings and Long-term debt on the Company's Consolidated Balance Sheet. Prior to 2016, the total change in the fair value of these non-structured liabilities was reported in Principal transactions in the Company's Consolidated Statement of Income. Beginning in the first quarter of 2016, the portion of the changes in fair value attributable to changes in Citigroup's own credit spreads (DVA) is reflected as a component of AOCI while all other changes in fair value will continue to be reported in Principal transactions.

Interest expense on non-structured liabilities is measured based on the contractual interest rates and reported as Interest expense in the Consolidated Statement of Income.

The following table provides information about long-term debt carried at fair value:

In millions of dollars	June 30, December 31,	
	2018	2017
Carrying amount reported on the Consolidated Balance Sheet	\$35,462	\$ 31,392
Aggregate unpaid principal balance in excess of (less than) fair value	1,548	(579)

The following table provides information about short-term borrowings carried at fair value:

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In millions of dollars	June 30,December 31,	
	2018	2017
Carrying amount reported on the Consolidated Balance Sheet	\$ 4,093	\$ 4,627
Aggregate unpaid principal balance in excess of fair value	586	74

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22. GUARANTEES AND COMMITMENTS

Citi provides a variety of guarantees and indemnifications to its customers to enhance their credit standing and enable them to complete a wide variety of business transactions. For

certain contracts meeting the definition of a guarantee, the guarantor must recognize, at inception, a liability for the fair value of the obligation undertaken in issuing the guarantee.

In addition, the guarantor must disclose the maximum potential amount of future payments that the guarantor could be required to make under the guarantee, if there were a total

default by the guaranteed parties. The determination of the maximum potential future payments is based on the notional amount of the guarantees without consideration of possible

recoveries under recourse provisions or from collateral held or pledged. As such, Citi believes such amounts bear no relationship to the anticipated losses, if any, on these guarantees.

For additional information regarding Citi's guarantees and indemnifications included in the tables below, as well as its other guarantees and indemnifications excluded from the tables below, see Note 26 to the Consolidated Financial Statements in Citi's 2017 Annual Report on Form 10-K.

The following tables present information about Citi's guarantees at June 30, 2018 and December 31, 2017:

In billions of dollars at June 30, 2018 except carrying value in millions	Maximum potential amount of future payments			Carrying value (in millions of dollars)
	Expire within 1 year	Expire after 1 year	Total amount outstanding	
Financial standby letters of credit	\$30.1	\$64.2	\$ 94.3	\$ 149
Performance guarantees	7.7	4.2	11.9	29
Derivative instruments considered to be guarantees	15.5	84.1	99.6	396
Loans sold with recourse	—	0.3	0.3	9
Securities lending indemnifications ⁽¹⁾	121.5	—	121.5	—
Credit card merchant processing ⁽¹⁾⁽²⁾	94.2	—	94.2	—
Credit card arrangements with partners	0.1	1.1	1.2	162
Custody indemnifications and other	—	37.1	37.1	128
Total	\$269.1	\$191.0	\$ 460.1	\$ 873

In billions of dollars at December 31, 2017 except carrying value in millions	Maximum potential amount of future payments			Carrying value (in millions of dollars)
	Expire within 1 year	Expire after 1 year	Total amount outstanding	
Financial standby letters of credit	\$ 27.9	\$ 65.9	\$ 93.8	\$ 93
Performance guarantees	7.2	4.1	11.3	20
Derivative instruments considered to be guarantees	11.0	84.9	95.9	423
Loans sold with recourse	—	0.2	0.2	9

Securities lending indemnifications ⁽¹⁾	103.7	—	103.7	—
Credit card merchant processing ⁽¹⁾⁽²⁾	85.5	—	85.5	—
Credit card arrangements with partners	0.3	1.1	1.4	205
Custody indemnifications and other	—	36.0	36.0	59
Total	\$ 235.6	\$ 192.2	\$ 427.8	\$ 809

(1) The carrying values of securities lending indemnifications and credit card merchant processing were not material for either period presented, as the probability of potential liabilities arising from these guarantees is minimal.

At June 30, 2018 and December 31, 2017, this maximum potential exposure was estimated to be \$94 billion and \$86 billion, respectively. However, Citi believes that the maximum exposure is not representative of the actual

(2) potential loss exposure based on its historical experience. This contingent liability is unlikely to arise, as most products and services are delivered when purchased and amounts are refunded when items are returned to merchants.

Loans sold with recourse

Loans sold with recourse represent Citi's obligations to reimburse the buyers for loan losses under certain circumstances. Recourse refers to the clause in a sales agreement under which a seller/lender will fully reimburse the buyer/investor for any losses resulting from the purchased loans. This may be accomplished by the seller taking back any loans that become delinquent.

In addition to the amounts shown in the tables above, Citi has recorded a repurchase reserve for its potential repurchases or make-whole liability regarding residential mortgage representation and warranty claims related to its whole loan sales to U.S. government-sponsored enterprises (GSEs) and, to a lesser extent, private investors.

The repurchase reserve was approximately \$56 million and \$66 million at June 30, 2018 and December 31, 2017, respectively, and these amounts are included in Other liabilities on the Consolidated Balance Sheet.

Credit card arrangements with partners

Citi, in certain of its credit card partner arrangements, provides guarantees to the partner regarding the volume of certain customer originations during the term of the agreement. To the extent such origination targets are not met, the guarantees serve to compensate the partner for certain payments that otherwise would have been generated in connection with such originations.

Other guarantees and indemnifications

Credit Card Protection Programs

Citi, through its credit card businesses, provides various cardholder protection programs on several of its card products, including programs that provide insurance coverage for rental cars, coverage for certain losses associated with purchased products, price protection for certain purchases and protection for lost luggage. These guarantees are not included in the table, since the total outstanding amount of the guarantees and Citi's maximum exposure to loss cannot be quantified. The protection is limited to certain types of purchases and losses, and it is not possible to quantify the purchases that would qualify for these benefits at any given time. Citi assesses the probability and amount of its potential liability related to these programs based on the extent and nature of its historical loss experience. At June 30, 2018 and December 31, 2017, the actual and estimated losses incurred and the carrying value of Citi's obligations related to these programs were immaterial.

Value-Transfer Networks

Citi is a member of, or shareholder in, hundreds of value-transfer networks (VTNs) (payment, clearing and settlement

systems as well as exchanges) around the world. As a condition of membership, many of these VTNs require that members stand ready to pay a pro rata share of the losses incurred by the organization due to another member's default on its obligations. Citi's potential obligations may be limited to its membership interests in the VTNs, contributions to the

VTN's funds, or, in limited cases, the obligation may be unlimited. The maximum exposure cannot be estimated as this would require an assessment of claims that have not yet occurred. Citi believes the risk of loss is remote given historical experience with the VTNs. Accordingly, Citi's participation in VTNs is not reported in the guarantees tables above, and there are no amounts reflected on the Consolidated Balance Sheet as of June 30, 2018 or December 31, 2017 for potential obligations that could arise from Citi's involvement with VTN associations.

Long-Term Care Insurance Indemnification

In 2000, Travelers Life & Annuity (Travelers), then a subsidiary of Citi, entered into a reinsurance agreement to transfer the risks and rewards of its long-term care (LTC) business to GE Life (now Genworth Financial Inc., or Genworth), then a subsidiary of the General Electric Company (GE). As part of this transaction, the reinsurance obligations were provided by two regulated insurance subsidiaries of GE Life, which funded two collateral trusts with securities. Presently, as discussed below, the trusts are referred to as the Genworth Trusts.

As part of GE's spin-off of Genworth in 2004, GE retained the risks and rewards associated with the 2000 Travelers reinsurance agreement by providing a reinsurance contract to Genworth through its Union Fidelity Life Insurance Company (UFLIC) subsidiary that covers the Travelers LTC policies. In addition, GE provided a capital maintenance agreement in favor of UFLIC that is designed to assure that UFLIC will have the funds to pay its reinsurance obligations. As a result of these reinsurance agreements and the spin-off of Genworth, Genworth has reinsurance protection from UFLIC (supported by GE) and has reinsurance obligations in connection with the Travelers LTC policies. As noted below, the Genworth reinsurance obligations now benefit Brighthouse Financial, Inc. (Brighthouse). While neither Brighthouse nor Citi are direct beneficiaries of the capital maintenance agreement between GE and UFLIC, Brighthouse and Citi benefit indirectly from the existence of the capital maintenance agreement, which helps assure that UFLIC will continue to have funds necessary to pay its reinsurance obligations to Genworth.

In connection with Citi's 2005 sale of Travelers to MetLife Inc. (MetLife), Citi provided an indemnification to MetLife for losses (including policyholder claims) relating to the LTC business for the entire term of the Travelers LTC policies, which, as noted above, are reinsured by subsidiaries of Genworth. In 2017, MetLife spun off its retail insurance business to Brighthouse. As a result, the Travelers LTC policies now reside with Brighthouse. The original reinsurance agreement between Travelers (now Brighthouse) and Genworth remains in place and Brighthouse is the sole beneficiary of the Genworth Trusts. The fair value of the Genworth Trusts is approximately \$7.4 billion as of June 30, 2018, compared to \$7.5 billion at December 31, 2017. The Genworth Trusts are designed to provide collateral to Brighthouse in an amount equal to the statutory liabilities of Brighthouse in respect of the Travelers LTC policies. The assets in the Genworth Trusts are evaluated and adjusted

periodically to ensure that the fair value of the assets continues to provide collateral in an amount equal to these estimated statutory liabilities, as the liabilities change over time.

If both (i) Genworth fails to perform under the original Travelers/GE Life reinsurance agreement for any reason, including insolvency or the failure of UFLIC to perform in a timely manner, and (ii) the assets of the two Genworth Trusts are insufficient or unavailable, then Citi, through its LTC reinsurance indemnification, must reimburse Brighthouse for any losses incurred in connection with the LTC policies. Since both events would have to occur before Citi would become responsible for any payment to Brighthouse pursuant to its indemnification obligation, and the likelihood of such events occurring is currently not probable, there is no liability reflected on the Consolidated Balance Sheet as of June 30, 2018 and December 31, 2017 related to this indemnification. Citi continues to closely monitor its potential exposure under this indemnification obligation.

Separately, Genworth announced that it had agreed to be purchased by China Oceanwide Holdings Co., Ltd, subject to a series of conditions and regulatory approvals. Citi is monitoring these developments.

Futures and over-the-counter derivatives clearing

Citi provides clearing services on central clearing parties (CCP) for clients that need to clear exchange-traded and over-the-counter (OTC) derivative contracts with CCPs. Based on all relevant facts and circumstances, Citi has concluded that it acts as an agent for accounting purposes in its role as clearing member for these client transactions. As such, Citi does not reflect the underlying exchange-traded or OTC derivatives contracts in its Consolidated Financial Statements. See Note 19 for a discussion of Citi's derivatives activities that are reflected in its Consolidated Financial Statements.

As a clearing member, Citi collects and remits cash and securities collateral (margin) between its clients and the respective CCP. In certain circumstances, Citi collects a higher amount of cash (or securities) from its clients than it needs to remit to the CCPs. This excess cash is then held at depository institutions such as banks or carry brokers. There are two types of margin: initial and variation. Where Citi obtains benefits from or controls cash initial margin (e.g., retains an interest spread), cash initial margin collected from clients and remitted to the CCP or depository institutions is reflected within Brokerage payables (payables to customers) and Brokerage receivables (receivables from brokers, dealers and clearing organizations) or Cash and due from banks, respectively.

However, for exchange-traded and OTC-cleared derivative contracts where Citi does not obtain benefits from or control the client cash balances, the client cash initial margin collected from clients and remitted to the CCP or depository institutions is not reflected on Citi's Consolidated Balance Sheet. These conditions are met when Citi has contractually agreed with the client that (i) Citi will pass through to the client all interest paid by the CCP or depository institutions on the cash initial margin, (ii) Citi

will not utilize its right as a clearing member to transform cash margin into other assets, (iii) Citi does not guarantee and is not liable to the client for the performance of the CCP or the depository institution and (iv) the client cash balances are legally isolated from Citi's bankruptcy estate. The total amount of cash initial margin collected and remitted in this manner was approximately \$12.5 billion and \$10.7 billion as of June 30, 2018 and December 31, 2017, respectively.

Variation margin due from clients to the respective CCP, or from the CCP to clients, reflects changes in the value of the client's derivative contracts for each trading day. As a clearing member, Citi is exposed to the risk of non-performance by clients (e.g., failure of a client to post variation margin to the CCP for negative changes in the value of the client's derivative contracts). In the event of non-performance by a client, Citi would move to close out the client's positions. The CCP would typically utilize initial

margin posted by the client and held by the CCP, with any remaining shortfalls required to be paid by Citi as clearing member. Citi generally holds incremental cash or securities margin posted by the client, which would typically be expected to be sufficient to mitigate Citi's credit risk in the event the client fails to perform.

As required by ASC 860-30-25-5, securities collateral posted by clients is not recognized on Citi's Consolidated Balance Sheet.

Carrying Value—Guarantees and Indemnifications

At June 30, 2018 and December 31, 2017, the total carrying amounts of the liabilities related to the guarantees and indemnifications included in the tables above amounted to approximately \$0.9 billion and \$0.8 billion. The carrying value of financial and performance guarantees is included in Other liabilities. For loans sold with recourse, the carrying value of the liability is included in Other liabilities.

Collateral

Cash collateral available to Citi to reimburse losses realized under these guarantees and indemnifications amounted to \$51 billion and \$46 billion at June 30, 2018 and December 31, 2017, respectively. Securities and other marketable assets held as collateral amounted to \$85 billion and \$70 billion at June 30, 2018 and December 31, 2017, respectively. The majority of collateral is held to reimburse losses realized under securities lending indemnifications. Additionally, letters of credit in favor of Citi held as collateral amounted to \$3.8 billion and \$3.7 billion at June 30, 2018 and December 31, 2017, respectively. Other property may also be available to Citi to cover losses under certain guarantees and indemnifications; however, the value of such property has not been determined.

Performance risk

Presented in the tables below are the maximum potential amounts of future payments that are classified based upon internal and external credit ratings. The determination of the maximum potential future payments is based on the notional amount of the guarantees without consideration of possible recoveries under recourse provisions or from collateral held or pledged. As such, Citi believes such amounts bear no relationship to the anticipated losses, if any, on these guarantees.

In billions of dollars at June 30, 2018	Maximum potential amount of future payments			Total
	Investment grade	Non-investment grade	Not rated	
Financial standby letters of credit	\$64.9	\$ 12.3	\$17.1	\$94.3
Performance guarantees	8.7	2.1	1.1	11.9
Derivative instruments deemed to be guarantees	—	—	99.6	99.6
Loans sold with recourse	—	—	0.3	0.3
Securities lending indemnifications	—	—	121.5	121.5
Credit card merchant processing	—	—	94.2	94.2
Credit card arrangements with partners	—	—	1.2	1.2
Custody indemnifications and other	24.3	12.8	—	37.1
Total	\$97.9	\$ 27.2	\$335.0	\$460.1

In billions of dollars at December 31, 2017	Maximum potential amount of future payments			Total
	Investment grade	Non-investment grade	Not rated	
Financial standby letters of credit	\$68.1	\$ 10.9	\$14.8	\$93.8
Performance guarantees	7.9	2.4	1.0	11.3
Derivative instruments deemed to be guarantees	—	—	95.9	95.9
Loans sold with recourse	—	—	0.2	0.2
Securities lending indemnifications	—	—	103.7	103.7
Credit card merchant processing	—	—	85.5	85.5
Credit card arrangements with partners	—	—	1.4	1.4
Custody indemnifications and other	23.7	12.3	—	36.0
Total	\$99.7	\$ 25.6	\$302.5	\$427.8

Credit Commitments and Lines of Credit

The table below summarizes Citigroup's credit commitments:

In millions of dollars	U.S.	Outside of U.S.	June 30, 2018	December 31, 2017
Commercial and similar letters of credit	\$865	\$4,691	\$5,556	\$ 5,000
One- to four-family residential mortgages	1,561	1,799	3,360	2,674
Revolving open-end loans secured by one- to four-family residential properties	10,308	1,417	11,725	12,323
Commercial real estate, construction and land development	10,927	2,388	13,315	11,151
Credit card lines	600,259	93,036	693,295	678,300
Commercial and other consumer loan commitments	198,912	102,096	301,008	272,655
Other commitments and contingencies	2,211	810	3,021	3,071
Total	\$825,043	\$206,237	\$1,031,280	\$ 985,174

The majority of unused commitments are contingent upon customers maintaining specific credit standards.

Commercial commitments generally have floating interest rates and fixed expiration dates and may require payment of fees. Such fees (net of certain direct costs) are deferred and, upon exercise of the commitment, amortized over the life of

the loan or, if exercise is deemed remote, amortized over the commitment period.

Other commitments and contingencies

Other commitments and contingencies include all other transactions related to commitments and contingencies not reported on the lines above.

Unsettled reverse repurchase and securities lending agreements and unsettled repurchase and securities borrowing agreements

In addition, in the normal course of business, Citigroup enters into reverse repurchase and securities borrowing agreements, as well as repurchase and securities lending agreements, which settle at a future date. At June 30, 2018, and December 31, 2017, Citigroup had \$54.3 billion and \$35.0 billion of unsettled reverse repurchase and securities borrowing agreements, respectively, and \$42.4 billion and \$19.1 billion of unsettled repurchase and securities lending agreements, respectively. For a further discussion of securities purchased under agreements to resell and securities borrowed, and securities sold under agreements to repurchase and securities loaned, including the Company's policy for offsetting repurchase and reverse repurchase agreements, see Note 10 to the Consolidated Financial Statements.

Restricted Cash

Citigroup defines restricted cash (as cash subject to withdrawal restrictions) to include cash deposited with central banks that must be maintained to meet minimum regulatory requirements, and cash set aside for the benefit of customers or for other purposes such as compensating balance arrangements or debt retirement. Restricted cash includes minimum reserve requirements with the Federal

Reserve Bank and certain other central banks and cash segregated to satisfy rules regarding the protection of customer assets as required by Citigroup broker-dealers' primary regulators, including the Securities and Exchange Commission, the Commodities Futures Trading Commission and the United Kingdom's Prudential Regulation Authority.

Restricted cash is included on the consolidated balance sheet within the following balance sheet lines:

In millions of dollars December 31,

	June 30, 2017	
	2018	
Cash and due from banks	\$2,855	\$ 3,151
Deposits with banks	27,624	27,664
Total	\$30,479	\$ 30,815

23. CONTINGENCIES

The following information supplements and amends, as applicable, the disclosures in Note 23 to the Consolidated Financial Statements of Citigroup's First Quarter of 2018 Form 10-Q and Note 27 to the Consolidated Financial Statements of Citigroup's 2017 Annual Report on Form 10-K. For purposes of this Note, Citigroup, its affiliates and subsidiaries and current and former officers, directors and employees, are sometimes collectively referred to as Citigroup and Related Parties.

In accordance with ASC 450, Citigroup establishes accruals for contingencies, including the litigation and regulatory matters disclosed herein, when Citigroup believes it is probable that a loss has been incurred and the amount of the loss can be reasonably estimated. Once established, accruals are adjusted from time to time, as appropriate, in light of additional information. The amount of loss ultimately incurred in relation to those matters may be substantially higher or lower than the amounts accrued for those matters.

If Citigroup has not accrued for a matter because the matter does not meet the criteria for accrual (as set forth above), or Citigroup believes an exposure to loss exists in excess of the amount accrued for a particular matter, in each case assuming a material loss is reasonably possible, Citigroup discloses the matter. In addition, for such matters, Citigroup discloses an estimate of the aggregate reasonably possible loss or range of loss in excess of the amounts accrued for those matters as to which an estimate can be made. At June 30, 2018, Citigroup's estimate of the reasonably possible unaccrued loss for these matters was materially unchanged from the estimate of approximately \$1.0 billion in the aggregate as of March 31, 2018.

As available information changes, the matters for which Citigroup is able to estimate will change, and the estimates themselves will change. In addition, while many estimates presented in financial statements and other financial disclosures involve significant judgment and may be subject to significant uncertainty, estimates of the range of reasonably possible loss arising from litigation and regulatory proceedings are subject to particular uncertainties. For example, at the time of making an estimate, Citigroup may have only preliminary, incomplete or inaccurate information about the facts underlying the claim; its assumptions about the future rulings of the court or other tribunal on significant issues, or the behavior and incentives of adverse parties or regulators, may prove to be wrong; and the outcomes it is attempting to predict are often not amenable to the use of statistical or other quantitative analytical tools. In addition, from time to time an outcome may occur that Citigroup had not accounted for in its estimates because it had deemed such an outcome to be remote. For all these reasons, the amount of loss in excess of accruals ultimately incurred for the matters as to which an estimate has been made could be substantially higher or lower than the range of loss included in the estimate.

Subject to the foregoing, it is the opinion of Citigroup's management, based on current knowledge and after taking into account its current legal accruals, that the eventual outcome of all matters described in this Note would not be likely to have a

material adverse effect on the consolidated financial condition of Citigroup. Nonetheless, given the substantial or indeterminate amounts sought in certain of these matters and the inherent unpredictability of such matters, an adverse outcome in certain of these matters could, from time to time, have a material adverse effect on Citigroup's consolidated results of operations or cash flows in particular quarterly or annual periods.

For further information on ASC 450 and Citigroup's accounting and disclosure framework for contingencies, including for litigation and regulatory matters disclosed herein, see Note 27 to the Consolidated Financial Statements of Citigroup's 2017 Annual Report on Form 10-K.

ANZ Underwriting Matter

On June 1, 2018, charges were filed by the Australian Commonwealth Director of Public Prosecutions (CDPP) against Citigroup Global Markets Australia Pty Limited (CGMA) for alleged criminal cartel offenses following a referral by the Australian Competition and Consumer Commission. CDPP alleges that the cartel conduct took place following an institutional share placement by Australia and New Zealand Banking Group Limited (ANZ) in August 2015, where CGMA acted as joint underwriter and lead manager with other banks. CDPP has also charged other banks and

individuals, including current and former Citi employees. Charges relating to CGMA are captioned R v. CITIGROUP GLOBAL MARKETS AUSTRALIA PTY LIMITED (2018/00175168). The matter is before the Downing Centre Local Court in Sydney, Australia. Separately, the Australian Securities and Investments Commission is conducting an investigation, and CGMA is cooperating with the investigation.

CARD Act Matter

On June 29, 2018, Citi entered into a consent order with the Bureau of Consumer Financial Protection related to certain self-reported methodological issues in connection with determining annual percentage rates (APRs) for certain cardholders under the rate re-evaluation provisions of the Credit Card Accountability Responsibility and Disclosure Act (CARD Act) and Regulation Z.

Credit Crisis-Related Litigation and Other Matters

Tribune Company Bankruptcy

On May 15, 2018, the United States Court of Appeals for the Second Circuit withdrew its 2016 transfer of jurisdiction to the district court in IN RE: TRIBUNE COMPANY FRAUDULENT CONVEYANCE LITIGATION, in order to reconsider its decision in light of a recent United States Supreme Court decision. Additional information concerning these actions is publicly available in court filings under the docket numbers 08-13141 (Bankr. D. Del.) (Carey, J.), 11 MD 02296 (S.D.N.Y.) (Sullivan, J.), 12 MC 2296 (S.D.N.Y.) (Sullivan, J.), 13-3992, 13-3875, 13-4178, 13-4196 (2d Cir.) and 16-317 (U.S.).

Depository Receipts Conversion Litigation

On June 6, 2018, the parties informed the court that they had reached a settlement in principle and requested a 45-day stay to prepare final settlement documentation and submit a motion for preliminary approval of the settlement. On June 11, 2018, the court granted the request for a stay. Additional information concerning this action is publicly available in court filings under the docket number 15 Civ. 9185 (S.D.N.Y.) (McMahon, C.).

Foreign Exchange Matters

Antitrust and Other Litigation: On May 23, 2018, in *IN RE FOREIGN EXCHANGE BENCHMARK RATES ANTITRUST LITIGATION*, the court held a fairness hearing to consider plaintiffs' motion for final approval of the proposed class settlements with Citi and certain other banks and plaintiffs' motion for attorneys' fees. Additional information concerning this action is publicly available in court filings under the docket number 13 Civ. 7789 (S.D.N.Y.) (Schofield, J.).

On June 20, 2018, in *NYPL v. JPMORGAN CHASE & CO.*, the court denied plaintiffs' request to expand their class to include credit card, wire and ATM transactions with a foreign currency exchange component. On July 20, 2018, plaintiffs moved for reconsideration of this decision. Additional information concerning this action is publicly available in court filings under the docket numbers 15 Civ. 2290 (N.D. Cal.) (Chhabria, J.) and 15 Civ. 9300 (S.D.N.Y.) (Schofield, J.).

On July 10, 2018, the United States Court of Appeals for the Second Circuit affirmed the dismissal of *ALLEN v. BANK OF AMERICA CORPORATION, ET AL.*, in which plaintiffs had alleged violations of the Employee Retirement Income Security Act. Additional information concerning this action is publicly available in court filings under the docket numbers 15 Civ. 4285 (S.D.N.Y.) (Schofield, J.) and 16-3327 (lead case) and 16-3571 (consolidated case) (2d Cir.).

Interbank Offered Rates-Related Litigation and Other Matters

Regulatory Actions: On June 15, 2018, Citibank entered into a \$100 million civil settlement regarding its USD LIBOR submissions with a consortium of 42 state attorneys general.

Interest Rate Swaps Matters

Antitrust and Other Litigation: Numerous defendants, including Citigroup, Citibank, Citigroup Global Markets Inc. (CGMI) and Citigroup Global Markets Limited, were named as defendants in a complaint filed in the United States District Court for the Southern District of New York under the caption *TRUEEX LLC v. BANK OF AMERICA CORPORATION, ET AL.* Plaintiff asserts federal and state antitrust claims, as well as state claims for unjust enrichment and tortious interference, and seeks treble damages, fees, costs and injunctive relief. On June 21, 2018, this action was consolidated with the multidistrict litigation captioned *IN RE: INTEREST RATE SWAPS ANTITRUST LITIGATION*. Additional information concerning this action is publicly

available in court filings under the docket numbers 18-CV-5361 (S.D.N.Y.) (Engelmayer, J.) and 16-MDL-2704 (S.D.N.Y.) (Engelmayer, J.).

Oceanografía Fraud and Related Matters

Other Litigation: On June 22, 2018, in the action filed in the United States District Court for the Southern District of Florida, plaintiffs filed a notice of appeal of the decision dismissing the complaint. Additional information concerning this action is publicly available in court filings under the docket number 16-20725 (S.D. Fla.) (Gayles, J.).

Shareholder Derivative Litigation

On May 8, 2018, plaintiffs filed a notice of voluntary dismissal of their appeal from the order dismissing the complaint in *OKLAHOMA FIREFIGHTERS PENSION & RETIREMENT SYSTEM, ET AL. v. CORBAT, ET AL.* Additional information concerning this action is publicly available in court filings under the docket numbers C.A. No.

12151-VCG (Del. Ch.) (Glasscock, Ch.) and No. 32, 2018 (Del.).

Sovereign Securities Matters

Regulatory Actions: Government and regulatory agencies in the United States and in other jurisdictions are conducting investigations or making inquiries regarding Citigroup's sales and trading activities in connection with sovereign and other government-related securities. Citigroup is fully cooperating with these investigations and inquiries.

Antitrust and Other Litigation: Five additional complaints have been filed in the United States District Court for the Southern District of New York against numerous defendants, including Citigroup, CGMI, Citigroup Financial Products Inc., Citigroup Global Markets Holdings Inc. and Citibanamex, which assert antitrust and unjust enrichment claims and seek treble damages, restitution and injunctive relief. The additional complaints are based on allegations similar to those in the March 30, 2018 putative class action. All six actions were consolidated on June 18, 2018, and additional information relating to this consolidated action is publicly available in court filings under the docket number 18 Civ. 2830 (S.D.N.Y.) (Oetken, J.).

Settlement Payments

Payments required in settlement agreements described above have been made or are covered by existing litigation accruals.

24. CONDENSED CONSOLIDATING FINANCIAL STATEMENTS

Citigroup amended its Registration Statement on Form S-3 on file with the SEC (File No. 33-192302) to add its wholly owned subsidiary, Citigroup Global Markets Holdings Inc. (CGMHI), as a co-registrant. Any securities issued by CGMHI under the Form S-3 will be fully and unconditionally guaranteed by Citigroup.

The following are the Condensed Consolidating Statements of Income and Comprehensive Income for the three and six months ended June 30, 2018 and 2017, Condensed Consolidating Balance Sheet as of June 30, 2018 and December 31, 2017 and Condensed Consolidating Statement of Cash Flows for the six months ended June 30, 2018 and 2017 for Citigroup Inc., the parent holding company (Citigroup parent company), CGMHI, other Citigroup subsidiaries and eliminations and total consolidating adjustments. "Other Citigroup subsidiaries and eliminations" includes all other subsidiaries of Citigroup, intercompany eliminations and income (loss) from discontinued operations. "Consolidating adjustments" includes Citigroup parent company elimination of distributed and undistributed income of subsidiaries and investment in subsidiaries.

These Condensed Consolidating Financial Statements have been prepared and presented in accordance with SEC Regulation S-X Rule 3-10, "Financial Statements of Guarantors and Issuers of Guaranteed Securities Registered or Being Registered."

These Condensed Consolidating Financial Statements are presented for purposes of additional analysis, but should be considered in relation to the Consolidated Financial Statements of Citigroup taken as a whole.

Condensed Consolidating Statements of Income and Comprehensive Income

Three Months Ended June 30, 2018

In millions of dollars	Citigroup parent company	CGMH I	Other Citigroup subsidiaries and eliminations	Consolidating adjustments	Citigroup consolidated
Revenues					
Dividends from subsidiaries	\$3,115	\$—	\$ —	\$ (3,115)	\$ —
Interest revenue	14	2,398	15,138	—	17,550
Interest revenue—intercompany	1,225	399	(1,624)	—	—
Interest expense	1,141	1,314	3,430	—	5,885
Interest expense—intercompany	388	896	(1,284)	—	—
Net interest revenue	\$(290)	\$587	\$ 11,368	\$ —	\$ 11,665
Commissions and fees	\$—	\$1,347	\$ 1,764	\$ —	\$ 3,111
Commissions and fees—intercompany	(1)	91	(90)	—	—
Principal transactions	(1,206)	(697)	4,054	—	2,151
Principal transactions—intercompany	(472)	1,279	(807)	—	—
Other income	1,479	188	(125)	—	1,542
Other income—intercompany	(120)	(19)	139	—	—
Total non-interest revenues	\$(320)	\$2,189	\$ 4,935	\$ —	\$ 6,804
Total revenues, net of interest expense	\$2,505	\$2,776	\$ 16,303	\$ (3,115)	\$ 18,469
Provisions for credit losses and for benefits and claims	\$—	\$(24)	\$ 1,836	\$ —	\$ 1,812
Operating expenses					
Compensation and benefits	\$1	\$1,282	\$ 4,169	\$ —	\$ 5,452
Compensation and benefits—intercompany	29	—	(29)	—	—
Other operating	(53)	578	4,735	—	5,260
Other operating—intercompany	13	693	(706)	—	—
Total operating expenses	\$(10)	\$2,553	\$ 8,169	\$ —	\$ 10,712
Equity in undistributed income of subsidiaries	\$1,483	\$—	\$ —	\$ (1,483)	\$ —
Income (loss) from continuing operations before income taxes	\$3,998	\$247	\$ 6,298	\$ (4,598)	\$ 5,945
Provision (benefit) for income taxes	(492)	619	1,317	—	1,444
Income (loss) from continuing operations	\$4,490	\$(372)	\$ 4,981	\$ (4,598)	\$ 4,501
Income from discontinued operations, net of taxes	—	—	15	—	15
Net income before attribution of noncontrolling interests	\$4,490	\$(372)	\$ 4,996	\$ (4,598)	\$ 4,516
Noncontrolling interests	—	—	26	—	26
Net income (loss)	\$4,490	\$(372)	\$ 4,970	\$ (4,598)	\$ 4,490
Comprehensive income					
Add: Other comprehensive income (loss)	\$(2,875)	\$(72)	\$ 5,401	\$ (5,329)	\$(2,875)
Total Citigroup comprehensive income (loss)	\$1,615	\$(444)	\$ 10,371	\$ (9,927)	\$ 1,615
Add: Other comprehensive income attributable to noncontrolling interests	\$—	\$—	\$ (57)	\$ —	\$ (57)
Add: Net income attributable to noncontrolling interests	—	—	26	—	26
Total comprehensive income (loss)	\$1,615	\$(444)	\$ 10,340	\$ (9,927)	\$ 1,584

Condensed Consolidating Statements of Income and Comprehensive Income

Three Months Ended June 30, 2017

In millions of dollars	Citigroup parent company	CGMHI	Other Citigroup subsidiaries and eliminations	Consolidating adjustments	Citigroup consolidated
Revenues					
Dividends from subsidiaries	\$2,515	\$—	\$ —	\$ (2,515)	\$ —
Interest revenue	(1)	1,405	13,890	—	15,294
Interest revenue—intercompany	1,076	377	(1,453)	—	—
Interest expense	1,136	541	2,359	—	4,036
Interest expense—intercompany	263	658	(921)	—	—
Net interest revenue	\$(324)	\$583	10,999	\$ —	\$ 11,258
Commissions and fees	\$—	\$1,348	1,908	\$ —	\$ 3,256
Commissions and fees—intercompany	(1)	108	(107)	—	—
Principal transactions	1,122	218	1,303	—	2,643
Principal transactions—intercompany	396	617	(1,013)	—	—
Other income	(1,601)	70	2,529	—	998
Other income—intercompany	161	(3)	(158)	—	—
Total non-interest revenues	\$77	\$2,358	4,462	\$ —	\$ 6,897
Total revenues, net of interest expense	\$2,268	\$2,941	15,461	\$ (2,515)	\$ 18,155
Provisions for credit losses and for benefits and claims	\$—	\$1	1,716	\$ —	\$ 1,717
Operating expenses					
Compensation and benefits	\$(1)	\$1,212	4,252	\$ —	\$ 5,463
Compensation and benefits—intercompany	20	—	(20)	—	—
Other operating	(344)	532	5,109	—	5,297
Other operating—intercompany	10	617	(627)	—	—
Total operating expenses	\$(315)	\$2,361	8,714	\$ —	\$ 10,760
Equity in undistributed income of subsidiaries	\$1,183	\$—	—	\$ (1,183)	\$ —
Income (loss) from continuing operations before income taxes	\$3,766	\$579	5,031	\$ (3,698)	\$ 5,678
Provision (benefit) for income taxes	(106)	261	1,640	—	1,795
Income (loss) from continuing operations	\$3,872	\$318	3,391	\$ (3,698)	\$ 3,883
Income from discontinued operations, net of taxes	—	—	21	—	21
Net income (loss) before attribution of noncontrolling interests	\$3,872	\$318	3,412	\$ (3,698)	\$ 3,904
Noncontrolling interests	—	—	32	—	32
Net income (loss)	\$3,872	\$318	\$ 3,380	\$ (3,698)	\$ 3,872
Comprehensive income					
Add: Other comprehensive income (loss)	\$514	\$(38)	\$(155)	\$ 193	\$ 514
Total Citigroup comprehensive income (loss)	\$4,386	\$280	\$ 3,225	\$ (3,505)	\$ 4,386
Add: Other comprehensive income attributable to noncontrolling interests	\$—	\$—	-\$39	\$ —	\$ 39
Add: Net income attributable to noncontrolling interests	—	—	-32	—	32
Total comprehensive income (loss)	\$4,386	\$280	\$ 3,296	\$ (3,505)	\$ 4,457

Condensed Consolidating Statements of Income and Comprehensive Income

Six Months Ended June 30, 2018

In millions of dollars	Citigroup parent company	CGMH	Other Citigroup subsidiaries and eliminations	Consolidating adjustments	Citigroup consolidated
Revenues					
Dividends from subsidiaries	\$8,700	\$—	\$ —	\$ (8,700)	\$ —
Interest revenue	66	4,053	29,763	—	33,882
Interest revenue—intercompany	2,355	782	(3,137)	—	—
Interest expense	2,051	2,327	6,667	—	11,045
Interest expense—intercompany	975	1,668	(2,643)	—	—
Net interest revenue	\$(605)	\$840	\$ 22,602	\$ —	\$ 22,837
Commissions and fees	\$—	\$2,599	\$ 3,542	\$ —	\$ 6,141
Commissions and fees—intercompany	(1)	91	(90)	—	—
Principal transactions	(175)	224	5,391	—	5,440
Principal transactions—intercompany	(858)	1,471	(613)	—	—
Other income	551	341	2,031	—	2,923
Other income—intercompany	(65)	31	34	—	—
Total non-interest revenues	\$(548)	\$4,757	\$ 10,295	\$ —	\$ 14,504
Total revenues, net of interest expense	\$7,547	\$5,597	\$ 32,897	\$ (8,700)	\$ 37,341
Provisions for credit losses and for benefits and claims	\$—	\$(24)	\$ 3,693	\$ —	\$ 3,669
Operating expenses					
Compensation and benefits	\$135	\$2,547	\$ 8,577	\$ —	\$ 11,259
Compensation and benefits—intercompany	63	—	(63)	—	—
Other operating	(9)	1,126	9,261	—	10,378
Other operating—intercompany	25	1,271	(1,296)	—	—
Total operating expenses	\$214	\$4,944	\$ 16,479	\$ —	\$ 21,637
Equity in undistributed income of subsidiaries	\$1,038	\$—	\$ —	\$ (1,038)	\$ —
Income (loss) from continuing operations before income taxes	\$8,371	\$677	\$ 12,725	\$ (9,738)	\$ 12,035
Provision (benefit) for income taxes	(739)	684	2,940	—	2,885
Income (loss) from continuing operations	\$9,110	\$(7)	\$ 9,785	\$ (9,738)	\$ 9,150
Income from discontinued operations, net of taxes	—	—	8	—	8
Net income (loss) before attribution of noncontrolling interests	\$9,110	\$(7)	\$ 9,793	\$ (9,738)	\$ 9,158
Noncontrolling interests	—	—	48	—	48
Net income (loss)	\$9,110	\$(7)	\$ 9,745	\$ (9,738)	\$ 9,110
Comprehensive income					
Add: Other comprehensive income (loss)	\$(2,823)	\$10	\$ 2,245	\$ (2,255)	\$(2,823)
Total Citigroup comprehensive income (loss)	\$6,287	\$3	\$ 11,990	\$ (11,993)	\$ 6,287
Add: Other comprehensive income attributable to noncontrolling interests	\$—	\$—	\$(43)	\$ —	\$(43)
Add: Net income attributable to noncontrolling interests	—	—	48	—	48
Total comprehensive income (loss)	\$6,287	\$3	\$ 11,995	\$ (11,993)	\$ 6,292

Condensed Consolidating Statements of Income and Comprehensive Income

Six Months Ended June 30, 2017

In millions of dollars	Citigroup parent company	CGMH subsidiaries and eliminations	Other Citigroup subsidiaries and eliminations	Consolidating adjustments	Citigroup consolidated
Revenues					
Dividends from subsidiaries	\$6,265	\$—	\$—	\$ (6,265)	\$—
Interest revenue	—	2,431	27,384	—	29,815
Interest revenue—intercompany	1,869	534	(2,403)	—	—
Interest expense	2,354	935	4,313	—	7,602
Interest expense—intercompany	353	1,086	(1,439)	—	—
Net interest revenue	\$(838)	\$944	\$ 22,107	\$—	\$ 22,213
Commissions and fees	\$—	\$2,671	\$ 3,640	\$—	\$ 6,311
Commissions and fees—intercompany	(1)	110	(109)	—	—
Principal transactions	959	1,876	2,902	—	5,737
Principal transactions—intercompany	600	194	(794)	—	—
Other income	(1,640)	139	3,761	—	2,260
Other income—intercompany	38	3	(41)	—	—
Total non-interest revenues	\$(44)	\$4,993	\$ 9,359	\$—	\$ 14,308
Total revenues, net of interest expense	\$5,383	\$5,937	\$ 31,466	\$ (6,265)	\$ 36,521
Provisions for credit losses and for benefits and claims	\$—	\$1	\$ 3,378	\$—	\$ 3,379
Operating expenses					
Compensation and benefits	\$(15)	\$2,474	\$ 8,538	\$—	\$ 10,997
Compensation and benefits—intercompany	51	—	(51)	—	—
Other operating	(316)	1,045	9,757	—	10,486
Other operating—intercompany	(49)	1,323	(1,274)	—	—
Total operating expenses	\$(329)	\$4,842	\$ 16,970	\$—	\$ 21,483
Equity in undistributed income of subsidiaries	\$1,770	\$—	\$—	\$ (1,770)	\$—
Income (loss) from continuing operations before income taxes	\$7,482	\$1,094	\$ 11,118	\$ (8,035)	\$ 11,659
Provision (benefit) for income taxes	(480)	476	3,662	—	3,658
Income (loss) from continuing operations	\$7,962	\$618	\$ 7,456	\$ (8,035)	\$ 8,001
Income from discontinued operations, net of taxes	—	—	3	—	3
Net income (loss) before attribution of noncontrolling interests	\$7,962	\$618	\$ 7,459	\$ (8,035)	\$ 8,004
Noncontrolling interests	—	—	42	—	42
Net income (loss)	\$7,962	\$618	\$ 7,417	\$ (8,035)	\$ 7,962
Comprehensive income					
Add: Other comprehensive income (loss)	\$1,978	\$(58)	\$ (3,876)	\$ 3,934	\$ 1,978
Total Citigroup comprehensive income (loss)	\$9,940	\$560	\$ 3,541	\$ (4,101)	\$ 9,940
Add: Other comprehensive income attributable to noncontrolling interests	\$—	\$—	\$ 70	\$—	\$ 70
Add: Net income attributable to noncontrolling interests	—	—	42	—	42
Total comprehensive income (loss)	\$9,940	\$560	\$ 3,653	\$ (4,101)	\$ 10,052

Condensed Consolidating Balance Sheet

In millions of dollars	June 30, 2018				
	Citigroup parent company	CGMHI	Other Citigroup subsidiaries and eliminations	Consolidating adjustments	Citigroup consolidated
Assets					
Cash and due from banks	\$ 1	\$ 521	\$ 20,555	\$ —	\$ 21,077
Cash and due from banks—intercompany	30	3,721	(3,751)	—	—
Deposits with banks	—	3,206	176,619	—	179,825
Deposits with banks—intercompany	3,000	5,954	(8,954)	—	—
Federal funds sold and resale agreements	—	216,269	49,257	—	265,526
Federal funds sold and resale agreements—intercompany	—	12,838	(12,838)	—	—
Trading account assets	276	152,241	110,432	—	262,949
Trading account assets—intercompany	741	2,125	(2,866)	—	—
Investments	8	243	349,465	—	349,716
Loans, net of unearned income	—	1,036	670,144	—	671,180
Loans, net of unearned income—intercompany	—	—	—	—	—
Allowance for loan losses	—	—	(12,126)	—	(12,126)
Total loans, net	\$ —	\$ 1,036	\$ 658,018	\$ —	\$ 659,054
Advances to subsidiaries	\$ 143,693	\$ —	\$ (143,693)	\$ —	\$ —
Investments in subsidiaries	207,960	—	—	(207,960)	—
Other assets ⁽¹⁾	12,467	61,339	100,381	—	174,187
Other assets—intercompany	3,670	45,236	(48,906)	—	—
Total assets	\$ 371,846	\$ 504,729	\$ 1,243,719	\$ (207,960)	\$ 1,912,334
Liabilities and equity					
Deposits	\$ —	\$ —	\$ 996,730	\$ —	\$ 996,730
Deposits—intercompany	—	—	—	—	—
Federal funds purchased and securities loaned or sold	—	156,107	21,721	—	177,828
Federal funds purchased and securities loaned or sold—intercompany	—	23,745	(23,745)	—	—
Trading account liabilities	5	93,880	46,860	—	140,745
Trading account liabilities—intercompany	341	2,055	(2,396)	—	—
Short-term borrowings	276	3,109	33,848	—	37,233
Short-term borrowings—intercompany	—	34,575	(34,575)	—	—
Long-term debt	148,601	22,874	65,347	—	236,822
Long-term debt—intercompany	—	59,737	(59,737)	—	—
Advances from subsidiaries	19,634	—	(19,634)	—	—
Other liabilities	2,606	67,487	51,915	—	122,008
Other liabilities—intercompany	289	8,852	(9,141)	—	—
Stockholders' equity	200,094	32,308	176,526	(207,960)	200,968
Total liabilities and equity	\$ 371,846	\$ 504,729	\$ 1,243,719	\$ (207,960)	\$ 1,912,334

(1) Other assets for Citigroup parent company at June 30, 2018 included \$15.7 billion of placements to Citibank and its branches, of which \$11.4 billion had a remaining term of less than 30 days.

Condensed Consolidating Balance Sheet

In millions of dollars	December 31, 2017				
	Citigroup parent company	CGMHI	Other Citigroup subsidiaries and eliminations	Consolidating adjustments	Citigroup consolidated
Assets					
Cash and due from banks	\$—	\$378	\$23,397	\$—	\$23,775
Cash and due from banks—intercompany	13	3,750	(3,763)) —	—
Deposits with banks	—	3,348	153,393	—	156,741
Deposits with banks—intercompany	11,000	5,219	(16,219)) —	—
Federal funds sold and resale agreements	—	182,685	49,793	—	232,478
Federal funds sold and resale agreements—intercompany	—	16,091	(16,091)) —	—
Trading account assets	—	139,462	113,328	—	252,790
Trading account assets—intercompany	38	2,711	(2,749)) —	—
Investments	27	181	352,082	—	352,290
Loans, net of unearned income	—	900	666,134	—	667,034
Loans, net of unearned income—intercompany	—	—	—	—	—
Allowance for loan losses	—	—	(12,355)	) —	(12,355)
Total loans, net	\$—	\$900	\$653,779	\$—	\$654,679
Advances to subsidiaries	\$139,722	\$—	\$(139,722)) \$—	\$—
Investments in subsidiaries	210,537	—	—	(210,537)) —
Other assets ⁽¹⁾	10,844	58,299	100,569	—	169,712
Other assets—intercompany	3,428	43,613	(47,041)) —	—
Total assets	\$375,609	\$456,637	\$1,220,756	\$(210,537)	) \$1,842,465
Liabilities and equity					
Deposits	\$—	\$—	\$959,822	\$—	\$959,822
Deposits—intercompany	—	—	—	—	—
Federal funds purchased and securities loaned or sold	—	134,888	21,389	—	156,277
Federal funds purchased and securities loaned or sold—intercompany	—	18,597	(18,597)) —	—
Trading account liabilities	—	80,801	44,369	—	125,170
Trading account liabilities—intercompany	15	2,182	(2,197)) —	—
Short-term borrowings	251	3,568	40,633	—	44,452
Short-term borrowings—intercompany	—	32,871	(32,871)) —	—
Long-term debt	152,163	18,048	66,498	—	236,709
Long-term debt—intercompany	—	60,765	(60,765)) —	—
Advances from subsidiaries	19,136	—	(19,136)) —	—
Other liabilities	2,673	62,113	53,577	—	118,363
Other liabilities—intercompany	631	9,753	(10,384)) —	—
Stockholders' equity	200,740	33,051	178,418	(210,537)	) 201,672
Total liabilities and equity	\$375,609	\$456,637	\$1,220,756	\$(210,537)	) \$1,842,465

(1) Other assets for Citigroup parent company at December 31, 2017 included \$29.7 billion of placements to Citibank and its branches, of which \$18.9 billion had a remaining term of less than 30 days.

Condensed Consolidating Statement of Cash Flows

In millions of dollars	Six Months Ended June 30, 2018				
	Citigroup parent company	CGMHI	Other Citigroup subsidiaries and eliminations	Consolidating adjustments	Citigroup consolidated
Net cash provided by operating activities of continuing operations	\$5,156	\$1,207	\$1,956	\$	—\$ 8,319
Cash flows from investing activities of continuing operations					
Purchases of investments	\$(7,955)	\$—	\$(77,916)	\$	—\$(85,871)
Proceeds from sales of investments	7,634	—	34,174	—	41,808
Proceeds from maturities of investments	—	—	48,846	—	48,846
Change in loans	—	—	(10,132)	—	(10,132)
Proceeds from sales and securitizations of loans	—	—	3,217	—	3,217
Change in federal funds sold and resales	—	(30,331)	(2,717)	—	(33,048)
Changes in investments and advances—intercompany	(4,780)	(1,872)	6,652	—	—
Other investing activities	212	(26)	(1,635)	—	(1,449)
Net cash provided by (used in) investing activities of continuing operations	\$(4,889)	\$(32,229)	\$ 489	\$	—\$(36,629)
Cash flows from financing activities of continuing operations					
Dividends paid	\$(2,232)	\$—	\$—	\$	—\$(2,232)
Redemption of preferred stock	(218)	—	—	—	(218)
Treasury stock acquired	(4,686)	—	—	—	(4,686)
Proceeds (repayments) from issuance of long-term debt, net	(1,167)	5,805	1,032	—	5,670
Proceeds (repayments) from issuance of long-term debt—intercompany, net	—	(1,025)	1,025	—	—
Change in deposits	—	—	36,908	—	36,908
Change in federal funds purchased and repos	—	26,367	(4,816)	—	21,551
Change in short-term borrowings	32	(459)	(6,792)	—	(7,219)
Net change in short-term borrowings and other advances—intercompany	497	1,704	(2,201)	—	—
Capital contributions from (to) parent	—	(663)	663	—	—
Other financing activities	(475)	—	—	—	(475)
Net cash provided by (used in) financing activities of continuing operations	\$(8,249)	\$31,729	\$ 25,819	\$	—\$ 49,299
Effect of exchange rate changes on cash and due from banks	\$—	\$—	\$(603)	\$	—\$(603)
Change in cash and due from banks, and deposits with banks	\$(7,982)	\$707	\$ 27,661	\$	—\$ 20,386
Cash and due from banks, and deposits with banks at beginning of period	11,013	12,695	156,808	—	180,516
Cash and due from banks, and deposits with banks at end of period	\$3,031	\$13,402	\$ 184,469	\$	—\$ 200,902
Cash and due from banks	\$31	\$4,242	\$ 16,804	\$	—\$ 21,077

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Deposits with banks	3,000	9,160	167,665	—	179,825
Cash and due from banks, and deposits with banks at end of period	\$3,031	\$13,402	\$184,469	\$	—\$200,902
Supplemental disclosure of cash flow information for continuing operations					
Cash paid (received) during the year for income taxes	\$941	\$42	\$1,256	\$	—\$2,239
Cash paid during the year for interest	1,729	3,676	4,552	—	9,957
Non-cash investing activities					
Transfers to loans HFS from loans	\$—	\$—	\$2,900	\$	—\$2,900
Transfers to OREO and other repossessed assets	—	—	55	—	55

Condensed Consolidating Statement of Cash Flows

In millions of dollars	Six Months Ended June 30, 2017				
	Citigroup parent company	CGMHI	Other Citigroup subsidiaries and eliminations	Consolidating adjustments	Citigroup consolidated
Net cash provided by (used in) operating activities of continuing operations	\$983	\$(18,060)	\$(4,536)	\$	—\$(21,613)
Cash flows from investing activities of continuing operations					
Purchases of investments	\$—	\$—	\$(96,925)	\$	—\$(96,925)
Proceeds from sales of investments	132	—	56,596	—	56,728
Proceeds from maturities of investments	—	—	47,785	—	47,785
Change in loans	—	—	(29,952)	—	(29,952)
Proceeds from sales and securitizations of loans	—	—	6,256	—	6,256
Proceeds from significant disposals	—	—	2,732	—	2,732
Change in federal funds sold and resales	—	4,649	(1,901)	—	2,748
Changes in investments and advances—intercompany	12,132	(5,870)	(6,262)	—	—
Other investing activities	—	—	(1,330)	—	(1,330)
Net cash provided by (used in) investing activities of continuing operations	\$12,264	\$(1,221)	\$(23,001)	\$	—\$(11,958)
Cash flows from financing activities of continuing operations					
Dividends paid	\$(1,504)	\$—	\$—	\$	—\$(1,504)
Treasury stock acquired	(3,635)	—	—	—	(3,635)
Proceeds (repayments) from issuance of long-term debt, net	3,139	3,887	9,336	—	16,362
Proceeds (repayments) from issuance of long-term debt—intercompany, net	—	(3,100)	3,100	—	—
Change in deposits	—	—	29,337	—	29,337
Change in federal funds purchased and repos	—	4,564	8,395	—	12,959
Change in short-term borrowings	—	1,861	3,957	—	5,818
Net change in short-term borrowings and other advances—intercompany	(20,497)	907	19,590	—	—
Other financing activities	(401)	—	—	—	(401)
Net cash provided by (used in) financing activities of continuing operations	\$(22,898)	\$8,119	\$73,715	\$	—\$58,936
Effect of exchange rate changes on cash and due from banks	\$—	\$—	\$223	\$	—\$223
Change in cash and due from banks, and deposits with banks	\$(9,651)	\$(11,162)	\$46,401	\$	—\$25,588
Cash and due from banks, and deposits with banks at beginning of period	20,811	25,118	114,565	—	160,494
Cash and due from banks, and deposits with banks at end of period	\$11,160	\$13,956	\$160,966	\$	—\$186,082
Cash and due from banks	\$160	\$3,636	\$17,144	\$	—\$20,940
Deposits with banks	11,000	10,320	143,822	—	165,142

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Cash and due from banks, and deposits with banks at end of period	\$11,160	\$13,956	\$160,966	\$	—\$186,082
Supplemental disclosure of cash flow information for continuing operations					
Cash paid during the year for income taxes	\$679	\$152	\$1,144	\$	—\$1,975
Cash paid during the year for interest	2,212	1,924	3,193	—	7,329
Non-cash investing activities					
Transfers to loans HFS from loans	\$—	\$—	\$3,300	\$	—\$3,300
Transfers to OREO and other repossessed assets	—	—	58	—	58

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UNREGISTERED SALES OF EQUITY SECURITIES, PURCHASES OF EQUITY SECURITIES AND DIVIDENDS

Unregistered Sales of Equity Securities

None.

Equity Security Repurchases

The following table summarizes Citi's equity security repurchases, which consisted entirely of common stock repurchases:

In millions, except per share amounts	Total shares purchased	Average value of price paid per share	Approximate dollar shares that may yet be purchased under the plan or programs
April 2018			
Open market repurchases ⁽¹⁾	13.9	\$ 69.54	\$ 1,385
Employee transactions ⁽²⁾	—	—	N/A
May 2018			
Open market repurchases ⁽¹⁾	11.0	69.40	618
Employee transactions ⁽²⁾	—	—	N/A
June 2018			
Open market repurchases ⁽¹⁾	8.5	67.24	—
Employee transactions ⁽²⁾	—	—	N/A
Total for 2Q18 and remaining program balance as of June 30, 2018	33.4	\$ 68.91	\$ —

Represents repurchases under the \$15.6 billion 2017 common stock repurchase program (2017 Repurchase Program) that was approved by Citigroup's Board of Directors and announced on June 28, 2017. The 2017 Repurchase Program was part of the planned capital actions included by Citi in its 2017 Comprehensive Capital Analysis and Review (CCAR). Shares repurchased under the 2017 Repurchase Program were added to treasury (1) stock. The 2017 Repurchase Program expired on June 30, 2018. On June 28, 2018, Citigroup announced a \$17.6 billion stock repurchase program during the four quarters beginning in the third quarter of 2018 (2018 Repurchase Program), which was part of the planned capital actions included by Citi as part of its 2018 CCAR. The 2018 Repurchase Program expires on June 30, 2019. Shares repurchased under the 2018 Repurchase Program will be added to treasury stock.

Consisted of shares added to treasury stock related to (i) certain activity on employee stock option program (2) exercises where the employee delivers existing shares to cover the option exercise, or (ii) under Citi's employee restricted share awards where shares are withheld to satisfy tax requirements.

N/A Not applicable

Dividends

In addition to Board of Directors' approval, Citi's ability to pay common stock dividends substantially depends on regulatory approval, including an annual regulatory review of the results of the CCAR process required by the Federal Reserve Board and the supervisory stress tests required under the Dodd-Frank Act. For additional information regarding Citi's capital planning and stress testing, see "Capital Resources—Current Regulatory Capital Standards" and "Regulatory Capital Standards Developments" above and "Risk Factors—Strategic Risks" and "Stress Testing Component on

Capital Planning” in Citi’s 2017 Annual Report on Form 10-K.

On June 28, 2018, Citi announced that the Federal Reserve Board did not object to its planned capital actions as part of the 2018 CCAR, which, among other things, included an increase of Citi’s quarterly common stock dividend to \$0.45 per share over the four quarters beginning with the third quarter of 2018 (subject to quarterly approval by the Board of Directors). Any dividend on Citi’s outstanding common stock would also need to be made in compliance with Citi’s obligations on its outstanding preferred stock.

For information on the ability of Citigroup’s subsidiary depository institutions to pay dividends, see Note 18 to the Consolidated Financial Statements in Citi’s 2017 Annual Report on Form 10-K.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on the 31st day of July, 2018.

CITIGROUP INC.
(Registrant)

By /s/ John C. Gerspach
John C. Gerspach
Chief Financial Officer
(Principal Financial Officer)

By /s/ Raja J. Akram
Raja J. Akram
Controller and Chief Accounting Officer
(Principal Accounting Officer)

EXHIBIT INDEX

Exhibit

Number Description of Exhibit

<u>3.01+</u>	<u>Restated Certificate of Incorporation of Citigroup Inc., as amended, as in effect on the date hereof.</u>
<u>10.02.4*</u>	<u>Citigroup 2014 Stock Incentive Plan (as amended and restated as of April 24, 2018), incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed April 30, 2018 (File No. 001-09924).</u>
<u>12.01+</u>	<u>Calculation of Ratio of Income to Fixed Charges.</u>
<u>12.02+</u>	<u>Calculation of Ratio of Income to Fixed Charges Including Preferred Stock Dividends.</u>
<u>31.01+</u>	<u>Certification of principal executive officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</u>
<u>31.02+</u>	<u>Certification of principal financial officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</u>
<u>32.01+</u>	<u>Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</u>
<u>101.01+</u>	<u>Financial statements from the Quarterly Report on Form 10-Q of the Company for the quarter ended June 30, 2018, filed on July 31, 2018, formatted in XBRL: (i) the Consolidated Statement of Income, (ii) the Consolidated Balance Sheet, (iii) the Consolidated Statement of Changes in Equity, (iv) the Consolidated Statement of Cash Flows and (v) the Notes to Consolidated Financial Statements.</u>

The total amount of securities authorized pursuant to any instrument defining rights of holders of long-term debt of the Company does not exceed 10% of the total assets of the Company and its consolidated subsidiaries. The Company will furnish copies of any such instrument to the SEC upon request.

* Denotes a management contract or compensatory plan or arrangement.

+ Filed herewith.