## **UNITED STATES** SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

	FORM 10	-Q	
(Mark One)			
X	QUARTERLY REPORT PURSUANT TO SECTION 13 CO. OF 193		RITIES EXCHANGE ACT
	For the quarterly period	ended June 30, 2019	
	OR		
	TRANSITION REPORT PURSUANT TO SECTION 13 CO. OF 193		RITIES EXCHANGE ACT
	For the transition per	riod from to	
	Commission file numb	oer 1-9924	
	Citigroup	Inc.	
	(Exact name of registrant as spe		
	Delaware	52-1568	
	(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Ide	· · · · · · · · · · · · · · · · · · ·
	388 Greenwich Street, New York NY (Address of principal executive offices)	1001: (Zip co	
	(212) 559-1000	` *	uc)
	(Registrant's telephone number, in		
Securities re	gistered pursuant to Section 12(b) of the Securities Exchange Act	of 1934 formatted in Inline	XBRL: See Exhibit 99.01
Act of 1934	check mark whether the registrant (1) has filed all reports required during the preceding 12 months (or for such shorter period that to to such filing requirements for the past 90 days. Yes 🗵 No 🗆		
Rule 405 of	check mark whether the registrant has submitted electronically e Regulation S-T (§232.405 of this chapter) during the preceding 12 submit such files). Yes $old Z$ No $\Box$		
an emerging	check mark whether the registrant is a large accelerated filer, an g growth company. See the definitions of "large accelerated filer," growth company" in Rule 12b-2 of the Exchange Act.		
Large ac	ccelerated filer 🗵 Accelerated filer 🗆 Non-	-accelerated filer	Smaller reporting company □
			Emerging growth company $\Box$
	ing growth company, indicate by check mark if the registrant has w or revised financial accounting standards provided pursuant to		
Indicate by	check mark whether the registrant is a shell company (as defined	in Rule 12b-2 of the Exchar	nge Act). Yes □ No 🗷
	Number of shares of Citigroup Inc. common stock out	standing on June 30, 2019:	2,259,056,466

Available on the web at www.citigroup.com

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#### **OVERVIEW**

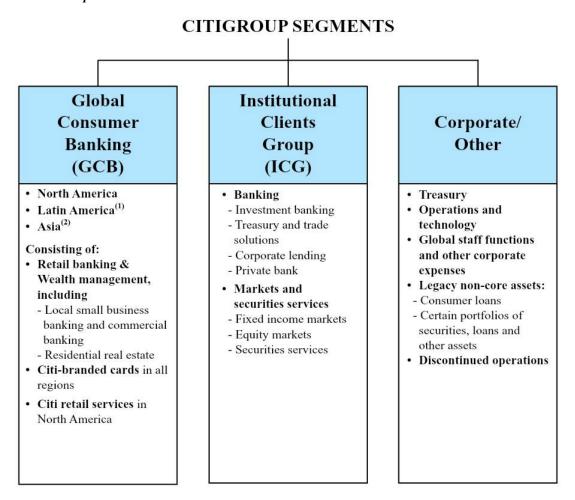
This Quarterly Report on Form 10-Q should be read in conjunction with Citigroup's Annual Report on Form 10-K for the year ended December 31, 2018 (2018 Annual Report on Form 10-K) and Citigroup's Quarterly Report on Form 10-Q for the quarter ended March 31, 2019 (First Quarter of 2019 Form 10-Q).

Additional information about Citigroup is available on Citi's website at <a href="www.citigroup.com">www.citigroup.com</a>. 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.

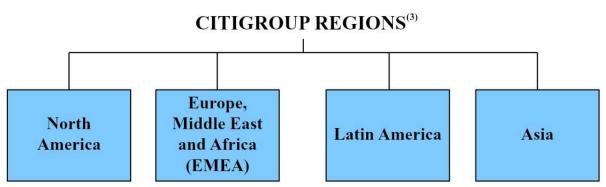
Certain reclassifications, including a realignment of certain businesses, have been made to the prior periods' financial statements and disclosures to conform to the current period's presentation. For additional information on certain recent reclassifications, see Notes 1 and 3 to the Consolidated Financial Statements below and Notes 1 and 3 to the Consolidated Financial Statements in Citi's 2018 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 2019—Results Demonstrated Continued Progress

As described further throughout this Executive Summary, during the second quarter of 2019, Citi continued to demonstrate steady progress toward improving its profitability and returns, despite an uncertain environment. During the quarter, Citi had revenue growth and positive operating leverage in every region in *Global Consumer Banking (GCB)*, excluding the impact of foreign currency translation into U.S. dollars for reporting purposes (FX translation). (Citi's results of operations excluding the impact of FX translation are non-GAAP financial measures.)

Citi also showed continued momentum across treasury and trade solutions, securities services and the private bank in the *Institutional Clients Group (ICG)*, while investment banking and fixed income and equity markets revenues were impacted by a challenging market environment. Citi's results in the quarter also included a pretax gain of approximately \$350 million (approximately \$270 million after-tax) on Citi's investment in Tradeweb (an electronic trading platform), recorded in fixed income markets within *ICG*.

Citi continued to demonstrate strong expense discipline, resulting in the eleventh consecutive quarter of positive operating leverage. Citi also had deposit and loan growth in both *GCB* and *ICG*, while credit quality remained broadly stable.

In the quarter, Citi continued to return capital to its shareholders, including \$4.6 billion in the form of common stock repurchases and dividends. Citi repurchased approximately 54 million common shares, contributing to a 10% reduction in average outstanding common shares from the prior-year period. Despite progress in returning capital to shareholders, 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 as part of Citi's 2019 Comprehensive Capital Analysis and Review (CCAR). Accordingly, Citi intends to return \$21.5 billion of capital to its common shareholders over the next four quarters, beginning in the third quarter of 2019 (for additional information, see "Equity Security Repurchases" and "Dividends" below).

While global growth has continued, economic forecasts for 2019 have been lowered and various economic, political and other risks and uncertainties could create a more volatile operating environment and 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 2019, 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 2018 Annual Report on Form 10-K.

#### **Second Quarter of 2019 Results Summary**

#### Citigroup

Citigroup reported net income of \$4.8 billion, or \$1.95 per share, compared to net income of \$4.5 billion, or \$1.63 per share, in the prior-year period. Net income increased 7% from the prior-year period, primarily driven by higher revenues, lower expenses and a lower effective tax rate, partially offset by higher cost of credit. Earnings per share increased 20%, including the Tradeweb gain. Excluding the Tradeweb gain, earnings per share of \$1.83 increased 12%, primarily reflecting the 10% reduction in average shares outstanding, driven by the common stock repurchases as well as the lower effective tax rate. (Citi's results of operations excluding gains are non-GAAP financial measures.)

Citigroup revenues of \$18.8 billion in the second quarter of 2019 increased 2% from the prior-year period, reflecting the Tradeweb gain and higher revenues across *GCB*, partially offset by declines in investment banking and fixed income and equity markets revenues, as well as mark-to-market losses on loan hedges in *ICG*.

Citigroup's end-of-period loans increased 3% to \$689 billion versus the prior-year period. Excluding the impact of FX translation, Citigroup's end-of-period loans also grew 3%, as 4% aggregate growth in *GCB* and *ICG* was partially offset by the continued wind-down of legacy assets in *Corporate/Other*. Citigroup's end-of-period deposits increased 5% to \$1.0 trillion versus the prior-year period. Excluding the impact of FX translation, Citigroup's deposits also increased 5%, primarily driven by 6% growth in *ICG* deposits as well as 3% growth in *GCB*.

#### Expenses

Citigroup operating expenses of \$10.5 billion decreased 2% versus the prior-year period, as efficiency savings and the wind-down of legacy assets were partially offset by continued investments and volume-driven growth. Year-over-year, *ICG* operating expenses were down 2% and *Corporate/Other* operating expenses decreased 20%, while *GCB* operating expenses were largely unchanged.

#### Cost of Credit

Citi's total provisions for credit losses and for benefits and claims of \$2.1 billion increased 16% from the prior-year period. The increase was primarily driven by higher net credit losses in both Citi-branded cards and Citi retail services in *North America GCB* as well as normalization in credit trends in *ICG*.

Net credit losses of \$2.0 billion increased 15% versus the prior-year period. Consumer net credit losses of \$1.9 billion increased 11% from the prior-year period, primarily reflecting volume growth and seasoning in the *North America* cards portfolios. Corporate net credit losses increased to \$70 million from a net recovery of \$2 million in the prior-year period, reflecting credit normalization in *ICG*. 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 were 11.9% and 13.4% as of June 30, 2019, respectively, compared to 12.1% and 13.8% as of June 30, 2018, both based on the Basel III Standardized Approach for determining risk-weighted assets. The decline in regulatory capital ratios primarily reflected the return of capital to common shareholders, partially offset by net income. Citigroup's Supplementary Leverage ratio as of June 30, 2019 was 6.4%, compared to 6.6% as of June 30, 2018. For additional information on Citi's capital ratios and related components, see "Capital Resources" below.

#### **Global Consumer Banking**

GCB net income of \$1.4 billion increased 11%. Excluding the impact of FX translation, net income also increased 11%, driven primarily by higher revenues and a lower effective tax rate, partially offset by higher expenses and cost of credit. GCB operating expenses of \$4.7 billion were largely unchanged versus the prior-year period. Excluding the impact of FX translation, expenses increased 1%, as continued investments and volume-driven expenses were largely offset by efficiency savings.

GCB revenues of \$8.5 billion increased 3% versus the prior-year period. Excluding the impact of FX translation, revenues increased 4%, driven by growth in all three regions. North America GCB revenues of \$5.2 billion increased 3%, primarily driven by growth in Citi-branded cards and Citi retail services, as retail banking revenues were largely unchanged. In North America GCB, Citi-branded cards revenues of \$2.2 billion increased 7%, primarily driven by growth in interest-earning balances. Citi retail services revenues of \$1.6 billion increased 1% versus the prior-year period, primarily reflecting loan growth, partially offset by higher contractual partner payments. Retail banking revenues of \$1.4 billion were largely unchanged versus the prior-year period. Excluding mortgage revenues, retail banking revenues of \$1.2 billion increased 1% from the prior-year period, as improved growth in deposit volumes was partially offset by lower deposit spreads in commercial banking.

North America GCB average deposits of \$183 billion increased 2% year-over-year, average retail banking loans of \$58 billion increased 4% year-over-year and assets under management of \$68 billion grew 12%. Average Citi-branded card loans of \$88 billion increased 2%, while Citi-branded card purchase sales of \$93 billion increased 8% versus the prior-year period. Average Citi retail services loans of \$49 billion increased 5% versus the prior-year period, while Citi retail services purchase sales of \$23 billion increased 4%. For additional information on the results of operations of North America GCB for the second quarter of 2019, 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)) of \$3.3 billion increased 3%

versus the prior-year period. Excluding the impact of FX translation, international GCB revenues increased 4% versus the prior-year period. On this basis, *Latin America GCB* revenues increased 3% versus the prior-year period, including the impact of the revenues associated with an asset management business in Mexico sold in the third quarter of 2018. Excluding this impact, *Latin America GCB* revenues increased 5%, primarily driven by an increase in cards revenues and improved deposit spreads. Asia GCB revenues increased 5%, including a gain from a building sale. Excluding this gain, revenues increased 3%, primarily driven by higher deposit revenues as well as a recovery in investment revenues. For additional information on the results of operations of *Latin* America GCB and Asia GCB for the second quarter of 2019, 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 \$130 billion increased 5%, average retail banking loans of \$90 billion increased 2%, assets under management of \$108 billion increased 5%, average card loans of \$25 billion increased 4% and card purchase sales of \$26 billion increased 6%, all excluding the impact of FX translation.

#### Institutional Clients Group

*ICG* net income of \$3.3 billion increased 3%, primarily driven by a decrease in expenses and a lower effective tax rate, partially offset by higher cost of credit. *ICG* operating expenses decreased 2% to \$5.4 billion, as efficiency savings more than offset investments and volume-related expenses.

*ICG* revenues of \$9.7 billion were largely unchanged in the second quarter of 2019, as the Tradeweb gain was offset by a 3% decrease in *Banking* revenues and a 4% decrease in *Markets and securities services* revenues. The decrease in *Banking* revenues included the impact of \$75 million of losses on loan hedges within corporate lending, compared to gains of \$23 million in the prior-year period.

Banking revenues of \$5.1 billion (excluding the impact of gains (losses) on loan hedges within corporate lending) decreased 1%, as growth in treasury and trade solutions and the private bank was more than offset by lower revenues in investment banking and corporate lending. Investment banking revenues of \$1.3 billion decreased 10%, but outperformed the market wallet. Advisory revenues decreased 36% to \$232 million, equity underwriting revenues decreased 6% to \$314 million and debt underwriting revenues increased 2% to \$737 million, all versus the prior-year period.

Treasury and trade solutions revenues of \$2.4 billion increased 4% versus the prior-year period, and 7% excluding the impact of FX translation, reflecting continued strong client engagement, with growth in deposits and transaction volumes as well as improved trade spreads. Private bank revenues increased 2% to \$866 million versus the prior-year period, reflecting growth with new and existing clients, which drove higher lending and deposit volumes as well as growth in assets under management, partially offset by spread compression. Corporate lending revenues decreased 24% to \$463 million. Excluding the impact of gains (losses) on loan hedges,

corporate lending revenues decreased 9% versus the prior-year period, reflecting lower spreads and higher hedging costs.

Markets and securities services revenues of \$4.7 billion increased 4% from the prior-year period, including the Tradeweb gain. Excluding the Tradeweb gain, Markets and securities services revenues decreased 4% from the prior-year period, as higher revenues in securities services were more than offset by lower fixed income and equity markets revenues. Fixed income markets revenues of \$3.3 billion increased 8% from the prior-year period, including the Tradeweb gain. Excluding the Tradeweb gain, fixed income markets revenues decreased 4%, reflecting the challenging market environment, particularly in rates. Equity markets revenues of \$790 million decreased 9%, primarily reflecting lower client activity in cash equities and prime finance, partially offset by strong corporate client activity in derivatives. Securities services revenues of \$682 million increased 3% versus the prior-year period, and 7% excluding the impact of FX translation, reflecting higher rates as well as an increase in client activity. For additional information on the results of operations of *ICG* for the second quarter of 2019, see "Institutional Clients Group" below.

#### Corporate/Other

Corporate/Other net income was \$54 million in the second quarter of 2019, compared to a net loss of \$14 million in the prior-year period. Operating expenses of \$481 million declined 20% from the prior-year period, largely reflecting the wind-down of legacy assets. Corporate/Other revenues of \$532 million increased 1% from the prior-year period, as higher treasury revenues and gains were largely offset by the continued wind-down of legacy assets. For additional information on the results of operations of Corporate/Other for the second quarter of 2019, see "Corporate/Other" below.

### **RESULTS OF OPERATIONS**

### SUMMARY OF SELECTED FINANCIAL DATA—PAGE 1

Citigroup Inc. and Consolidated Subsidiaries

	Second	Qua	arter	. ,		_		
In millions of dollars, except per share amounts and ratios	2019		2018	% Change		2019	2018	% Change
Net interest revenue	\$ 11,950	\$	11,665	2 %	\$	23,709	\$ 22,837	4 %
Non-interest revenue	6,808		6,804	_		13,625	14,504	(6)
Revenues, net of interest expense	\$ 18,758	\$	18,469	2 %	\$	37,334	\$ 37,341	<b>— %</b>
Operating expenses	10,500		10,712	(2)		21,084	21,637	(3)
Provisions for credit losses and for benefits and claims	2,093		1,812	16		4,073	3,669	11
Income from continuing operations before income taxes	\$ 6,165	\$	5,945	4 %	\$	12,177	\$ 12,035	1 %
Income taxes	1,373		1,444	(5)		2,648	2,885	(8)
Income from continuing operations	\$ 4,792	\$	4,501	6 %	\$	9,529	\$ 9,150	4 %
Income from discontinued operations, net of taxes <sup>(1)</sup>	17		15	13		15	8	88
Net income before attribution of noncontrolling interests	\$ 4,809	\$	4,516	6 %	\$	9,544	\$ 9,158	4 %
Net income attributable to noncontrolling interests	10		26	(62)		35	48	(27)
Citigroup's net income	\$ 4,799	\$	4,490	7 %	\$	9,509	\$ 9,110	4 %
Less:								
Preferred dividends—Basic	\$ 296	\$	318	(7)%	\$	558	\$ 590	(5)%
Dividends and undistributed earnings allocated to employee restricted and deferred shares that contain nonforfeitable rights to dividends, applicable to basic EPS	50		49	2		109	90	21
Income allocated to unrestricted common shareholders for basic and diluted EPS	\$ 4,453	\$	4,123	8 %	\$	8,842	\$ 8,430	5 %
Earnings per share								
Basic								
Income from continuing operations	\$ 1.94	\$	1.62	20 %	\$	3.81	\$ 3.30	15 %
Net income	1.95		1.63	20		3.82	3.31	15
Diluted								
Income from continuing operations	\$ 1.94	\$	1.62	20 %	\$	3.81	\$ 3.30	15 %
Net income	1.95		1.63	20		3.82	3.31	15
Dividends declared per common share	0.45		0.32	41		0.90	0.64	41

Table continues on the next page, including footnotes.

#### SUMMARY OF SELECTED FINANCIAL DATA—PAGE 2

Citigroup Inc. and Consolidated Subsidiaries

	Second	Quarter		Six Mo	Six Months				
In millions of dollars, except per share amounts, ratios and direct staff	2019	2018	% Change	2019	2018	% Change			
At June 30:									
Total assets	\$1,988,226	\$1,912,334	4%						
Total deposits	1,045,607	996,730	5						
Long-term debt	252,189	236,822	6						
Citigroup common stockholders' equity	179,379	181,059	(1)						
Total Citigroup stockholders' equity	197,359	200,094	(1)						
Direct staff (in thousands)	200	205	(2)						
Performance metrics									
Return on average assets	0.97%	0.94%	)	0.98%	0.96%	)			
Return on average common stockholders' equity <sup>(2)</sup>	10.1	9.2		10.2	9.5				
Return on average total stockholders' equity <sup>(2)</sup>	9.8	9.0		9.8	9.2				
Efficiency ratio (total operating expenses/total revenues)	56.0	58.0		56.5	57.9				
Basel III ratios									
Common Equity Tier 1 Capital <sup>(3)</sup>	11.89%	12.14%	)						
Tier 1 Capital <sup>(3)</sup>	13.43	13.77							
Total Capital <sup>(3)</sup>	16.36	16.31							
Supplementary Leverage ratio	6.38	6.60							
Citigroup common stockholders' equity to assets	9.02%	9.47%	)						
Total Citigroup stockholders' equity to assets	9.93	10.46							
Dividend payout ratio <sup>(4)</sup>	23.1	19.6		23.6%	19.3%	)			
Total payout ratio <sup>(5)</sup>	102.5	74.9		108.9	73.1				
Book value per common share	\$ 79.40	\$ 71.95	10%						
Tangible book value (TBV) per share <sup>(6)</sup>	67.64	61.29	10						

- (1) See Note 2 to the Consolidated Financial Statements in Citi's 2018 Annual Report on Form 10-K for additional information on Citi's discontinued operations.
- (2) The return on average common stockholders' equity is calculated using net income less preferred stock dividends 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.
- (3) 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, whereas the reportable Total Capital ratio was the lower derived under the U.S. Basel III Advanced Approaches framework. 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.
- (4) Dividends declared per common share as a percentage of net income per diluted share.
- (5) 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.
- (6) For information on TBV, see "Capital Resources—Tangible Common Equity, Book Value Per Share, Tangible Book Value Per Share and Returns on Equity" below.

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

### **CITIGROUP INCOME**

	Second	Qua	arter			Six M	lonths		
In millions of dollars	2019		2018	% Change	2019		2018		% Change
Income from continuing operations									
Global Consumer Banking									
North America	\$ 721	\$	719	<b>— %</b>	\$	1,490	\$	1,557	(4)%
Latin America	262		197	33		514		376	37
Asia <sup>(1)</sup>	430		360	19		846		733	15
Total	\$ 1,413	\$	1,276	11 %	\$	2,850	\$	2,666	7 %
Institutional Clients Group									
North America	\$ 1,022	\$	1,030	(1)%	\$	1,736	\$	1,888	(8)%
EMEA	1,005		986	2		2,130		2,099	1
Latin America	491		517	(5)		994		1,011	(2)
Asia	825		708	17		1,805		1,577	14
Total	\$ 3,343	\$	3,241	3 %	\$	6,665	\$	6,575	1 %
Corporate/Other	36		(16)	NM		14		(91)	NM
Income from continuing operations	\$ 4,792	\$	4,501	6 %	\$	9,529	\$	9,150	4 %
Discontinued operations	\$ 17	\$	15	13 %	\$	15	\$	8	88 %
Less: Net income attributable to noncontrolling interests	10		26	(62)		35		48	(27)
Citigroup's net income	\$ 4,799	\$	4,490	7 %	\$	9,509	\$	9,110	4 %

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

### CITIGROUP REVENUES

	Second Qua	arter				
In millions of dollars	 2019	2018	% Change	2019	2018	% Change
Global Consumer Banking						
North America	\$ 5,158 \$	5,004	3 %	\$ 10,343	\$ 10,161	2 %
Latin America	1,432	1,375	4	2,813	2,715	4
Asia <sup>(1)</sup>	1,915	1,865	3	3,800	3,794	_
Total	\$ 8,505 \$	8,244	3 %	\$ 16,956	\$ 16,670	2 %
Institutional Clients Group						
North America	\$ 3,478 \$	3,511	(1)%	\$ 6,597	\$ 6,777	(3)%
EMEA	2,960	3,043	(3)	6,130	6,210	(1)
Latin America	1,195	1,168	2	2,355	2,384	(1)
Asia	2,088	1,975	6	4,333	4,181	4
Total	\$ 9,721 \$	9,697	— %	\$ 19,415	\$ 19,552	(1)%
Corporate/Other	532	528	1	963	1,119	(14)
Total Citigroup net revenues	\$ 18,758 \$	18,469	2 %	\$ 37,334	\$ 37,341	<u> </u>

<sup>(1)</sup> 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	orporate/Other and consolidating eliminations <sup>(2)</sup>		Citigroup parent company- ssued long-term debt and stockholders' equity <sup>(3)</sup>	Total Citigroup consolidated
Assets						
Cash and deposits with banks	\$ 9,323	\$ 71,804	\$ 122,116	\$	<del>_</del>	\$ 203,243
Securities borrowed and purchased under agreements to resell	175	259,341	253		_	259,769
Trading account assets	1,041	295,151	10,639		_	306,831
Investments	1,064	117,471	231,167		_	349,702
Loans, net of unearned income and allowance for loan losses	304,569	360,298	11,337		_	676,204
Other assets	38,943	110,571	42,963		_	192,477
Net inter-segment liquid assets(4)	81,471	239,509	(320,980)	)	_	_
Total assets	\$ 436,586	\$ 1,454,145	\$ 97,495	\$	_	\$ 1,988,226
Liabilities and equity						_
Total deposits	\$ 315,923	\$ 714,759	\$ 14,925	\$	_	\$ 1,045,607
Securities loaned and sold under agreements to repurchase	4,255	176,844	34		_	181,133
Trading account liabilities	411	135,394	489		_	136,294
Short-term borrowings	370	26,646	15,426		<u> </u>	42,442
Long-term debt <sup>(3)</sup>	1,752	53,783	44,513		152,141	252,189
Other liabilities	21,023	92,664	18,764		_	132,451
Net inter-segment funding (lending) <sup>(3)</sup>	92,852	254,055	2,593		(349,500)	_
Total liabilities	\$ 436,586	\$ 1,454,145	\$ 96,744	\$	(197,359)	\$ 1,790,116
Total stockholders' equity <sup>(5)</sup>	_		751		197,359	198,110
Total liabilities and equity	\$ 436,586	\$ 1,454,145	\$ 97,495	\$	_	\$ 1,988,226

<sup>(1)</sup> The supplemental information presented in the table above reflects Citigroup's consolidated GAAP balance sheet by reporting segment as of June 30, 2019. The respective segment information depicts the assets and liabilities managed by each segment as of such date.

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

<sup>(3)</sup> The total stockholders' equity and the majority of long-term debt of Citigroup reside in the Citigroup parent company balance sheet. Citigroup allocates stockholders' equity and long-term debt to its businesses through inter-segment allocations as shown above.

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

<sup>(5)</sup> Corporate/Other equity represents noncontrolling interests.

#### 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 2,399 branches in 19 countries and jurisdictions as of June 30, 2019. At June 30, 2019, GCB had approximately \$437 billion in assets and \$316 billion in deposits.

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 (including commercial banking), Citi serves customers in a somewhat broader set of segments and geographies.

	Second	Qu	arter		ths			
In millions of dollars, except as otherwise noted	2019		2018	% Change	2019		2018	% Change
Net interest revenue	\$ 7,272	\$	7,019	4%	\$ 14,525	\$	13,999	4 %
Non-interest revenue	1,233		1,225	1	2,431		2,671	(9)
Total revenues, net of interest expense	\$ 8,505	\$	8,244	3%	\$ 16,956	\$	16,670	2 %
Total operating expenses	\$ 4,663	\$	4,652	<b>_%</b>	\$ 9,271	\$	9,329	(1)%
Net credit losses	\$ 1,889	\$	1,726	9%	\$ 3,780	\$	3,462	9 %
Credit reserve build (release)	99		154	(36)	175		298	(41)
Provision (release) for unfunded lending commitments	5		3	67%	10		2	NM
Provision for benefits and claims	19		22	(14)	31		48	(35)
Provisions for credit losses and for benefits and claims (LLR & PBC)	\$ 2,012	\$	1,905	6%	\$ 3,996	\$	3,810	5 %
Income from continuing operations before taxes	\$ 1,830	\$	1,687	8%	\$ 3,689	\$	3,531	4 %
Income taxes	417		411	1	839		865	(3)
Income from continuing operations	\$ 1,413	\$	1,276	11%	\$ 2,850	\$	2,666	7 %
Noncontrolling interests	1		1	_	1		3	(67)
Net income	\$ 1,412	\$	1,275	11%	\$ 2,849	\$	2,663	7 %
Balance Sheet data and ratios (in billions of dollars)								
Total EOP assets	\$ 437	\$	422	4%				
Average assets	431		417	3	\$ 429	\$	420	2 %
Return on average assets	1.31%	o	1.23%		1.34%	o	1.28%	
Efficiency ratio	55		56		55		56	
Average deposits	\$ 313	\$	306	2	\$ 312	\$	307	2
Net credit losses as a percentage of average loans	2.45%	o	2.28%		2.46%	ó	2.29%	
Revenue by business								
Retail banking	\$ 3,574	\$	3,483	3%	\$ 7,041	\$	6,947	1 %
Cards <sup>(1)</sup>	4,931		4,761	4	9,915		9,723	2
Total	\$ 8,505	\$	8,244	3%	\$ 16,956	\$	16,670	2 %
Income from continuing operations by business								
Retail banking	\$ 629	\$	577	9%	\$ 1,155	\$	1,097	5 %
Cards <sup>(1)</sup>	784		699	12	1,695		1,569	8
Total	\$ 1,413	\$	1,276	11%	\$ 2,850	\$	2,666	7 %

Table continues on the next page, including footnotes.

Foreign currency (FX) translation impact						ı	
Total revenue—as reported	\$ 8,505 \$	8,244	3%	\$ 16,956	\$ 16	,670	2 %
Impact of FX translation <sup>(2)</sup>	_	(29)		_		(142)	
Total revenues—ex-FX <sup>(3)</sup>	\$ 8,505 \$	8,215	4%	\$ 16,956	\$ 16	,528	3 %
Total operating expenses—as reported	\$ 4,663 \$	4,652	<b>_%</b>	\$ 9,271	\$ 9	,329	(1)%
Impact of FX translation <sup>(2)</sup>	_	(23)		_		(93)	
Total operating expenses—ex-FX <sup>(3)</sup>	\$ 4,663 \$	4,629	1%	\$ 9,271	\$ 9	,236	<b>— %</b>
Total provisions for LLR & PBC—as reported	\$ 2,012 \$	1,905	6%	\$ 3,996	\$ 3	,810	5 %
Impact of FX translation <sup>(2)</sup>	_	(2)		_		(22)	
Total provisions for LLR & PBC—ex-FX <sup>(3)</sup>	\$ 2,012 \$	1,903	6%	\$ 3,996	\$ 3	,788	5 %
Net income—as reported	\$ 1,412 \$	1,275	11%	\$ 2,849	\$ 2	,663	7 %
Impact of FX translation <sup>(2)</sup>	_	(4)		_		(19)	
Net income—ex-FX <sup>(3)</sup>	\$ 1,412 \$	1,271	11%	\$ 2,849	\$ 2	,644	8 %

<sup>(1)</sup> Includes both Citi-branded cards and Citi retail services.

<sup>(2)</sup> Reflects the impact of FX translation into U.S. dollars at the second quarter of 2019 and year-to-date 2019 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, 2019, *North America GCB* had 688 retail bank branches 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, 2019, *North America GCB* had approximately 9.1 million retail banking customer accounts, \$58.3 billion in retail banking loans and \$184.0 billion in deposits. In addition, *North America GCB* had approximately 118.9 million Citi-branded and Citi retail services credit card accounts with \$140.2 billion in outstanding card loan balances.

	Second	Qua	arter		Six N			
In millions of dollars, except as otherwise noted	 2019		2018	% Change	2019		2018	% Change
Net interest revenue	\$ 5,030	\$	4,780	5 %	\$ 10,088	\$	9,530	6 %
Non-interest revenue	128		224	(43)	255		631	(60)
Total revenues, net of interest expense	\$ 5,158	\$	5,004	3 %	\$ 10,343	\$	10,161	2 %
Total operating expenses	\$ 2,720	\$	2,666	2 %	\$ 5,389	\$	5,311	1 %
Net credit losses	\$ 1,428	\$	1,278	12 %	\$ 2,857	\$	2,574	11 %
Credit reserve build (release)	82		115	(29)	180		238	(24)
Provision (release) for unfunded lending commitments	6		2	NM	11		(2)	NM
Provision for benefits and claims	6		5	20	12		11	9
Provisions for credit losses and for benefits and claims	\$ 1,522	\$	1,400	9 %	\$ 3,060	\$	2,821	8 %
Income from continuing operations before taxes	\$ 916	\$	938	(2)%	\$ 1,894	\$	2,029	(7)%
Income taxes	195		219	(11)	404		472	(14)
Income from continuing operations	\$ 721	\$	719	<b>— %</b>	\$ 1,490	\$	1,557	(4)%
Noncontrolling interests			_	_			_	
Net income	\$ 721	\$	719	<u> </u>	\$ 1,490	\$	1,557	(4)%
Balance Sheet data and ratios (in billions of dollars)								
Average assets	\$ 253	\$	244	4 %	\$ 252	\$	246	2 %
Return on average assets	1.14%	ó	1.18%		1.19%	6	1.28%	
Efficiency ratio	53		53		52		52	
Average deposits	\$ 183.0	\$	179.9	2	\$ 182.7	\$	180.4	1
Net credit losses as a percentage of average loans	2.93%	o	2.72%		2.95%	<b>6</b>	2.74%	
Revenue by business								
Retail banking	\$ 1,351	\$	1,348	<u> </u>	\$ 2,667	\$	2,655	<b>— %</b>
Citi-branded cards	2,197		2,062	7	4,392		4,294	2
Citi retail services	1,610		1,594	1	3,284		3,212	2
Total	\$ 5,158	\$	5,004	3 %	\$ 10,343	\$	10,161	2 %
Income from continuing operations by business								
Retail banking	\$ 114	\$	161	(29)%	\$ 197	\$	301	(35)%
Citi-branded cards	364		309	18	746		734	2
Citi retail services	243		249	(2)	547		522	5
Total	\$ 721	\$	719	<u> </u>	\$ 1,490	\$	1,557	(4)%

NM Not meaningful

#### 2Q19 vs. 2Q18

*Net income* was largely unchanged, as higher revenues and a lower effective tax rate were offset by higher cost of credit and higher expenses.

*Revenues* increased 3%, reflecting growth in Citi-branded cards and Citi retail services.

Retail banking revenues were largely unchanged. Excluding mortgage revenues (decline of 9%), revenues were up 1%, as growth in deposit volumes was partially offset by lower deposit spreads in commercial banking. Average deposits increased 2% and assets under management increased 12%. The decline in mortgage revenues was driven by spread compression, partially offset by higher volumes.

Cards revenues increased 4%. In Citi-branded cards, revenues increased 7%, primarily driven by continued growth in interest-earning balances. Average loans increased 2% and purchase sales increased 8%.

Citi retail services revenues increased 1%, primarily driven by organic loan growth and the benefit of the L.L.Bean portfolio acquisition, partially offset by higher contractual partner payments. Average loans increased 5% and purchase sales increased 4%.

*Expenses* increased 2%, as higher volume-related expenses and investments were largely offset by efficiency savings.

*Provisions* increased 9% from the prior-year period, primarily driven by higher net credit losses, partially offset by a lower net loan loss reserve build. Net credit losses increased 12%, primarily driven by higher net credit losses in Citibranded cards (up 10% to \$723 million) and Citi retail services (up 11% to \$654 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 current quarter was \$88 million, reflecting volume growth and seasoning in both cards portfolios (compared to a build of \$117 million in the prior-year period).

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.

For additional information on Citi retail services' cobrand and private label credit card products with Sears, see "Forward-Looking Statements" below and "North America GCB" and "Risk Factors—Strategic Risks" in Citi's 2018 Annual Report on Form 10-K.

#### 2019 YTD vs. 2018 YTD

Year-to-date, *North America GCB* experienced similar trends to those described above. *Net income* decreased 4%, as higher cost of credit and higher expenses were partially offset by a lower effective tax rate and higher revenues.

Revenues increased 2%. Excluding the impact of the \$150 million gain on the Hilton portfolio sale in the prior-year period, revenues increased 3%, reflecting higher revenues in Citi-branded cards and Citi retail services. Retail banking revenues were largely unchanged. Excluding mortgage revenues (decline of 11%), retail banking revenues increased 2%, driven by the same factors described above. Cards revenues increased 2% (4% excluding the Hilton gain). In Citi-branded cards, revenues increased 2% (6% excluding the Hilton gain), driven by the same factors described above. Citi retail services revenues increased 2%, driven by the same factors described above.

*Expenses* increased 1%, driven by the same factors described above.

*Provisions* increased 8%. Net credit losses increased 11%, driven by volume growth and seasoning in both cards portfolios. This increase was partially offset by a 19% 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, 2019, *Latin America GCB* had 1,459 retail branches in Mexico, with approximately 30.3 million retail banking customer accounts, \$20.1 billion in retail banking loans and \$29.2 billion in deposits. In addition, the business had approximately 5.4 million Citi-branded card accounts with \$5.7 billion in outstanding card loan balances.

	Second	Qu	arter		Six			
In millions of dollars, except as otherwise noted	2019		2018	% Change	2019		2018	% Change
Net interest revenue	\$ 1,017	\$	1,013	_ %	1,992	\$	2,010	(1)%
Non-interest revenue	415		362	15	821		705	16
Total revenues, net of interest expense	\$ 1,432	\$	1,375	4 %	\$ 2,813	\$	2,715	4 %
Total operating expenses	\$ 765	\$	779	(2)%	\$ 1,500	\$	1,534	(2)%
Net credit losses	\$ 285	\$	278	3 %	583	\$	556	5 %
Credit reserve build	10		33	(70)	3		75	(96)
Provision (release) for unfunded lending commitments	(1)		_	_	(1)	)	1	NM
Provision for benefits and claims	13		17	(24)	19		37	(49)
Provisions for credit losses and for benefits and claims (LLR & PBC)	\$ 307	\$	328	(6)%	604	\$	669	(10)%
Income from continuing operations before taxes	\$ 360	\$	268	34 %	<b>709</b>	\$	512	38 %
Income taxes	98		71	38	195		136	43
Income from continuing operations	\$ 262	\$	197	33 %	§ 514	\$	376	37 %
Net income	\$ 262	\$	197	33 %	\$ 514	\$	376	37 %
Balance Sheet data and ratios (in billions of dollars)								
Average assets	\$ 45	\$	43	5 %	\$ 45	\$	44	2 %
Return on average assets	2.34%	ó	1.84%		2.30	<b>%</b>	1.72%	
Efficiency ratio	53		57		53		57	
Average deposits	\$ 29.2	\$	28.3	3	\$ 28.9	\$	28.6	1
Net credit losses as a percentage of average loans	4.47%	ó	4.37%		4.57	<b>%</b>	4.33%	
Revenue by business								
Retail banking	\$ 1,015	\$	993	2 %	\$ 2,023	\$	1,952	4 %
Citi-branded cards	417		382	9	790		763	4
Total	\$ 1,432	\$	1,375	4 %	\$ 2,813	\$	2,715	4 %
Income from continuing operations by business								
Retail banking	\$ 192	\$	152	26 %	389	\$	286	36 %
Citi-branded cards	70		45	56	125		90	39
Total	\$ 262	\$	197	33 %	\$ 514	\$	376	37 %
FX translation impact								
Total revenues—as reported	\$ 1,432	\$	1,375	4 %	\$ 2,813	\$	2,715	4 %
Impact of FX translation <sup>(1)</sup>	_		13		_		(31)	
Total revenues—ex-FX <sup>(2)</sup>	\$ 1,432	\$	1,388	3 %	\$ 2,813	\$	2,684	5 %
Total operating expenses—as reported	\$ 765	\$	779	(2)%	\$ 1,500	\$	1,534	(2)%
Impact of FX translation <sup>(1)</sup>			6		_		(16)	
Total operating expenses—ex-FX <sup>(2)</sup>	\$ 765	\$	785	(3)%	1,500	\$	1,518	(1)%
Provisions for LLR & PBC—as reported	\$ 307	\$	328	(6)%	\$ 604	\$	669	(10)%
Impact of FX translation <sup>(1)</sup>	_		3		_		(9)	
Provisions for LLR & PBC—ex-FX <sup>(2)</sup>	\$ 307	\$	331	(7)%	\$ 604	\$	660	(8)%
Net income—as reported	\$ 262	\$	197	33 %	§ 514	\$	376	37 %
Impact of FX translation <sup>(1)</sup>			2		_		(5)	
Net income—ex-FX <sup>(2)</sup>	 	_					(- )	

- (1) Reflects the impact of FX translation into U.S. dollars at the second quarter of 2019 and year-to-date 2019 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.

#### 2Q19 vs. 2Q18

*Net income* increased 32%, reflecting higher revenues, lower expenses and lower cost of credit.

Revenues increased 3% from the prior year. Excluding revenues associated with the sale of an asset management business in Mexico in the third quarter of 2018, revenues increased 5%, primarily driven by an increase in cards revenues and improved deposit spreads.

Retail banking revenues increased 1% compared to the prior-year period. Excluding the revenues associated with the asset management business, retail banking revenues increased 3%, as modest deposit growth (average deposits up 2%) and improved deposit spreads were partially offset by lower average loans (down 2%), reflecting the ongoing slowdown in overall economic growth and industry volumes in Mexico. Cards revenues increased 8%, primarily driven by continued volume growth, reflecting higher purchase sales (up 7%) and full-rate revolving loans, as well as higher rates. Average cards loans grew 2%.

*Expenses* decreased 3%, as efficiency savings more than offset ongoing investment spending and volume-driven growth.

*Provisions* decreased 7%, primarily driven by a lower net loan loss reserve build, reflecting lower volumes.

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.

#### 2019 YTD vs. 2018 YTD

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

Revenues increased 5%, reflecting higher revenues in both retail banking and cards. Retail banking revenues increased 5%, driven by the same factors described above. Cards revenues increased 5%, driven by the same factors described above.

*Expenses* decreased 1%, driven by the same factors described above.

*Provisions* decreased 8%, driven by the same factors described above.

#### **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 2019, Asia GCB's most significant revenues in Asia were from Hong Kong, Korea, Singapore, 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, 2019, on a combined basis, the businesses had 252 retail branches, approximately 16.1 million retail banking customer accounts, \$70.8 billion in retail banking loans and \$102.6 billion in deposits. In addition, the businesses had approximately 15.2 million Citi-branded card accounts with \$19.2 billion in outstanding card loan balances.

	Second	Qu	arter		ths			
In millions of dollars, except as otherwise noted <sup>(1)</sup>	2019		2018	% Change	2019		2018	% Change
Net interest revenue	\$ 1,225	\$	1,226	<b>— %</b>	\$ 2,445	\$	2,459	(1)%
Non-interest revenue	690		639	8	1,355		1,335	1
Total revenues, net of interest expense	\$ 1,915	\$	1,865	3 %	\$ 3,800	\$	3,794	<b>— %</b>
Total operating expenses	\$ 1,178	\$	1,207	(2)%	\$ 2,382	\$	2,484	(4)%
Net credit losses	\$ 176	\$	170	4 %	\$ 340	\$	332	2 %
Credit reserve build (release)	7		6	17	(8)		(15)	47
Provision (release) for unfunded lending commitments	_		1	(100)	_		3	(100)
Provisions for credit losses	\$ 183	\$	177	3 %	\$ 332	\$	320	4 %
Income from continuing operations before taxes	\$ 554	\$	481	15 %	\$ 1,086	\$	990	10 %
Income taxes	124		121	2	240		257	(7)
Income from continuing operations	\$ 430	\$	360	19 %	\$ 846	\$	733	15 %
Noncontrolling interests	1		1	_	1		3	(67)
Net income	\$ 429	\$	359	19 %	\$ 845	\$	730	16 %
Balance Sheet data and ratios (in billions of dollars)								
Average assets	\$ 133	\$	130	2 %	\$ 133	\$	131	2 %
Return on average assets	1.29%	6	1.11%		1.28%	D	1.12%	
Efficiency ratio	62		65		63		65	
Average deposits	\$ 100.7	\$	97.6	3	\$ 100.0	\$	98.4	2
Net credit losses as a percentage of average loans	0.80%	6	0.77%		0.77%	D	0.75%	
Revenue by business								
Retail banking	\$ 1,208	\$	1,142	6 %	\$ 2,351	\$	2,340	<b>— %</b>
Citi-branded cards	707		723	(2)	1,449		1,454	_
Total	\$ 1,915	\$	1,865	3 %	\$ 3,800	\$	3,794	<u> </u>
Income from continuing operations by business								
Retail banking	\$ 323	\$	264	22 %	\$ 569	\$	510	12 %
Citi-branded cards	107		96	11	277		223	24
Total	\$ 430	\$	360	19 %	\$ 846	\$	733	15 %

FX translation impact						
Total revenues—as reported	\$ 1,915	\$ 1,865	3 %	\$ 3,800	\$ 3,794	<b>— %</b>
Impact of FX translation <sup>(2)</sup>	_	(42)		_	(111)	
Total revenues—ex-FX <sup>(3)</sup>	\$ 1,915	\$ 1,823	5 %	\$ 3,800	\$ 3,683	3 %
Total operating expenses—as reported	\$ 1,178	\$ 1,207	(2)%	\$ 2,382	\$ 2,484	(4)%
Impact of FX translation <sup>(2)</sup>	_	(29)		_	(77)	
Total operating expenses—ex-FX <sup>(3)</sup>	\$ 1,178	\$ 1,178	<b>— %</b>	\$ 2,382	\$ 2,407	(1)%
Provisions for loan losses—as reported	\$ 183	\$ 177	3 %	\$ 332	\$ 320	4 %
Impact of FX translation <sup>(2)</sup>	_	(5)		_	(13)	
Provisions for loan losses—ex-FX <sup>(3)</sup>	\$ 183	\$ 172	6 %	\$ 332	\$ 307	8 %
Net income—as reported	\$ 429	\$ 359	19 %	\$ 845	\$ 730	16 %
Impact of FX translation <sup>(2)</sup>	_	(6)		_	(14)	
Net income—ex-FX <sup>(3)</sup>	\$ 429	\$ 353	22 %	\$ 845	\$ 716	18 %

- (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 2019 and year-to-date 2019 average exchange rates for all periods presented.
- (3) Presentation of this metric excluding FX translation is a non-GAAP financial measure.

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.

#### 2Q19 vs. 2Q18

*Net income* increased 22%, reflecting higher revenues and a lower effective tax rate, partially offset by higher cost of credit

*Revenues* increased 5%, including a gain from a building sale. Excluding the gain, revenues increased 3%, driven by higher retail banking revenues.

Retail banking revenues increased 8% compared to the prior-year period. Excluding the gain, retail banking revenues increased 4%, primarily driven by higher deposit revenues as well as a recovery in investment revenues due to improved market sentiment. Investment sales increased 8%, while assets under management grew 10%, average deposits increased 6% and average loans increased 4%. Retail lending revenues declined 2%, as continued growth in personal loans was more than offset by lower mortgage revenues due to spread compression.

Cards revenues were largely unchanged, as continued growth in average loans (up 4%) and purchase sales (up 5%) were offset by spread compression.

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

*Provisions* increased 6%, primarily driven by higher net credit losses, reflecting volume growth and seasoning. 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.

#### 2019 YTD vs. 2018 YTD

Year-to-date, *Asia GCB* experienced similar trends to those described above. *Net income* increased 18%, due to higher revenues, lower expenses and a lower effective tax rate, partially offset by higher cost of credit.

Revenues increased 3%, driven by growth in both retail banking and cards. Retail banking revenues increased 3%, driven by growth in deposits, partially offset by lower investment and retail lending revenues. Cards revenues were up 3%, including a modest one-time gain. Excluding the gain, cards revenues were up 1%, driven by continued growth in average loans and purchase sales, partially offset by spread compression.

*Expenses* decreased 1%, as volume-driven growth and ongoing investment spending were more than offset by efficiency savings.

*Provisions* were up 8%, driven by the same factors described above.

#### 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. For more information on ICG's business activities, see "Institutional Clients Group" in Citi's 2018 Annual Report on Form 10-K.

*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, 2019, *ICG* had approximately \$1.5 trillion in assets and \$715 billion in deposits, while two of its businesses—securities services and issuer services—managed approximately \$19.0 trillion in assets under custody compared to \$17.8 trillion at the end of the prior-year period.

	Second	Qu	arter		Six M	Ion	ths	
In millions of dollars, except as otherwise noted	2019		2018	% Change	2019		2018	% Change
Commissions and fees	\$ 1,046	\$	1,127	(7)%	\$ 2,167	\$	2,340	(7)%
Administration and other fiduciary fees	696		713	(2)	1,366		1,407	(3)
Investment banking	1,100		1,246	(12)	2,212		2,231	(1)
Principal transactions	1,930		2,339	(17)	4,562		5,183	(12)
Other <sup>(1)</sup>	716		179	NM	1,000		644	55
Total non-interest revenue	\$ 5,488	\$	5,604	(2)%	\$ 11,307	\$	11,805	(4)%
Net interest revenue (including dividends)	4,233		4,093	3	8,108		7,747	5
Total revenues, net of interest expense	\$ 9,721	\$	9,697	<b>— %</b>	\$ 19,415	\$	19,552	(1)%
Total operating expenses	\$ 5,356	\$	5,460	(2)%	\$ 10,783	\$	10,966	(2)%
Net credit losses	\$ 72	\$	(1)	NM	\$ 127	\$	104	22 %
Credit reserve build (release)	47		32	47	(7)		(143)	95
Provision (release) for unfunded lending commitments	(16)		(6)	NM	4		23	(83)
Provisions for credit losses	\$ 103	\$	25	NM	\$ 124	\$	(16)	NM
Income from continuing operations before taxes	\$ 4,262	\$	4,212	1 %	\$ 8,508	\$	8,602	(1)%
Income taxes	919		971	(5)	1,843		2,027	(9)
Income from continuing operations	\$ 3,343	\$	3,241	3 %	\$ 6,665	\$	6,575	1 %
Noncontrolling interests	10		12	(17)	21		27	(22)
Net income	\$ 3,333	\$	3,229	3 %	\$ 6,644	\$	6,548	1 %
EOP assets (in billions of dollars)	\$ 1,454	\$	1,397	4 %				
Average assets (in billions of dollars)	1,450		1,406	3	\$ 1,432	\$	1,397	3 %
Return on average assets	0.92%	6	0.92%		0.94%	o	0.95%	
Efficiency ratio	55		56		56		56	
Revenues by region								
North America	\$ 3,478	\$	3,511	(1)%	\$ 6,597	\$	6,777	(3)%
EMEA	2,960		3,043	(3)	6,130		6,210	(1)
Latin America	1,195		1,168	2	2,355		2,384	(1)
Asia	2,088		1,975	6	4,333		4,181	4
Total	\$ 9,721	\$	9,697	<b>—</b> %	\$ 19,415	\$	19,552	(1)%
Income from continuing operations by region								
North America	\$ 1,022	\$	1,030	(1)%	\$ 1,736	\$	1,888	(8)%
EMEA	1,005		986	2	2,130		2,099	1
Latin America	491		517	(5)	994		1,011	(2)
Asia	825		708	17	1,805		1,577	14
Total	\$ 3,343	\$	3,241	3 %	\$ 6,665	\$	6,575	1 %

Average loans by region (in billions of dollars)						
North America	\$ 178	\$ 165	8 %	\$ 176	\$ 162	9 %
EMEA	85	80	6	85	79	8
Latin America	33	33	_	34	34	_
Asia	63	68	(7)	63	68	(7)
Total	\$ 359	\$ 346	4 %	\$ 358	\$ 343	4 %
EOP deposits by business (in billions of dollars)						
Treasury and trade solutions	\$ 488	\$ 459	6 %			
All other <i>ICG</i> businesses	227	217	5			
Total	\$ 715	\$ 676	6 %			

<sup>(1)</sup> The second quarter of 2019 includes an approximate \$350 million gain on Citi's investment in Tradeweb. NM Not meaningful

### ICG Revenue Details

	Second Quarter			S					
In millions of dollars		2019	2018	% Change	2019			2018	% Change
Investment banking revenue details									
Advisory	\$	232 \$	361	(36)%	\$	610	\$	576	6 %
Equity underwriting		314	335	(6)		486		551	(12)
Debt underwriting		737	726	2	1,	541		1,425	8
Total investment banking	\$	1,283 \$	1,422	(10)%	\$ 2,	637	\$	2,552	3 %
Treasury and trade solutions		2,441	2,336	4	4,	836		4,604	5
Corporate lending—excluding gains (losses) on loan hedges <sup>(1)</sup>		538	589	(9)	1,	107		1,110	_
Private bank		866	848	2	1,	746		1,752	_
Total banking revenues (ex-gains (losses) on loan hedges)	\$	5,128 \$	5,195	(1)%	\$ 10,	326	\$	10,018	3 %
Corporate lending—gains (losses) on loan hedges <sup>(1)</sup>	\$	(75) \$	23	NM	\$ (	306)	\$	46	NM
Total banking revenues (including gains (losses) on loan hedges), net of interest expense	\$	5,053 \$	5,218	(3)%	<b>\$</b> 10,	020	\$	10,064	<b>—</b> %
Fixed income markets <sup>(2)</sup>	\$	3,323 \$	3,082	8 %	\$ 6,	775	\$	6,507	4 %
Equity markets		790	864	(9)	1,	632		1,967	(17)
Securities services		682	665	3	1,	320		1,306	1
Other		(127)	(132)	4	(	332)	)	(292)	(14)
Total markets and securities services revenues, net of interest expense	\$	4,668 \$	4,479	4 %	\$ 9,	395	\$	9,488	(1)%
Total revenues, net of interest expense	\$	9,721 \$	9,697	<b>— %</b>	\$ 19,	415	\$	19,552	(1)%
Commissions and fees	\$	198 \$	182	9 %	\$	372	\$	357	4 %
Principal transactions <sup>(3)</sup>		1,870	2,114	(12)	4,	247		4,306	(1)
Other <sup>(2)</sup>		533	28	NM		683		303	NM
Total non-interest revenue	\$	2,601 \$	2,324	12 %	\$ 5,	302	\$	4,966	7 %
Net interest revenue		722	758	(5)	1,	473		1,541	(4)
Total fixed income markets	\$	3,323 \$	3,082	8 %	\$ 6,	775	\$	6,507	4 %
Rates and currencies	\$	2,118 \$	2,241	(5)%	\$ 4,	520	\$	4,718	(4)%
Spread products/other fixed income		1,205	841	43		255		1,789	26
Total fixed income markets	\$	3,323 \$	3,082	8 %	\$ 6,	775	\$	6,507	4 %
Commissions and fees	\$	274 \$	308	(11)%	\$	567	\$	669	(15)%
Principal transactions <sup>(3)</sup>		7	101	(93)		403		638	(37)
Other		10	20	(50)		17		100	(83)
Total non-interest revenue	\$	291 \$		(32)%		987	\$	1,407	(30)%
Net interest revenue		499	435	15		645		560	15
Total equity markets	\$	790 \$	864	(9)%	\$ 1,	632	\$	1,967	(17)%

- (1) 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 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) The second quarter of 2019 includes an approximate \$350 million gain on Citi's investment in Tradeweb.
- (3) Excludes principal transactions revenues of *ICG* businesses other than *Markets*, primarily treasury and trade solutions and the private bank. NM Not meaningful

The discussion of the results of operations for ICG below excludes (where noted) the impact of gains (losses) on hedges of accrual loans, which are non-GAAP financial measures. For a reconciliation of these metrics to the reported results, see the table above.

#### 2Q19 vs. 2Q18

*Net income* increased 3%, primarily driven by a decrease in expenses and a lower effective tax rate, partially offset by an increase in cost of credit.

Revenues were largely unchanged, as the Tradeweb gain was offset by lower revenues in *Banking* (decrease of 3%, including the impact of the gains (losses) on loan hedges) and Markets and securities services (decrease of 4%, excluding the Tradeweb gain). Excluding the Tradeweb gain, revenues decreased 3%. Banking revenues were down 3%. Excluding the impact of the gains (losses) on loan hedges, Banking revenues decreased 1%, as higher revenues in treasury and trade solutions and the private bank were more than offset by lower revenues in investment banking and corporate lending. Markets and securities services revenues were up 4% versus the prioryear period, including the Tradeweb gain. Excluding the Tradeweb gain, Markets and securities services revenues decreased 4%, as higher revenues in securities services were more than offset by lower fixed income and equity markets revenues. Citi expects that revenues in its markets and investment banking businesses will likely continue to reflect the overall market environment in the near term.

#### Within Banking:

- Investment banking revenues declined 10%, while outperforming the market wallet, as strength in debt underwriting was more than offset by a strong prior-year comparison in advisory. Advisory revenues declined 36%, primarily reflecting a decline in the market wallet as well as the strong prior-year period comparison. Equity underwriting revenues declined 6%, largely in line with the decline in market wallet. Debt underwriting revenues increased 2%, reflecting gains in wallet share, particularly in North America.
- Treasury and trade solutions revenues increased 4%. Excluding the impact of FX translation, revenues increased 7%, driven by growth in both the cash and trade businesses, reflecting both higher net interest and fee revenues. Average deposit balances increased 8% (10% excluding the impact of FX translation), reflecting strong growth across all regions. Revenue growth in the cash business was primarily driven by continued growth in deposit balances, as deposit spreads remained stable. Revenue growth in the trade business was driven primarily by improved loan spreads and higher episodic fees, modestly offset by lower average trade loans.

- Corporate lending revenues decreased from \$612 million to \$463 million. Excluding the impact of gains (losses) on loan hedges, revenues decreased 9%, driven by higher hedging costs and lower spreads.
- *Private bank* revenues increased 2%, driven primarily by *North America* and *Asia*, partially offset by *Latin America*. The increase in revenues reflected strong client activity, which drove higher lending, deposit and assets under management volumes, partially offset by spread compression.

#### Within Markets and securities services:

• Fixed income markets revenues increased 8%, including the Tradeweb gain. Excluding the Tradeweb gain, revenues decreased 4%, as growth across Asia and Latin America was more than offset by lower revenues in North America. The decrease in revenues reflected both lower net interest and non-interest revenues. Net interest revenues declined reflecting higher funding costs, given the higher interest rate environment. The decrease in non-interest revenues was largely driven by lower principal transactions revenues, reflecting lower investor client activity, particularly in rates and currencies, in a challenging market environment.

Rates and currencies revenues decreased 5%, as lower revenues in G10 rates and currencies, primarily in *North America*, were partially offset by higher local markets rates and currencies revenues, while corporate client activity was broadly stable. The decrease in rates reflected the challenging market environment, particularly in *North America*, as well as lower investor client activity in *EMEA*.

Spread products and other fixed income revenues increased 43%, including the Tradeweb gain. Excluding the Tradeweb gain, revenues increased 1%, as an increase in client activity in financing and flow products was largely offset by a continued challenging market environment in structured products, particularly in *North America*.

• Equity markets revenues decreased 9%, reflecting lower revenues in cash equities and prime finance, primarily in North America and Asia, partially offset by higher revenues in equity derivatives. The decline in cash equities revenues reflected lower client volumes. The decline in prime finance revenues was driven by lower client financing balances. Equity derivatives revenues increased, reflecting strong corporate client activity as well as improved volatility. Non-interest revenues decreased, primarily driven by lower principal

- transactions revenues, reflecting a change in the mix of trading positions in support of client activity, partially offset by an increase in net interest revenues.
- Securities services revenues increased 3%. Excluding the impact of FX translation, revenues increased 7%, driven by higher client volumes and an increase in interest revenues due to higher interest rates.

Expenses decreased 2%, as efficiency savings and a benefit from FX translation more than offset ongoing investments and volume-related growth.

Provisions increased \$78 million to \$103 million, largely driven by higher net credit losses (up \$73 million). The increase in net credit losses largely reflected a normalization of credit trends compared to the prior-year period that benefited from ratings upgrades. Citi expects this normalization of credit costs will likely continue in the near term.

#### 2019 YTD vs. 2018 YTD

*Net income* increased 1%, primarily driven by lower expenses and a lower effective tax rate, partially offset by lower revenues and higher credit costs.

• Revenues decreased 1%, driven by a 1% decrease in *Markets and securities services* revenues (including the Tradeweb gain), while *Banking* revenues (including the impact of the gains (losses) on loan hedges) were largely unchanged. Excluding the impact of the gains (losses) on loan hedges, *Banking* revenues increased 3%, driven by higher revenues in treasury and trade solutions and investment banking. *Markets and securities services* revenues decreased 1%, as the Tradeweb gain and higher securities services revenues were more than offset by lower fixed income and equity markets revenues.

#### Within Banking:

- *Investment banking* revenues increased 3%. Advisory revenues increased 6%, reflecting gains in wallet share despite a decline in overall market wallet. Equity underwriting revenues decreased 12%, reflecting market wallet declines, particularly in *EMEA* and *Asia*. Debt underwriting revenues increased 8%, reflecting gains in wallet share, primarily in *North America*.
- Treasury and trade solutions revenues increased 5%.
   Excluding the impact of FX translation, revenues increased 8%, reflecting growth in both the cash and trade businesses, driven by continued growth in deposit volumes and improved loan spreads as well as strong fee growth across most cash products.
- Corporate lending revenues decreased from \$1.2 billion to \$801 million. Excluding the impact of gains (losses) on loan hedges, revenues were largely unchanged.
- Private bank revenues were largely unchanged versus the prior-year period, as higher loan and deposit volumes were offset by lower managed investments revenues and spread compression.

#### Within Markets and securities services:

- Fixed income markets revenues increased 4%, including the Tradeweb gain. Excluding the Tradeweb gain, revenues decreased 1%, largely reflecting lower revenues in North America. Rates and currencies revenues decreased 4%, driven by the challenging market environment. Spread products and other fixed income revenues increased 26%, including the Tradeweb gain. Excluding the Tradeweb gain, revenues increased 6%, as strong flow trading and financing revenues were partially offset by lower revenues in structured products.
- Equity markets revenues decreased 17%, driven by North America and Asia, reflecting lower client activity as well as comparison to a strong prior-year period characterized by higher market volatility.
- Securities services revenues increased 1%. Excluding the impact of FX translation, revenues increased 6%, reflecting growth in both client volumes and assets under custody, as well as higher net interest revenue, driven by higher deposit volumes and higher interest rates.

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

*Provisions* increased \$140 million to \$124 million, primarily due to a lower loan loss reserve release (release of \$3 million) as compared to the prior-year period (release of \$120 million).

#### 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 and income taxes, as well as 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, 2019, *Corporate/Other* had \$97 billion in assets.

	Second Q	ua	ırter			Six Mo	n	ths	
In millions of dollars	2019		2018	% Change	Г	2019		2018	% Change
Net interest revenue	\$ 445 \$	\$	553	(20)%	\$	1,076	\$	1,091	(1)%
Non-interest revenue	87		(25)	NM		(113)		28	NM
Total revenues, net of interest expense	\$ 532 \$	\$	528	1 %	\$	963	\$	1,119	(14)%
Total operating expenses	\$ 481 \$	\$	600	(20)%	\$	1,030	\$	1,342	(23)%
Net credit losses (recoveries)	\$ 2 \$	\$	(21)	NM	\$	4	\$	5	(20)%
Credit reserve build (release)	(20)		(95)	79 %		(46)		(128)	64
Provision (release) for unfunded lending commitments	(4)		(1)	NM		(5)		(1)	NM
Provision for benefits and claims	_		(1)	NM		_		(1)	100
Provisions (release) for credit losses and for benefits and claims	\$ (22) \$	\$	(118)	81 %	\$	(47)	\$	(125)	62 %
Income (loss) from continuing operations before taxes	\$ 73 \$	\$	46	59 %	\$	(20)	\$	(98)	80 %
Income taxes (benefits)	37		62	(40)		(34)		(7)	NM
Income (loss) from continuing operations	\$ 36 \$	\$	(16)	NM	\$	14	\$	(91)	NM
Income (loss) from discontinued operations, net of taxes	17		15	13 %		15		8	88 %
Net income (loss) before attribution of noncontrolling interests	\$ 53 \$	\$	(1)	NM	\$	29	\$	(83)	NM
Noncontrolling interests	(1)		13	NM		13		18	(28)%
Net income (loss)	\$ 54 \$	\$	(14)	NM	\$	16	\$	(101)	NM

NM Not meaningful

#### 2019 vs. 2018

*Net income* was \$54 million, compared to a net loss of \$14 million in the prior-year period. Net income was largely driven by lower expenses and a lower effective tax rate, partially offset by a lower net loan loss reserve release in the current period.

*Revenues* increased 1%, as higher treasury revenues and gains were largely offset by the wind-down of legacy assets.

*Expenses* decreased 20%, primarily driven by the wind-down of legacy assets.

*Provisions* increased \$96 million to a net benefit of \$22 million, primarily due to a lower net loan loss reserve release and absence of net recoveries in the prior-year period related to the continued wind-down in the legacy *North America* mortgage portfolio.

#### 2019 YTD vs. 2018 YTD

*Net income* was \$16 million, compared to a net loss of \$101 million in the prior-year period, reflecting lower expenses, partially offset by a lower net loan loss reserve release and lower revenues.

*Revenues* decreased 14%, primarily driven by the wind-down of legacy assets.

*Expenses* decreased 23%, primarily driven by the wind-down of legacy assets.

*Provisions* increased \$78 million to a net benefit of \$47 million, primarily due to a lower net loan loss reserve release, driven by the same factors described above.

#### **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 2018 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.
Letters of credit, and lending and other commitments	See Note 22 to the Consolidated Financial Statements.
Guarantees	See Note 22 to the Consolidated Financial Statements.

#### CAPITAL RESOURCES

For additional information about capital resources, including Citi's capital management, the stress testing component of capital planning, current regulatory capital standards and regulatory capital standards developments, see "Capital Resources" and "Risk Factors" in Citi's 2018 Annual Report on Form 10-K.

During the second quarter of 2019, Citi returned a total of \$4.6 billion of capital to common shareholders in the form of share repurchases (approximately 54 million common shares) and dividends.

The following tables set forth Citi's capital components and ratios:

Effective

	Minim Requiren	um	-	Adv	and	ced Approa	ich	es		Stan	dar	dized App	roa	ch
In millions of dollars, except ratios	2019	2018	Ju	ın. 30, 2019	M	ar. 30, 2019	D	ec. 31, 2018	Jı	ın. 30, 2019	M	far. 30, 2019	De	ec. 31, 2018
Common Equity Tier 1 Capital			\$	141,125	\$	140,355	\$	139,252	\$	141,125	\$	140,355	\$	139,252
Tier 1 Capital				159,447		158,712		158,122		159,447		158,712		158,122
Total Capital (Tier 1 Capital + Tier 2 Capital)				185,498		184,418		183,144		197,679		196,452		195,440
Total Risk-Weighted Assets				1,133,593		1,121,645		1,131,933		1,187,328		1,178,628		1,174,448
Credit Risk			\$	763,600	\$	752,804	\$	758,887	\$	1,127,714	\$	1,118,057	\$	1,109,007
Market Risk				58,824		59,200		63,987		59,614		60,571		65,441
Operational Risk				311,169		309,641		309,059		_		_		_
Common Equity Tier 1 Capital ratio <sup>(2)</sup>	10.0%	8.625%		12.45%	,	12.51%	, )	12.30%		11.89%		11.91%	)	11.86%
Tier 1 Capital ratio <sup>(2)</sup>	11.5	10.125		14.07		14.15		13.97		13.43		13.47		13.46
Total Capital ratio <sup>(2)</sup>	13.5	12.125		16.36		16.44		16.18		16.65		16.67		16.64

In millions of dollars, except ratios	Effective Minimum Requirement	Jun. 30, 2019	Mar. 30, 2019	Dec. 31, 2018
Quarterly Adjusted Average Total Assets <sup>(3)</sup>		\$ 1,939,611	\$ 1,899,790	\$ 1,896,959
Total Leverage Exposure <sup>(4)</sup>		2,500,128	2,463,958	2,465,641
Tier 1 Leverage ratio	4.0%	8.22%	8.35%	8.34%
Supplementary Leverage ratio	5.0	6.38	6.44	6.41

- (1) Citi's effective minimum risk-based capital requirements during 2019 and 2018 are inclusive of the 100% and 75% phase-in, respectively, of both the 2.5% Capital Conservation Buffer and the 3.0% GSIB surcharge (all of which must be composed of Common Equity Tier 1 Capital).
- (2) 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 for all periods presented.
- (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, 2019 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, 2019.

#### Common Equity Tier 1 Capital Ratio

Citi's Common Equity Tier 1 Capital ratio was 11.9% at June 30, 2019, unchanged from March 31, 2019 and December 31, 2018, as net income and beneficial net movements in *Accumulated other comprehensive income* (AOCI) were offset by the return of capital to common shareholders and an increase in credit risk-weighted assets during the three and six months ended June 30, 2019.

#### Components of Citigroup Capital

In millions of dollars	June 30, 2019	Dec	ember 31, 2018
Common Equity Tier 1 Capital			
Citigroup common stockholders' equity <sup>(1)</sup>	\$ 179,534	\$	177,928
Add: Qualifying noncontrolling interests	154		147
Regulatory Capital Adjustments and Deductions:			
Less: Accumulated net unrealized losses on cash flow hedges, net of tax	75		(728)
Less: Cumulative unrealized net gain (loss) related to changes in fair value of financial liabilities attributable to own creditworthiness, net of tax	(85)		580
Less: Intangible assets:			
Goodwill, net of related DTLs <sup>(2)</sup>	21,793		21,778
Identifiable intangible assets other than MSRs, net of related DTLs	4,264		4,402
Less: Defined benefit pension plan net assets	969		806
Less: DTAs arising from net operating loss, foreign tax credit and general			
business credit carry-forwards <sup>(3)</sup>	11,547		11,985
Total Common Equity Tier 1 Capital (Standardized Approach and Advanced Approaches)	\$ 141,125	\$	139,252
Additional Tier 1 Capital			
Qualifying noncumulative perpetual preferred stock <sup>(1)</sup>	\$ 17,825	\$	18,292
Qualifying trust preferred securities <sup>(4)</sup>	1,388		1,384
Qualifying noncontrolling interests	49		55
Regulatory Capital Deductions:			
Less: Permitted ownership interests in covered funds <sup>(5)</sup>	900		806
Less: Minimum regulatory capital requirements of insurance underwriting subsidiaries <sup>(6)</sup>	40		55
Total Additional Tier 1 Capital (Standardized Approach and Advanced Approaches)	\$ 18,322	\$	18,870
Total Tier 1 Capital (Common Equity Tier 1 Capital + Additional Tier 1 Capital) (Standardized Approach and Advanced Approaches)	\$ 159,447	\$	158,122
Tier 2 Capital			
Qualifying subordinated debt	\$ 24,062	\$	23,324
Qualifying trust preferred securities <sup>(7)</sup>	321		321
Qualifying noncontrolling interests	48		47
Eligible allowance for credit losses <sup>(8)</sup>	13,841		13,681
Regulatory Capital Deduction:			
Less: Minimum regulatory capital requirements of insurance underwriting subsidiaries <sup>(6)</sup>	40		55
Total Tier 2 Capital (Standardized Approach)	\$ 38,232	\$	37,318
Total Capital (Tier 1 Capital + Tier 2 Capital) (Standardized Approach)	\$ 197,679	\$	195,440
Adjustment for excess of eligible credit reserves over expected credit losses <sup>(8)</sup>	\$ (12,181)	\$	(12,296)
Total Tier 2 Capital (Advanced Approaches)	\$ 26,051	\$	25,022
Total Capital (Tier 1 Capital + Tier 2 Capital) (Advanced Approaches)	\$ 185,498	\$	183,144

<sup>(1)</sup> Issuance costs of \$155 million as of June 30, 2019 and \$168 million as of December 31, 2018 are related to outstanding noncumulative perpetual preferred stock, are excluded from common stockholders' equity and are netted against such preferred stock in accordance with Federal Reserve Board regulatory reporting requirements, which differ from those under U.S. GAAP.

<sup>(2)</sup> Includes goodwill "embedded" in the valuation of significant common stock investments in unconsolidated financial institutions.

<sup>(3)</sup> Of Citi's \$22.3 billion of net DTAs at June 30, 2019, \$11.9 billion was includable in Common Equity Tier 1 Capital pursuant to the U.S. Basel III rules, while \$10.4 billion was excluded. Excluded from Citi's Common Equity Tier 1 Capital as of June 30, 2019 was \$11.5 billion of net DTAs arising from net operating loss, foreign tax credit and general business credit carry-forwards, which was reduced by \$1.1 billion of net DTLs primarily associated with goodwill and certain other intangible assets. Separately, under the U.S. Basel III rules, goodwill 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. Citi's DTAs arising from temporary differences are 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%.

<sup>(4)</sup> Represents Citigroup Capital XIII trust preferred securities, which are permanently grandfathered as Tier 1 Capital under the U.S. Basel III rules.

- (5) 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 funds. Accordingly, Citi is required by the Volcker Rule to deduct from Tier 1 Capital all permitted ownership interests in covered funds.
- (6) 50% of the minimum regulatory capital requirements of insurance underwriting subsidiaries must be deducted from each of Tier 1 Capital and Tier 2 Capital.
- (7) 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.
- (8) 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 that the excess 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 \$1.4 billion at June 30, 2019 and December 31, 2018, respectively.

## Citigroup Capital Rollforward

In millions of dollars	ee Months Ended June 30, 2019	Six Months Ended June 30, 2019
Common Equity Tier 1 Capital, beginning of period	\$ 140,355	\$ 139,252
Net income	4,799	9,509
Common and preferred dividends declared	(1,337)	(2,674)
Net increase in treasury stock	(3,566)	(7,057)
Net change in common stock and additional paid-in capital	106	(278)
Net increase in foreign currency translation gains net of hedges, net of tax	91	149
Net decrease in unrealized losses on debt securities AFS, net of tax	703	1,838
Net increase in defined benefit plans liability adjustment, net of tax	(253)	(317)
Net change in adjustment related to change in fair value of financial liabilities attributable to own creditworthiness, net of tax	21	97
Net increase in ASC 815—excluded component of fair value hedges	44	62
Net increase in goodwill, net of related DTLs	(25)	(15)
Net decrease in identifiable intangible assets other than MSRs, net of related DTLs	126	138
Net increase in defined benefit pension plan net assets	(158)	(163)
Net decrease in DTAs arising from net operating loss, foreign tax credit and general business credit carry-forwards	209	438
Other	10	146
Net increase in Common Equity Tier 1 Capital	\$ 770	\$ 1,873
Common Equity Tier 1 Capital, end of period (Standardized Approach and Advanced Approaches)	\$ 141,125	\$ 141,125
Additional Tier 1 Capital, beginning of period	\$ 18,357	\$ 18,870
Net decrease in qualifying perpetual preferred stock	_	(467)
Net increase in qualifying trust preferred securities	2	4
Net increase in permitted ownership interest in covered funds	(52)	(94)
Other	15	9
Net decrease in Additional Tier 1 Capital	\$ (35)	\$ (548)
Tier 1 Capital, end of period (Standardized Approach and Advanced Approaches)	\$ 159,447	\$ 159,447
Tier 2 Capital, beginning of period (Standardized Approach)	\$ 37,740	\$ 37,318
Net increase in qualifying subordinated debt	358	738
Net increase in eligible allowance for credit losses	122	160
Other	12	16
Net increase in Tier 2 Capital (Standardized Approach)	\$ 492	\$ 914
Tier 2 Capital, end of period (Standardized Approach)	\$ 38,232	\$ 38,232
Total Capital, end of period (Standardized Approach)	\$ 197,679	\$ 197,679
Tier 2 Capital, beginning of period (Advanced Approaches)	\$ 25,706	\$ 25,022
Net increase in qualifying subordinated debt	358	738
Net change in excess of eligible credit reserves over expected credit losses	(25)	275
Other	12	16
Net increase in Tier 2 Capital (Advanced Approaches)	\$ 345	\$ 1,029
Tier 2 Capital, end of period (Advanced Approaches)	\$ 26,051	\$ 26,051
Total Capital, end of period (Advanced Approaches)	\$ 185,498	\$ 185,498

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

	Three Months Ended	Six Months Ended
In millions of dollars	June 30, 2019	June 30, 2019
Total Risk-Weighted Assets, beginning of period	\$ 1,178,628 \$	1,174,448
Changes in Credit Risk-Weighted Assets		
General credit risk exposures <sup>(1)</sup>	9,078	2,006
Repo-style transactions <sup>(2)</sup>	331	8,061
Securitization exposures <sup>(3)</sup>	(6,933)	398
Equity exposures <sup>(4)</sup>	1,702	3,541
Over-the-counter (OTC) derivatives <sup>(5)</sup>	2,898	2,964
Other exposures <sup>(6)</sup>	1,536	7,444
Off-balance sheet exposures <sup>(7)</sup>	1,045	(5,707)
Net change in Credit Risk-Weighted Assets	\$ 9,657 \$	18,707
Changes in Market Risk-Weighted Assets		
Risk levels <sup>(8)</sup>	\$ (1,252) \$	(5,765)
Model and methodology updates	295	(62)
Net decrease in Market Risk-Weighted Assets	\$ (957) \$	(5,827)
Total Risk-Weighted Assets, end of period	\$ 1,187,328 \$	1,187,328

- (1) General credit risk exposures include cash and balances due from depository institutions, securities, and loans and leases. General credit risk exposures increased during the three months ended June 30, 2019 primarily due to growth in retail and commercial loans.
- (2) Repo-style transactions include repurchase and reverse repurchase transactions as well as securities borrowing and securities lending transactions.
- 3) Securitization exposures decreased during the three months ended June 30, 2019 primarily due to decreased exposures from existing deals.
- (4) Equity exposures increased during the three months and six months ended June 30, 2019 primarily due to an increase in market value of investments.
- (5) OTC derivatives increased during the three months and six months ended June 30, 2019 primarily due to notional increases.
- (6) Other exposures include cleared transactions, unsettled transactions and other assets. Other exposures increased during the six months ended June 30, 2019 primarily due to the recognition of right-of-use (ROU) assets in accordance with the adoption of ASU No. 2016-02, Leases (Topic 842), effective January 1, 2019, and increases in various other assets.
- (7) Off-balance sheet exposures decreased during the six months ended June 30, 2019 primarily due to decreases in standby letters of credit and loan commitments.
- (8) Risk levels decreased during the six months ended June 30, 2019 primarily due to decreases in exposure levels subject to Stressed Value at Risk and Value at Risk.

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

In millions of dollars	T	hree Months Ended June 30, 2019	Six Months Ended June 30, 2019
Total Risk-Weighted Assets, beginning of period	\$	1,121,645	· · · · · · · · · · · · · · · · · · ·
Changes in Credit Risk-Weighted Assets			
Retail exposures		(654)	(2,166)
Wholesale exposures <sup>(1)</sup>		2,751	(9,556)
Repo-style transactions <sup>(2)</sup>		4,288	3,318
Securitization exposures <sup>(3)</sup>		(4,090)	(229)
Equity exposures <sup>(4)</sup>		1,697	3,391
Over-the-counter (OTC) derivatives <sup>(5)</sup>		2,038	2,946
Derivatives CVA		648	634
Other exposures <sup>(6)</sup>		3,544	6,144
Supervisory 6% multiplier		574	231
Net increase in Credit Risk-Weighted Assets	\$	10,796	\$ 4,713
Changes in Market Risk-Weighted Assets			
Risk levels <sup>(7)</sup>	\$	(671)	\$ (5,101)
Model and methodology updates		295	(62)
Net decrease in Market Risk-Weighted Assets	\$	(376)	\$ (5,163)
Net increase in Operational Risk-Weighted Assets	\$	1,528	\$ 2,110
Total Risk-Weighted Assets, end of period	\$	1,133,593	\$ 1,133,593

- (1) Wholesale exposures decreased during the six months ended June 30, 2019 primarily due to annual model parameter updates reflecting Citi's loss experience.
- (2) Repo-style transactions include repurchase and reverse repurchase transactions as well as securities borrowing and securities lending transactions.
- (3) Securitization exposures decreased during the three months ended June 30, 2019 primarily due to decreased exposures from existing deals.
- (4) Equity exposures increased during the three months and six months ended June 30, 2019 primarily due to an increase in market value of investments.
- (5) OTC derivatives increased during the three months and six months ended June 30, 2019 primarily due to notional increases.
- (6) Other exposures include cleared transactions, unsettled transactions, assets other than those reportable in specific exposure categories and non-material portfolios. Other exposures increased during the six months ended June 30, 2019 primarily due to the recognition of right-of-use (ROU) assets in accordance with the adoption of ASU No. 2016-02, *Leases (Topic 842)*, effective January 1, 2019, and increases in various other assets.
- (7) Risk levels decreased during the six months ended June 30, 2019 primarily due to decreases in exposure levels subject to Stressed Value at Risk and Value at Risk.

As set forth in the table above, total risk-weighted assets under the Basel III Standardized Approach increased from year-end 2018 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 increases in repo-style transactions, the recognition of right-of-use (ROU) assets in accordance with the adoption of ASU No. 2016-02, *Leases (Topic 842)*, effective January 1, 2019 and increased equity exposures. The increase in credit risk-weighted assets was partially offset by decreases in standby letters of credit and loan commitments.

As set forth in the table above, total risk-weighted assets under the Basel III Advanced Approaches increased from year-end 2018 primarily due to higher credit and operational risk-weighted assets partially offset by a decrease in market risk-weighted assets. The increase in credit risk-weighted assets was primarily due to the recognition of ROU assets in accordance with the adoption of ASU 2016-02, increases in equity exposures and repostyle transactions, partially offset by decreases due to annual wholesale parameter updates.

Market risk-weighted assets under both the Basel III Standardized Approach and Basel III Advanced Approaches decreased from year-end 2018 primarily due to reductions in exposure levels subject to Stressed Value at Risk and Value at Risk.

#### Supplementary Leverage Ratio

As set forth in the table below, Citigroup's Supplementary Leverage ratio was 6.4% for the second quarter of 2019. The ratio remained largely unchanged from the first quarter of 2019 and the fourth quarter of 2018, as the return of capital to common shareholders and an increase in Total Leverage Exposure (TLE) primarily due to growth in average on-balance sheet assets were offset by net income as well as beneficial net movements in AOCI during the three and six months ended June 30, 2019.

The following table sets forth Citi's Supplementary Leverage ratio and related components:

In millions of dollars, except ratios	June 30, 2019		M	March 31, 2019		cember 31, 2018
Tier 1 Capital	\$	<b>\$ 159,447</b> \$ 158,712		\$	158,122	
Total Leverage Exposure						
On-balance sheet assets <sup>(1)</sup>	\$	1,979,124	\$	1,939,414	\$	1,936,791
Certain off-balance sheet exposures: (2)						
Potential future exposure on derivative contracts		179,880		184,115		187,130
Effective notional of sold credit derivatives, net <sup>(3)</sup>		42,319		44,506		49,402
Counterparty credit risk for repo-style transactions <sup>(4)</sup>		21,416		20,696		23,715
Unconditionally cancellable commitments		70,750		70,252		69,630
Other off-balance sheet exposures		246,152		244,599		238,805
Total of certain off-balance sheet exposures	\$	560,517	\$	564,168	\$	568,682
Less: Tier 1 Capital deductions		(39,513)		(39,624)		(39,832)
Total Leverage Exposure	\$	2,500,128	\$	2,463,958	\$	2,465,641
Supplementary Leverage ratio	6.38%			6.44%	ó	6.41%

- (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 Total Leverage Exposure 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, including Citibank, 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.

Effortive

The following tables set forth Citibank's capital components and ratios:

	Effect Minim Requirer	um	Advanced Approaches							Standardized Approach						
In millions of dollars, except ratios	2019	2018	•	Jun. 30, 2019		Mar. 30, 2019		Dec. 31, 2018		Jun. 30, 2019		Mar. 30, 2019		Dec. 31, 2018		
Common Equity Tier 1 Capital			\$	130,742	\$	130,051	\$	129,091	\$	130,742	\$	130,051	\$	129,091		
Tier 1 Capital				132,875		132,169		131,215		132,875		132,169		131,215		
Total Capital (Tier 1 Capital + Tier 2 Capital) <sup>(2)</sup>				145,554		145,516		144,358		156,304		156,132		155,154		
Total Risk-Weighted Assets				934,661		926,758		926,229		1,041,349		1,041,251		1,032,809		
Credit Risk			\$	660,569	\$	651,979	\$	654,962	\$	1,006,835	\$	1,001,334	\$	994,294		
Market Risk				34,421		39,463		38,144		34,514		39,917		38,515		
Operational Risk				239,671		235,316		233,123		_		_		_		
Common Equity Tier 1 Capital ratio <sup>(3)(4)</sup>	7.0%	6.375%		13.99%	, D	14.03%	ó	13.94%		12.56%	ó	12.49%	ó	12.50%		
Tier 1 Capital ratio <sup>(3)(4)</sup>	8.5	7.875		14.22		14.26		14.17		12.76		12.69		12.70		
Total Capital ratio <sup>(3)(4)</sup>	10.5	9.875		15.57		15.70		15.59		15.01		14.99		15.02		

In millions of dollars, except ratios	Effective Minimum Requirement	Jun. 30, 2019	Mar. 30, 2019	Dec. 31, 2018
Quarterly Adjusted Average Total Assets <sup>(5)</sup>		\$ 1,427,576	\$ 1,397,703	\$ 1,398,875
Total Leverage Exposure <sup>(6)</sup>		1,932,340	1,909,587	1,914,663
Tier 1 Leverage ratio <sup>(4)</sup>	4.0%	9.31%	9.46%	9.38%
Supplementary Leverage ratio <sup>(4)</sup>	6.0	6.88	6.92	6.85

- (1) Citibank's effective minimum risk-based capital requirements during 2019 and 2018 are inclusive of the 100% and 75% phase-in, respectively, of the 2.5% Capital Conservation Buffer (all of which must be composed of Common Equity Tier 1 Capital).
- (2) Under the Advanced Approaches framework, eligible credit reserves that exceed expected credit losses are eligible for inclusion in Tier 2 Capital to the extent that the excess reserves do not exceed 0.6% of credit risk-weighted assets, 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.
- (3) 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 for all periods presented.
- (4) 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. 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 2018 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, 2019 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, 2019 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 riskweighted assets and quarterly adjusted average total assets, as well as Total Leverage Exposure (denominator), as of June 30, 2019. 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, riskweighted 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.

	Common Tier 1 Cap	Equity ital ratio	Tier 1 Cap	ital ratio	Total Capital ratio					
In basis points	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	1.1	0.8	1.4				
Citibank										
Advanced Approaches	1.1	1.5	1.1	1.5	1.1	1.7				
Standardized Approach	1.0	1.2	1.0	1.2	1.0	1.4				

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

#### Citigroup Broker-Dealer Subsidiaries

At June 30, 2019, 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 \$9.9 billion, which exceeded the minimum requirement by \$7.1 billion.

Moreover, Citigroup Global Markets Limited, a brokerdealer registered with the United Kingdom's Prudential Regulation Authority (PRA) that is also an indirect wholly owned subsidiary of Citigroup, had total capital of \$21.4 billion at June 30, 2019, 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 principal broker-dealer subsidiaries were in compliance with their regulatory capital requirements at June 30, 2019.

#### Total Loss-Absorbing Capacity (TLAC)

As previously disclosed, effective January 1, 2019, U.S. global systemically important bank holding companies (GSIBs), including Citi, are required to maintain minimum levels of TLAC and eligible long-term debt (LTD), each set by reference to the GSIB's consolidated risk-weighted assets and Total Leverage Exposure.

The table below details Citi's eligible external TLAC and LTD amounts and ratios, and each effective minimum TLAC and LTD ratio requirement, as well as the surplus amount in dollars in excess of each requirement. As of June 30, 2019, Citi exceeded each of the minimum TLAC and LTD requirements, resulting in a \$13 billion surplus above its binding TLAC requirement of LTD as a percentage of Total Leverage Exposure.

	June 30, 2019							
In billions of dollars, except ratios		ternal LAC		LTD				
Total eligible amount	\$	288	\$	125				
% of Standardized Approach risk- weighted assets		24.3%	)	10.6%				
Effective minimum requirement (1)(2)		22.5%	)	9.0%				
Surplus amount	\$	21	\$	19				
% of Total Leverage Exposure		11.5%	,	5.0%				
Effective minimum requirement		9.5%	)	4.5%				
Surplus amount	\$	51	\$	13				

- (1) External TLAC includes Method 1 GSIB surcharge of 2.0%.
- (2) LTD includes Method 2 GSIB surcharge of 3.0%.

For additional information on Citi's TLAC-related requirements, see "Liquidity Risk—Long-Term Debt—Total Loss-Absorbing Capacity (TLAC)" and "Risk Factors—Compliance, Conduct and Legal Risks" in Citi's 2018 Annual Report on Form 10-K.

#### **Regulatory Capital Standards Developments**

Leverage Ratio Treatment of Client Cleared Derivatives In June 2019, the Basel Committee on Banking Supervision issued a final standard that revises its leverage ratio framework to align the leverage ratio measurement of client cleared derivatives with the measurement as determined per the Basel Committee's standardized approach for measuring counterparty credit risk exposures, as used for risk-based capital requirements. Under the Basel Committee's leverage ratio framework, the leverage ratio exposure measure is generally not adjusted for physical or financial collateral, guarantees or other credit risk mitigation techniques, including initial margin received from clients. However, the final rule permits both cash and non-cash forms of initial margin and variation margin received from clients to mitigate replacement cost and potential future exposure for client-cleared derivatives only. The Basel Committee stated in the rule that this revision balances the robustness of the leverage ratio as a non-risk based safeguard against unsustainable sources of leverage with the policy objective of promoting central clearing of

In the U.S., the Basel Committee's leverage ratio framework and leverage ratio exposure measure are most closely aligned with the Supplementary Leverage Ratio and Total Leverage Exposure, respectively. If the U.S. agencies were to amend the Supplementary Leverage Ratio requirements in a manner similar to the Basel Committee, Citi's Supplementary Leverage Ratio would likely benefit modestly. However, the impact from and timing of any actions undertaken by the U.S. banking agencies in this regard remains uncertain.

standardized derivative contracts.

## 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 (TBV) per share and returns on average TCE are non-GAAP financial measures.

In millions of dollars or shares, except per share amounts	June 30, 2019	December 31, 2018
Total Citigroup stockholders' equity	\$ 197,359	\$ 196,220
Less: Preferred stock	17,980	18,460
Common stockholders' equity	\$ 179,379	\$ 177,760
Less:		
Goodwill	22,065	22,046
Identifiable intangible assets (other than MSRs)	4,518	4,636
Tangible common equity (TCE)	\$ 152,796	\$ 151,078
Common shares outstanding (CSO)	2,259.1	2,368.5
Book value per share (common equity/CSO)	\$ 79.40	\$ 75.05
Tangible book value per share (TCE/CSO)	67.64	63.79

In millions of dollars	 ree Months ded June 30, 2019	_	hree Months aded June 30, 2018	-	Six Months Ended June 30, 2019		Six Months Ended June 30, 2018
Net income available to common shareholders	\$ 4,503	\$	4,172	\$	8,951	\$	8,520
Average common stockholders' equity	\$ 178,257	\$	181,229	\$	177,814	\$	181,429
Average TCE	\$ 152,193	\$	154,921	\$	151,821	\$	154,818
Return on average common stockholders' equity	10.1%	o	9.2%		10.2%	ó	9.5%
Return on average TCE (RoTCE) <sup>(1)</sup>	11.9		10.8		11.9		11.1

<sup>(1)</sup> RoTCE represents annualized net income available to common shareholders as a percentage of average TCE.

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<sup>(1)</sup> For additional information regarding certain credit risk, market risk and other quantitative and qualitative 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 2018 Annual Report on Form 10-K.

### **CREDIT RISK**

For additional information on credit risk, including Citi's credit risk management, measurement and stress testing, and Citi's consumer and corporate credit portfolios, see "Credit Risk" and "Risk Factors" in Citi's 2018 Annual Report on Form 10-K.

### **CONSUMER CREDIT**

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

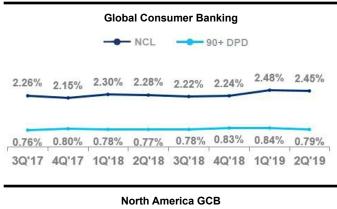
In billions of dollars	2Q'18		3Q'18		4Q'18		1Q'19		2Q'19
Retail banking:									
Mortgages	\$ 80.5	\$	80.9	\$	80.6	\$	80.8	\$	81.9
Commercial banking	36.5		37.2		36.3		37.1		37.6
Personal and other	28.1		28.7		28.8		29.1		29.7
Total retail banking	\$ 145.1	\$	146.8	\$	145.7	\$	147.0	\$	149.2
Cards:									
Citi-branded cards	\$ 112.3	\$	112.8	\$	116.8	\$	111.4	\$	115.5
Citi retail services	48.6		49.4		52.7		48.9		49.6
<b>Total cards</b>	\$ 160.9	\$	162.2	\$	169.5	\$	160.3	\$	165.1
Total GCB	\$ 306.0	\$	309.0	\$	315.2	\$	307.3	\$	314.3
GCB regional distribution:									
North America	63%	ó	62%	o	64%	ó	63%	o	63%
Latin America	8		9		8		8		8
Asia <sup>(2)</sup>	29		29		28		29		29
Total GCB	100%	ó	100%	100% 100%		6 100%		ó	100%
Corporate/Other <sup>(3)</sup>	\$ 17.6	\$	16.5	\$	15.3	\$	12.6	\$	11.7
Total consumer loans	\$ 323.6	\$	325.5	\$	330.5	\$	319.9	\$	326.0

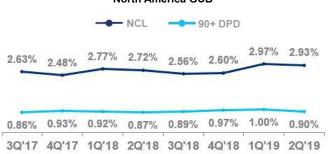
- (1) End-of-period loans include interest and fees on credit cards.
- (2) Asia includes loans and leases in certain EMEA countries for all periods presented.
- (3) Primarily consists of legacy assets, principally North America consumer mortgages.

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.

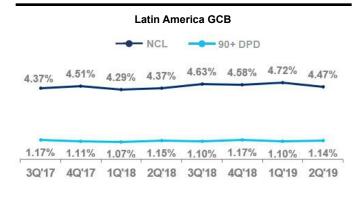




As of June 30, 2019, approximately 70% of *North America GCB* consumer loans consisted of Citi-branded and Citi retail services cards, which generally drives the overall credit performance of *North America GCB* (for additional information on *North America GCB*'s cards portfolios, including delinquency and net credit loss rates, see "Credit Card Trends" below).

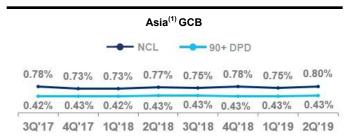
As shown in the chart above, the 90+ days past due delinquency rate decreased quarter-over-quarter in *North America GCB*, primarily driven by seasonality in the cards portfolios, while it remained broadly stable year-over-year.

The net credit loss rate decreased quarter-over-quarter, primarily driven by the absence of an episodic charge-off in the commercial portfolio in the first quarter of 2019. The net credit loss rate increased year-over-year, primarily driven by the seasoning of more recent vintages in *North America* cards as well as an increase in net flow rates in later delinquency buckets in Citi retail services.



As shown in the chart above, the 90+ days past due delinquency rate increased quarter-over-quarter in *Latin America GCB* due to seasonality, while it remained broadly stable year-over-year.

The net credit loss rate decreased quarter-over-quarter, primarily due to seasonality in the cards portfolio. The net credit loss rate increased year-over-year, primarily driven by the seasoning of more recent vintages in the cards portfolio.



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

As shown in the chart above, the 90+ days past due delinquency rate remained broadly stable in *Asia GCB* quarter-over-quarter and year-over-year. The net credit loss rate increased quarter-over-quarter, primarily due to seasonality in cards, while it remained broadly stable year-over-year. 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

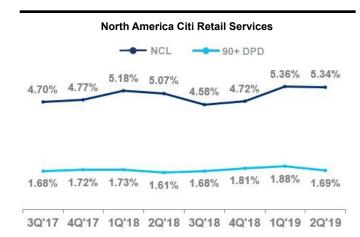
The following charts show the quarterly trends in delinquencies and net credit losses for total *GCB* cards, *North America* Citi-branded cards and Citi retail services portfolios as well as for *Latin America* and *Asia* Citi-branded cards portfolios.





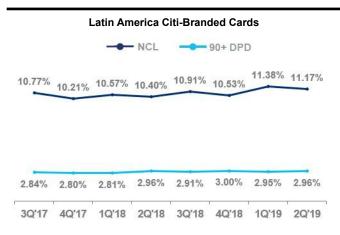
As shown in the chart above, the 90+ days past due delinquency rate decreased quarter-over-quarter, primarily due to seasonality, while it increased year-over-year primarily due to seasoning of the portfolio.

The net credit loss rate remained broadly stable quarterover-quarter, while it increased year-over-year primarily due to seasoning of more recent vintages in the portfolio.



As shown in the chart above, the 90+ days past due delinquency rate decreased quarter-over-quarter, primarily due to seasonality, while the net credit loss rate remained broadly stable.

The delinquency and net credit loss rates increased yearover-year, primarily due to seasoning of more recent vintages as well as an increase in net flow rates in later delinquency buckets.



As shown in the chart above, the 90+ days past due delinquency rate remained broadly stable quarter-over-quarter and year-over-year. The net credit loss rate decreased quarter-over-quarter primarily due to seasonality, while the year-over-increase was primarily due to seasoning of more recent vintages.

#### Asia Citi-Branded Cards<sup>(1)</sup> NCL 2.29% 2.38% 2.38% 2.25% 2.16% 1.03% 1.02% 1.03% 1.06% 1.05% 1.02% 1.01% 3Q'17 4Q'17 1Q'18 2Q'18 3Q'18 4Q'18 1Q'19 2Q'19

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

As set forth in the chart above, the 90+ days past due delinquency rate remained broadly stable quarter-over-quarter and year-over-year, driven by the mature and well-diversified cards portfolios. The net credit loss rate increased quarter-over-quarter primarily due to seasonality, while it remained stable year-over-year.

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* cards 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 Cards

FICO distribution	June 30, 2019	March 31, 2019	June 30, 2018
> 760	42%	41%	43%
680–760	41	41	40
< 680	17	18	17
Total	100%	100%	100%

### Citi Retail Services

FICO distribution	June 30, 2019	March 31, 2019	June 30, 2018
> 760	24%	23%	24%
680–760	43	43	43
< 680	33	34	33
Total	100%	100%	100%

The FICO distribution of both cards portfolios remained broadly stable, compared to the prior quarter and prior year, demonstrating strong underlying credit quality. For additional information on FICO scores, see Note 13 to the Consolidated Financial Statements.

### **Additional Consumer Credit Details**

### Consumer Loan Delinquency Amounts and Ratios

	1	EOP loans <sup>(1)</sup>		90+ da	ys past due <sup>(2)</sup>		30–89	days past due	2)	
In millions of dollars, except EOP loan amounts in billions	June 30, 2019		J	June 30, M 2019	Iarch 31, 2019	June 30, 2018	ine 30, 2019	March 31, 2019	June 30, 2018	
Global Consumer Banking <sup>(3)(4)</sup>										
Total	\$	314.3	\$	2,466 \$	2,585 \$	2,345	\$ 2,821 \$	2,776 \$	2,558	
Ratio				0.79%	0.84%	0.77%	0.90%	0.91%	0.84%	
Retail banking										
Total	\$	149.2	\$	456 \$	474 \$	500	\$ 869 \$	769 \$	754	
Ratio				0.31%	0.32%	0.35%	0.58%	0.53%	0.52%	
North America		58.3		145	179	179	361	269	252	
Ratio				0.25%	0.32%	0.33%	0.63%	0.47%	0.46%	
Latin America		20.1		124	114	132	206	201	183	
Ratio				0.62%	0.58%	0.66%	1.02%	1.02%	0.91%	
Asia <sup>(5)</sup>		70.8		187	181	189	302	299	319	
Ratio				0.26%	0.26%	0.27%	0.43%	0.43%	0.46%	
Cards							-			
Total	\$	165.1	\$	2,010 \$	2,111 \$	1,845	\$ 1,952 \$	2,007 \$	1,804	
Ratio				1.22%	1.32%	1.15%	1.18%	1.25%	1.12%	
North America—Citi-branded		90.6		799	828	712	705	731	627	
Ratio				0.88%	0.95%	0.81%	0.78%	0.84%	0.71%	
North America—Citi retail services		49.6		840	918	781	831	859	761	
Ratio				1.69%	1.88%	1.61%	1.68%	1.76%	1.57%	
Latin America		5.7		169	165	160	159	161	156	
Ratio				2.96%	2.95%	2.96%	2.79%	2.88%	2.89%	
Asia <sup>(5)</sup>		19.2		202	200	192	257	256	260	
Ratio				1.05%	1.06%	1.02%	1.34%	1.36%	1.38%	
Corporate/Other—Consumer <sup>(6)</sup>										
North America	\$	11.7	\$	327 \$	354 \$	415	\$ 334 \$	348 \$	355	
Ratio				3.00%	2.97%	2.49%	3.06%	2.92%	2.13%	
Total Citigroup	\$	326.0	\$	2,793 \$	2,939 \$	2,760	\$ 3,155 \$	3,124 \$	2,913	
Ratio				0.86%	0.92%	0.86%	0.97%	0.98%	0.90%	

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

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

<sup>(3)</sup> The 90+ days past due balances for *North America*—Citi-branded and *North America*—Citi retail services are generally 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.

<sup>(4)</sup> The 90+ days past due and 30–89 days past due and related ratios for *North America GCB* exclude U.S. mortgage loans that are guaranteed by U.S. government-sponsored entities since the potential loss predominantly resides with the U.S. government-sponsored entities. The amounts excluded for loans 90+ days past due and (EOP loans) were \$151 million (\$0.6 billion), \$163 million (\$0.6 billion) and \$244 million (\$0.7 billion) as of June 30, 2019, March 31, 2019 and June 30, 2018, respectively. The amounts excluded for loans 30–89 days past due and (EOP loans) were \$83 million (\$0.6 billion), \$71 million (\$0.6 billion) and \$87 million (\$0.7 billion) as of June 30, 2019, March 31, 2019 and June 30, 2018, respectively.

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

<sup>(6)</sup> The loans 90+ days past due and related ratios exclude U.S. mortgage loans that are guaranteed by U.S. government-sponsored agencies since the potential loss predominantly resides with the U.S. agencies. The amounts excluded for 90+ days past due and (EOP loans) for each period were \$0.3 billion (\$0.7 billion), \$0.3 billion (\$0.7 billion) and \$0.4 billion (\$0.9 billion) as of June 30, 2019, March 31, 2019 and June 30, 2018, respectively. The amounts excluded for loans 30–89 days past due and (EOP loans) for each period were \$0.1 billion (\$0.7 billion), \$0.1 billion (\$0.7 billion) and \$0.1 billion (\$0.9 billion) as of June 30, 2019, March 31, 2019 and June 30, 2018, respectively.

### Consumer Loan Net Credit Losses and Ratios

	A` lo	verage pans <sup>(1)</sup>	Net c	redit losses <sup>(2)</sup>	
In millions of dollars, except average loan amounts in billions		2Q19	2Q19	1Q19	2Q18
Global Consumer Banking					
Total	\$	309.4 \$		1,891 \$	1,726
Ratio			2.45%	2.48%	2.28 %
Retail banking					
Total	\$	147.4 \$		256 \$	228
Ratio			0.66%	0.71%	0.63 %
North America		57.9	51	60	32
Ratio			0.35%	0.43%	0.23 %
Latin America		20.0	129	138	138
Ratio			2.59%	2.81%	2.75 %
Asia <sup>(3)</sup>		69.5	64	58	58
Ratio			0.37%	0.34%	0.33 %
Cards					
Total	\$	162.0 \$	1,645 \$	1,635 \$	1,498
Ratio			4.07%	4.08%	3.81 %
North America—Citi-branded		88.4	723	706	657
Ratio			3.28%	3.26%	3.04 %
North America—Citi retail services		49.1	654	663	589
Ratio			5.34%	5.36%	5.07 %
Latin America		5.6	156	160	140
Ratio			11.17%	11.38%	10.40 %
Asia <sup>(3)</sup>		18.9	112	106	112
Ratio			2.38%	2.25%	2.38 %
Corporate/Other—Consumer				_	
Total	\$	12.4 \$	4 \$	1 \$	(20)
Ratio			0.13%	0.03%	(0.41)%
International			_	_	19
Ratio			<u>_%</u>	<u> </u> %	6.93 %
North America		12.4	4	1	(39)
Ratio			0.13%	0.03%	(0.85)%
Total Citigroup	\$	321.8 \$		1,892 \$	1,706
Ratio			2.36%	2.38%	2.12 %

<sup>(1)</sup> Average loans include interest and fees on credit cards.

 <sup>(2)</sup> The ratios of net credit losses are calculated based on average loans, net of unearned income
 (3) Asia includes NCLs and average loans in certain EMEA countries for all periods presented. The ratios of net credit losses are calculated based on average loans, net of unearned income.

### **CORPORATE CREDIT**

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:

	At June 30, 2019				N	March 31, 2019				December 31, 2018												
In billions of dollars	wi	Oue thin year	t 1 w	reater han year but ithin years	th	eater ian ears	otal osure	wi	Oue thin year	t 1 w	reater than year but vithin years		Greater than years		Total posure	w	Oue ithin year	1 1 w	reater than year but vithin years		reater than years	Total posure
Direct outstandings (on-balance sheet) <sup>(1)</sup>	\$	134	\$	107	\$	21	\$ 262	\$	135	\$	109	\$	20	\$	264	\$	128	\$	110	\$	20	\$ 258
Unfunded lending commitments (off-balance sheet) <sup>(2)</sup>		123		244		15	382		121		240		23		384		106		245		19	370
Total exposure	\$	257	\$	351	\$	36	\$ 644	\$	256	\$	349	\$	43	\$	648	\$	234	\$	355	\$	39	\$ 628

- (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, 2019	March 31, 2019	December 31, 2018
North America	56%	54%	55%
<i>EMEA</i>	27	28	27
Asia	11	11	11
Latin America	6	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 by leveraging 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 costeffective 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, 2019	March 31, 2019	December 31, 2018							
AAA/AA/A	49%	49%	49%							
BBB	35	35	34							
BB/B	15	15	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, 2019	March 31, 2019	December 31, 2018							
Transportation and industrial	21%	21%	21%							
Consumer retail and health	15	15	15							
Technology, media and telecom	12	11	13							
Power, chemicals, metals and mining	10	11	10							
Energy and commodities	8	8	8							
Banks/broker- dealers/finance companies	8	8	8							
Real estate	9	9	8							
Public sector	4	4	5							
Insurance and special purpose entities	4	4	4							
Hedge funds	4	4	4							
Other industries	5	5	4							
Total	100%	100%	100%							

For additional information on Citi's corporate credit portfolio, see Note 13 to the Consolidated Financial Statements.

### 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 *Principal transactions* in the Consolidated Statement of Income.

At June 30, 2019, December 31, 2018 and June 30, 2018, \$30.4 billion, \$30.8 billion and \$27.4 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, 2019	March 31, 2019	December 31, 2018
AAA/AA/A	35%	36%	35%
BBB	47	48	50
BB/B	17	15	14
CCC or below	1	1	1
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, 2019	March 31, 2019	December 31, 2018
Transportation and industrial	23%	22%	23%
Technology, media and telecom	18	18	17
Consumer retail and health	16	16	16
Power, chemicals, metals and mining	14	15	15
Energy and commodities	10	10	11
Insurance and special purpose entities	5	6	6
Banks/broker- dealers/finance companies	4	4	4
Public sector	4	4	3
Real estate	4	4	4
Other industries	2	1	1
Total	100%	100%	100%

### ADDITIONAL CONSUMER AND CORPORATE CREDIT DETAILS

### **Loans Outstanding**

	2nd Qtr.		1st Qtr.		4th Qtr.		3rd Qtr.		2nd Qtr.
In millions of dollars	2019		2019		2018		2018		2018
Consumer loans									
In North America offices <sup>(1)</sup>									
Residential first mortgages <sup>(2)</sup>	\$ 45,474	\$	45,351	\$	47,412	\$	47,707	\$	47,904
Home equity loans <sup>(2)</sup>	10,404		10,937		11,543		12,131		12,861
Credit cards	140,266		135,908		144,557		137,872		136,741
Installment and other	3,245		3,314		3,454		3,528		3,454
Commercial banking	10,690		10,360		9,728		9,279		9,104
Total	\$ 210,079	\$	205,870	\$	216,694	\$	210,517	\$	210,064
In offices outside North America <sup>(1)</sup>									
Residential first mortgages <sup>(2)</sup>	\$ 36,580	\$	36,114	\$	35,972	\$	36,282	\$	36,134
Credit cards	24,975		24,343		24,926		24,414		24,157
Installment and other	27,321		26,744		26,134		26,281		25,791
Commercial banking	27,040		26,816		26,761		27,975		27,486
Total	\$ 115,916	\$	114,017	\$	113,793	\$	114,952	\$	113,568
Consumer loans, net of unearned income <sup>(3)</sup>	\$ 325,995	\$	319,887	\$	330,487	\$	325,469	\$	323,632
Corporate loans									
In North America offices <sup>(1)</sup>									
Commercial and industrial	\$ 54,519	\$	56,698	\$	52,063	\$	51,365	\$	53,260
Financial institutions	47,610		49,985		48,447		46,255		42,867
Mortgage and real estate <sup>(2)</sup>	51,321		49,746		50,124		47,629		46,310
Installment, revolving credit and other	33,555		31,960		32,425		31,414		31,861
Lease financing	1,385		1,405		1,429		1,445		1,445
Total	\$ 188,390	\$	189,794	\$	184,488	\$	178,108	\$	175,743
In offices outside North America <sup>(1)</sup>									
Commercial and industrial	\$ 98,351	\$	97,844	\$	94,701	\$	98,281	\$	98,068
Financial institutions	37,523		39,155		36,837		37,851		38,312
Mortgage and real estate <sup>(2)</sup>	7,577		7,005		7,376		7,344		7,261
Installment, revolving credit and other	27,333		24,868		25,684		22,827		22,755
Lease financing	92		95		103		131		139
Governments and official institutions	3,409		3,698		4,520		4,898		5,270
Total	\$ 174,285	\$	172,665	\$	169,221	\$	171,332	\$	171,805
Corporate loans, net of unearned income <sup>(4)</sup>	\$ 362,675	\$	362,459	\$	353,709	\$	349,440	\$	347,548
Total loans—net of unearned income	\$ 688,670	\$	682,346	\$	684,196	\$	674,909	\$	671,180
Allowance for loan losses—on drawn exposures	(12,466)		(12,329)		(12,315)		(12,336)		(12,126)
Total loans—net of unearned income and allowance for credit losses	\$ 676,204	\$	670,017	\$	671,881	\$	662,573	\$	659,054
Allowance for loan losses as a percentage of total loans—net of unearned income <sup>(5)</sup>	1.82%	6	1.82%	ó	1.81%	ó	1.84%	, 0	1.81%
Allowance for consumer loan losses as a percentage of total consumer loans—net of unearned income <sup>(5)</sup>	3.10%	<b>6</b>	3.13%	ó	3.01%	ó	3.07%	ó	3.03%
Allowance for corporate loan losses as a percentage of total corporate loans—net of unearned income <sup>(5)</sup>	0.66%	6	0.64%	ó	0.67%	ó	0.68%	, 0	0.68%

<sup>(1)</sup> North America includes the U.S., Canada and Puerto Rico. Mexico is included in offices outside North America.

<sup>(2)</sup> Loans secured primarily by real estate.

<sup>(3)</sup> Consumer loans are net of unearned income of \$713 million, \$701 million, \$708 million, \$712 million and \$711 million at June 30, 2019, March 31, 2019, December 31, 2018, September 30, 2018 and June 30, 2018, respectively. Unearned income on consumer loans primarily represents unamortized origination fees and costs, premiums and discounts.

<sup>(4)</sup> Corporate loans are net of unearned income of \$(815) million, \$(808) million, \$(822) million, \$(787) million and \$(802) million at June 30, 2019, March 31, 2019, December 31, 2018, September 30, 2018 and June 30, 2018, respectively. Unearned income on corporate loans primarily represents interest received in advance, but not yet earned, on loans originated on a discounted basis.

<sup>(5)</sup> All periods exclude loans that are carried at fair value.

### **Details of Credit Loss Experience**

	2	2nd Qtr.		1st Qtr.		4th Qtr.		3rd Qtr.	2	2nd Qtr.
In millions of dollars		2019		2019		2018		2018		2018
Allowance for loan losses at beginning of period	\$	12,329	\$	12,315	\$	12,336	\$	12,126	\$	12,354
Provision for loan losses										
Consumer	\$	1,972	\$	1,942	\$	1,774	\$	1,869	\$	1,764
Corporate		117		2		76		37		31
Total	\$	2,089	\$	1,944	\$	1,850	\$	1,906	\$	1,795
Gross credit losses										
Consumer										
In U.S. offices	\$	1,680	\$	1,670	\$	1,495	\$	1,462	\$	1,490
In offices outside the U.S.		591		602		595		596		599
Corporate										
In U.S. offices		41		33		23		15		5
In offices outside the U.S.		42		40		53		21		15
Total	\$	2,354	\$	2,345	\$	2,166	\$	2,094	\$	2,109
Credit recoveries <sup>(1)</sup>										
Consumer										
In U.S. offices	\$	255	\$	246	\$	217	\$	212	\$	255
In offices outside the U.S.		123		134		132		120		128
Corporate										
In U.S. offices		5		3		24		1		5
In offices outside the U.S.		8		14		7		5		17
Total	\$	391	\$	397	\$	380	\$	338	\$	405
Net credit losses										
In U.S. offices	\$	1,461	\$	1,454	\$	1,277	\$	1,264	\$	1,235
In offices outside the U.S.		502		494		509		492		469
Total	\$	1,963	\$	1,948	\$	1,786	\$	1,756	\$	1,704
Other— $net^{(2)(3)(4)(5)(6)(7)}$	\$	11	\$	18	\$	(85)	\$	60	\$	(319)
Allowance for loan losses at end of period	\$	12,466	\$	12,329	\$	12,315	\$	12,336	\$	12,126
Allowance for loan losses as a percentage of total loans <sup>(8)</sup>		1.82%	ó	1.82%	ζo	1.81%	ó	1.84%	ó	1.81%
Allowance for unfunded lending commitments <sup>(9)</sup>	\$	1,376	\$	1,391	\$	1,367	\$	1,321	\$	1,278
Total allowance for loan losses and unfunded lending commitments	\$	13,842	\$	13,720	\$	13,682	\$	13,657	\$	13,404
Net consumer credit losses	\$	1,893	\$	1,892	\$	1,741	\$	1,726	\$	1,706
As a percentage of average consumer loans		2.36%	o	2.38%	<b>6</b>	2.13%	ó	2.11%	ó	2.12%
Net corporate credit losses (recoveries)	\$	70	\$	56	\$	45	\$	30	\$	(2)
As a percentage of average corporate loans		0.08%	ó	0.07%	6	0.06%	ó	0.03%	ó	%
Allowance by type at end of period <sup>(10)</sup>										
Consumer	\$	10,113	\$	10,026	\$	9,950	\$	9,997	\$	9,796
Corporate		2,353		2,303		2,365		2,339		2,330
Total	\$	12,466	\$	12,329	\$	12,315	\$	12,336	\$	12,126

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

<sup>(2)</sup> 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.

<sup>(3)</sup> The second quarter of 2019 includes an increase of approximately \$13 million related to FX translation.

<sup>(4)</sup> The first quarter of 2019 includes an increase of approximately \$26 million related to FX translation.

<sup>(5)</sup> The fourth quarter of 2018 includes a reduction of approximately \$4 million related to the sale or transfers to held-for-sale (HFS) of various loan portfolios, including a reduction of \$3 million related to the transfers of a real estate loan portfolio to HFS. Additionally, the fourth quarter includes a decrease of approximately \$76 million related to FX translation.

<sup>(6)</sup> The third quarter of 2018 includes a reduction of approximately \$5 million related to the sale or transfers to HFS of various loan portfolios, including a reduction of \$2 million related to the transfers of a real estate loan portfolio to HFS. Additionally, the third quarter includes an increase of approximately \$62 million related to FX translation.

- (7) 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 portfolio to HFS. Additionally, the second quarter includes a decrease of approximately \$164 million related to FX translation.
- (8) June 30, 2019, March 31, 2019, December 31, 2018, September 30, 2018 and June 30, 2018 exclude \$3.8 billion, \$3.9 billion, \$3.2 billion, \$4.2 billion and \$3.0 billion, respectively, of loans which are carried at fair value.
- (9) Represents additional credit reserves recorded as Other liabilities on the Consolidated Balance Sheet.
- (10) 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 "Significant Accounting Policies and Significant Estimates" and Note 1 to the Consolidated Financial Statements in Citi's 2018 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:

	June 30, 2019						
In billions of dollars		ance for losses	Loans, net of unearned income	Allowance as a percentage of loans <sup>(1)</sup>			
North America cards <sup>(2)</sup>	\$	6.7	\$ 140.2	4.8%			
North America mortgages <sup>(3)</sup>		0.4	55.9	0.7			
North America other		0.3	14.0	2.1			
International cards		0.6	25.0	2.4			
International other <sup>(4)</sup>		2.1	90.9	2.3			
Total consumer	\$	10.1	\$ 326.0	3.1%			
Total corporate		2.4	362.7	0.7			
Total Citigroup	\$	12.5	\$ 688.7	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 \$6.7 billion of loan loss reserves represented approximately 15 months of coincident net credit loss coverage.
- (3) Of the \$0.4 billion, nearly all was allocated to *North America* mortgages in *Corporate/Other*, of which \$0.1 billion and \$0.3 billion determined in accordance with ASC 450-20 and ASC 310-10-35 (troubled debt restructurings), respectively. Of the \$55.9 billion in loans, approximately \$53.4 billion and \$2.4 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.

	December 31, 2018								
In billions of dollars	llowance for loan losses	Loans, net of unearned income	Allowance as a percentage of loans <sup>(1)</sup>						
North America cards <sup>(2)</sup>	\$ 6.5	\$ 144.6	4.5%						
North America mortgages <sup>(3)</sup>	0.4	58.9	0.7						
North America other	0.3	13.2	2.3						
International cards	0.7	24.9	2.8						
International other <sup>(4)</sup>	2.0	88.9	2.2						
Total consumer	\$ 9.9	\$ 330.5	3.0%						
Total corporate	2.4	353.7	0.7						
Total Citigroup	\$ 12.3	\$ 684.2	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 \$6.5 billion of loan loss reserves represented approximately 16 months of coincident net credit loss coverage.
- (3) Of the \$0.4 billion, nearly all was allocated to *North America* mortgages in *Corporate/Other*, including \$0.1 billion and \$0.3 billion determined in accordance with ASC 450-20 and ASC 310-10-35 (troubled debt restructurings), respectively. Of the \$58.9 billion in loans, approximately \$56.3 billion and \$2.5 billion of the loans were 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

For additional information on Citi's non-accrual loans and assets and renegotiated loans, see "Non-Accrual Loans and Assets and Renegotiated Loans" in Citi's 2018 Annual Report on Form 10-K.

### 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.

	Ju	n. 30,	Mar. 31,	Dec. 31,	Sept. 30,	Jun. 30,
In millions of dollars	2	019	2019	2018	2018	2018
Corporate non-accrual loans <sup>(1)(2)</sup>						
North America	\$	779	\$ 922	\$ 483	\$ 679	\$ 784
EMEA		321	317	375	362	391
Latin America		259	225	230	266	204
Asia		51	18	223	233	244
Total corporate non-accrual loans	\$	1,410	\$ 1,482	\$ 1,311	\$ 1,540	\$ 1,623
Consumer non-accrual loans <sup>(1)</sup>						
North America	\$	1,216	\$ 1,230	\$ 1,241	\$ 1,323	\$ 1,373
Latin America		723	694	715	764	726
Asia <sup>(3)</sup>		289	281	270	287	284
Total consumer non-accrual loans	\$	2,228	\$ 2,205	\$ 2,226	\$ 2,374	\$ 2,383
Total non-accrual loans	\$	3,638	\$ 3,687	\$ 3,537	\$ 3,914	\$ 4,006

<sup>(1)</sup> Excludes purchased distressed loans, as they are generally accreting interest. The carrying value of these loans was \$123 million at June 30, 2019, \$125 million at March 31, 2019, \$128 million at December 31, 2018, \$131 million at September 30, 2018 and \$149 million at June 30, 2018.

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

	Th	ree Months End	ed	Th	led	
		June 30, 2019			June 30, 2018	
In millions of dollars	Corporate	Consumer	Total	Corporate	Consumer	Total
Non-accrual loans at beginning of period	\$ 1,482	\$ 2,205	\$ 3,687	\$ 1,668	\$ 2,575	\$ 4,243
Additions	499	823	1,322	628	791	1,419
Sales and transfers to HFS	_	(22)	(22)	(8)	(68)	(76)
Returned to performing	(11)	(92)	(103)	(36)	(146)	(182)
Paydowns/settlements	(499)	(286)	(785)	(613)	(327)	(940)
Charge-offs	(37)	(406)	(443)	(14)	(372)	(386)
Other	(24)	6	(18)	(2)	(70)	(72)
Ending balance	\$ 1,410	\$ 2,228	\$ 3,638	\$ 1,623	\$ 2,383	\$ 4,006

<sup>(2)</sup> Approximately 46%, 55% and 65% of Citi's corporate non-accrual loans were performing at June 30, 2019, December 31, 2018 and March 31, 2018, respectively.

<sup>(3)</sup> Asia GCB includes balances in certain EMEA countries for all periods presented.

Six Months Ended June 30, 2019

Six Months Ended June 30, 2018

In millions of dollars	Corporate	Consumer	Total	Corporate	Consumer	Total
Non-accrual loans at beginning of period	\$ 1,311 \$	2,226	\$ 3,537	\$ 1,942	\$ 2,690	\$ 4,632
Additions	1,222	1,545	2,767	1,453	1,652	3,105
Sales and transfers to HFS	(5)	(56)	(61)	(28)	(153)	(181)
Returned to performing	(39)	(234)	(273)	(104)	(354)	(458)
Paydowns/settlements	(983)	(460)	(1,443)	(1,497)	(597)	(2,094)
Charge-offs	(72)	(808)	(880)	(120)	(826)	(946)
Other	(24)	15	(9)	(23)	(29)	(52)
Ending balance	\$ 1,410 \$	2,228	\$ 3,638	\$ 1,623	\$ 2,383	\$ 4,006

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, 2019		Mar. 31, 2019		Dec. 31, 2018		Sept. 30, 2018		Jun. 30, 2018
OREO									
North America	\$ 47	\$	63	\$	64	\$	76	\$	66
EMEA	1		1		1		1		1
Latin America	14		13		12		25		24
Asia	20		21		22		7		10
Total OREO	\$ 82	\$	98	\$	99	\$	109	\$	101
Non-accrual assets									
Corporate non-accrual loans	\$ 1,410	\$	1,482	\$	1,311	\$	1,540	\$	1,623
Consumer non-accrual loans	2,228		2,205		2,226		2,374		2,383
Non-accrual loans (NAL)	\$ 3,638	\$	3,687	\$	3,537	\$	3,914	\$	4,006
OREO	\$ 82	\$	98	\$	99	\$	109	\$	101
Non-accrual assets (NAA)	\$ 3,720	\$	3,785	\$	3,636	\$	4,023	\$	4,107
NAL as a percentage of total loans	0.53%	ó	0.54%	ó	0.52%	0	0.58%	ó	0.60%
NAA as a percentage of total assets	0.19		0.19		0.19		0.21		0.21
Allowance for loan losses as a percentage of $\mathrm{NAL}^{(1)}$	343		334		348		315		303

<sup>(1)</sup> The allowance for loan losses includes the allowance for Citi's credit card portfolios and purchased distressed loans, 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:

In millions of dollars	ın. 30, 2019	Ι	Dec. 31, 2018
Corporate renegotiated loans <sup>(1)</sup>			
In U.S. offices			
Commercial and industrial <sup>(2)</sup>	\$ 182	\$	188
Mortgage and real estate	90		111
Financial institutions	1		16
Other	6		2
Total	\$ 279	\$	317
In offices outside the U.S.			
Commercial and industrial <sup>(2)</sup>	\$ 242	\$	226
Mortgage and real estate	22		12
Financial institutions	9		9
Other	_		_
Total	\$ 273	\$	247
Total corporate renegotiated loans	\$ 552	\$	564
Consumer renegotiated loans (3)(4)(5)			
In U.S. offices			
Mortgage and real estate	\$ 2,370	\$	2,520
Cards	1,399		1,338
Installment and other	88		86
Total	\$ 3,857	\$	3,944
In offices outside the U.S.			
Mortgage and real estate	\$ 325	\$	311
Cards	474		480
Installment and other	410		415
Total	\$ 1,209	\$	1,206
Total consumer renegotiated loans	\$ 5,066	\$	5,150

- Includes \$465 million and \$466 million of non-accrual loans included in the non-accrual loans table above at June 30, 2019 and December 31, 2018, respectively. The remaining loans are accruing interest.
- (2) In addition to modifications reflected as TDRs at June 30, 2019, Citi also modified \$26 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 \$1,002 million and \$1,015 million of non-accrual loans included in the non-accrual loans table above at June 30, 2019 and December 31, 2018, respectively. The remaining loans are accruing interest.
- (4) Includes \$21 million and \$17 million of commercial real estate loans at June 30, 2019 and December 31, 2018, respectively.
- (5) Includes \$98 million and \$101 million of other commercial loans at June 30, 2019 and December 31, 2018, respectively.

### 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 2018 Annual Report on Form 10-K.

### **High-Quality Liquid Assets (HQLA)**

		Citibank		Non	-Bank and (	Other	Total					
In billions of dollars	un. 30, 2019	Mar. 31, 2019	Jun. 30, 2018	Jun. 30, 2019	Mar. 31, 2019	Jun. 30, 2018	Jun. 30, 2019	Mar. 31, 2019	Jun. 30, 2018			
Available cash	\$ 102.1	\$ 94.7	\$ 97.3	\$ 42.1	\$ 34.9	\$ 27.4	\$ 144.2	\$ 129.6	\$ 124.7			
U.S. sovereign	93.8	94.9	101.4	37.0	29.5	28.7	130.8	124.4	130.1			
U.S. agency/agency MBS	57.5	59.3	59.5	4.8	5.3	6.7	62.3	64.6	66.2			
Foreign government debt(1)	61.9	67.7	73.5	4.0	3.5	10.9	65.9	71.2	84.4			
Other investment grade	3.1	3.5	0.1	0.7	1.6	1.1	3.8	5.1	1.2			
Total HQLA (AVG)	\$ 318.4	\$ 320.1	\$ 331.8	\$ 88.6	\$ 74.8	\$ 74.8	\$ 407.0	\$ 394.9	\$ 406.6			

Note: The amounts set forth in the table above are presented on an average basis. 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. The table above incorporates various restrictions that could limit the transferability of liquidity between legal entities, including Section 23A of the Federal Reserve Act.

(1) 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 Canada.

The table above includes average amounts of HQLA held at Citigroup's operating entities that are eligible for inclusion in the calculation of Citigroup's consolidated Liquidity Coverage Ratio (LCR), pursuant to the U.S. LCR rules. 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 other entities within Citigroup. Citigroup's HQLA increased modestly year-over-year, as well as sequentially, largely reflecting cash from non-bank long-term debt issuances. While available liquidity resources at Citibank increased both year-over-year and sequentially, the amount of HQLA included in the table above declined both year-over-year and sequentially, as less HQLA in Citibank 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 \$32 billion as of June 30, 2019 (compared to \$25 billion as of March 31, 2019 and \$21 billion as of June 30, 2018) 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.

### **Liquidity Coverage Ratio**

In addition to internal 30-day liquidity stress testing performed for Citi's major entities, operating subsidiaries and countries, Citi also monitors its liquidity by reference to the LCR. The table below details the components of Citi's LCR calculation and HQLA in excess of net outflows for the periods indicated:

In billions of dollars	Jun. 30, 2019	N	Mar. 31, 2019	J	un. 30, 2018
HQLA	\$ 407.0	\$	394.9	\$	406.6
Net outflows	353.5		331.6		341.5
LCR	115%	,	119%		119%
HQLA in excess of net outflows	\$53.5	\$	63.3	\$	65.1

Note: The amounts are presented on an average basis.

Citi's average LCR decreased both year-over-year and sequentially, due to changes in the amount of Citibank HQLA available for inclusion in the consolidated metric.

#### Loans

The table below details 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	ın. 30, 2019	lar. 31, 2019	ın. 30, 2018
Global Consumer Banking			
North America	\$ 195.4	\$ 195.0	\$ 188.8
Latin America	25.6	25.6	25.5
Asia <sup>(1)</sup>	88.4	88.6	88.8
Total	\$ 309.4	\$ 309.2	\$ 303.1
Institutional Clients Group			
Corporate lending	\$ 132.9	\$ 133.1	\$ 135.5
Treasury and trade solutions (TTS)	73.2	75.1	77.7
Private bank	101.2	97.2	90.7
Markets and securities services and other	50.6	51.1	43.0
Total	\$ 357.9	\$ 356.5	\$ 346.9
Total Corporate/Other	\$ 12.3	\$ 13.5	\$ 19.7
Total Citigroup loans (AVG)	\$ 679.6	\$ 679.2	\$ 669.7
Total Citigroup loans (EOP)	\$ 688.7	\$ 682.3	\$ 671.2

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

End-of-period loans increased 3% year-over-year and 1% sequentially. On an average basis, loans increased 1% year-over-year and remained largely unchanged sequentially.

Excluding the impact of FX translation, average loans increased 3% year-over-year and 4% in aggregate across *GCB* and *ICG*. Average *GCB* loans grew 3% year-over-year, driven by continued growth in *North America GCB and Asia GCB*. Average loans in *Latin America GCB* declined 1% year-over-year, reflecting a deceleration in GDP growth in Mexico and a slowdown in overall industry volumes.

Excluding the impact of FX translation, average *ICG* loans increased 5% year-over-year. TTS loans declined 4% year-over-year, despite continued strong origination volumes, as Citi continued to utilize its distribution capabilities to optimize the balance sheet and drive returns. Corporate lending loans were flat year-over-year, reflecting both the episodic nature of clients' strategic financing needs, as well as lower activity in *Asia* where corporate client sentiment has become more cautious. Private bank loans increased 12%, driven by both new client onboarding, as well as the deepening of relationships with existing clients. Finally, continued strong year-over-year *Markets and securities services* loan growth was driven primarily by residential and commercial real-estate warehouse lending, as well as Community Reinvestment Act-related lending.

Average *Corporate/Other* loans continued to decline (down 37%), driven by the wind-down of legacy assets.

### **Deposits**

The table below details 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		ın. 30, 2019	N	Iar. 31, 2019	ın. 30, 2018
Global Consumer Banking					
North America	\$	183.0	\$	182.3	\$ 179.9
Latin America		29.2		28.6	28.3
Asia <sup>(1)</sup>		100.7		99.3	97.6
Total	\$	312.9	\$	310.2	\$ 305.8
Institutional Clients Group					
Treasury and trade solutions (TTS)	\$	484.2	\$	472.4	\$ 448.7
Banking ex-TTS		133.2		130.2	125.5
Markets and securities services		94.0		90.0	88.2
Total	\$	711.4	\$	692.6	\$ 662.4
Corporate/Other	\$	15.5	\$	14.4	\$ 18.0
Total Citigroup deposits (AVG)	\$ 1	1,039.9	\$	1,017.2	\$ 986.2
Total Citigroup deposits (EOP)	\$ 1	1,045.6	\$	1,030.4	\$ 996.7

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

End-of-period deposits increased 5% year-over-year and 1% sequentially. On an average basis, deposits increased 5% year-over-year and 2% sequentially.

Excluding the impact of FX translation, average deposits grew 7% from the prior-year period with contribution across businesses and regions. In *GCB*, deposits increased 3%, driven by growth across all regions.

Within *ICG*, average deposits grew 9% year-over-year, primarily driven by continued 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 8.5 years as of June 30, 2019, compared to 8.3 years as of the prior-year period and 8.6 as of the prior quarter. The weighted-average maturity is calculated based on the contractual maturity of each security. For securities which are redeemable prior to maturity at the option of the holder, the weighted-average maturity is calculated based on the earliest date an option becomes exercisable.

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 complements benchmark debt issuance as a source of funding for Citi's non-bank entities. Citi's long-term debt at the bank includes benchmark senior debt, FHLB advances and securitizations.

### Long-Term Debt Outstanding

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

In billions of dollars		ın. 30, 2019	Iar. 31, 2019	ın. 30, 2018
Parent and other(1)				
Benchmark debt:				
Senior debt	\$	111.2	\$ 109.7	\$ 107.8
Subordinated debt		25.5	24.9	25.3
Trust preferred		1.7	1.7	1.7
Customer-related debt		47.9	42.4	34.3
Local country and other <sup>(2)</sup>		3.3	3.4	3.7
Total parent and other	\$	189.6	\$ 182.1	\$ 172.8
Bank				
FHLB borrowings	\$	7.7	\$ 10.5	\$ 13.7
Securitizations <sup>(3)</sup>		25.9	25.9	28.5
Citibank benchmark senior debt		25.4	21.4	18.5
Local country and other <sup>(2)</sup>		3.6	3.7	3.3
Total bank	\$	62.6	\$ 61.5	\$ 64.0
Total long-term debt	\$	252.2	\$ 243.6	\$ 236.8

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.

- (1) "Parent and other" includes long-term debt issued to third parties by the parent holding company (Citigroup) and Citi's non-bank subsidiaries (including broker-dealer subsidiaries) that are consolidated into Citigroup. As of June 30, 2019, "parent and other" included \$37.4 billion of long-term debt issued by Citi's broker-dealer subsidiaries.
- Local country debt includes debt issued by Citi's affiliates in support of their local operations.
- (3) Predominantly credit card securitizations, primarily backed by Citibranded credit card receivables.

Citi's total long-term debt outstanding increased yearover-year, primarily driven by the issuance of customer-related debt at the non-bank entities and unsecured senior benchmark debt at the bank, partially offset by a decline in FHLB advances and securitizations. Sequentially, Citi's total longterm debt outstanding increased, primarily driven by the issuance of unsecured senior benchmark debt at the bank and customer-related debt at the non-bank entities, partially offset by a decline in FHLB advances.

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. During the second quarter of 2019, Citi repurchased and called an aggregate of approximately \$1.7 billion of its outstanding long-term debt.

### 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:

	2Q	19	1Q	19		2Q18				
In billions of dollars	Maturities Issuances		Maturities		Issuances		Maturities	Issuances		
Parent and other										
Benchmark debt:										
Senior debt	\$ 5.1	\$ 4.5	\$ 0.2	\$	4.6	\$	7.2 \$	4.9		
Subordinated debt	_	_	_		_		0.3	0.3		
Trust preferred	_	_	_		_		_	_		
Customer-related debt	3.2	7.5	1.0		5.2		1.5	4.7		
Local country and other	0.3	0.1	_		0.3		0.2	2.1		
Total parent and other	\$ 8.6	\$ 12.2	\$ 1.2	\$	10.1	\$	9.1 \$	12.0		
Bank										
FHLB borrowings	\$ 2.8	<b>\$</b>	\$ _	\$	_	\$	4.5 \$	2.5		
Securitizations	0.1	_	2.6		_		2.7	1.1		
Citibank benchmark senior debt	_	3.9	2.5		5.0		_	3.5		
Local country and other	0.3	0.2	0.3		0.5		0.9	0.9		
Total bank	\$ 3.2	\$ 4.1	\$ 5.4	\$	5.5	\$	8.1 \$	8.0		
Total	\$ 11.9	\$ 16.3	\$ 6.6	\$	15.6	\$	17.2 \$	20.0		

The table below shows Citi's aggregate long-term debt maturities (including repurchases and redemptions) year-to-date in 2019, as well as its aggregate expected remaining long-term debt maturities by year as of June 30, 2019:

			<u>Maturities</u>															
In billions of dollars	2019	9 YTD		2019		2020		2021		2022		2023		2024	Th	ereafter		Total
Parent and other																		
Benchmark debt:																		
Senior debt	\$	5.3	\$	8.9	\$	8.9	\$	14.3	\$	9.3	\$	12.6	\$	7.1	\$	50.0	\$	111.2
Subordinated debt		_		_		_		_		0.7		1.1		0.9		22.8	\$	25.5
Trust preferred		_		_		_		_		_		_		_		1.7		1.7
Customer-related debt		4.2		2.5		8.2		4.1		3.5		4.1		2.8		22.8		47.9
Local country and other		0.4		1.4		_		0.1		0.1		0.1		_		1.6		3.3
Total parent and other	\$	9.8	\$	12.7	\$	17.1	\$	18.5	\$	13.6	\$	17.9	\$	10.8	\$	99.0	\$	189.6
Bank	,																	
FHLB borrowings	\$	2.8	\$	2.8	\$	4.9	\$	_	\$	_	\$	_	\$	_	\$	_	\$	7.7
Securitizations		2.6		5.2		4.6		7.2		2.2		2.5		1.2		3.1		25.9
Citibank benchmark debt		2.5		2.2		8.7		6.1		5.6		_		2.7		_		25.4
Local country and other		0.7		0.1		0.7		1.6		0.3		0.2		0.1		0.5		3.6
Total bank	\$	8.6	\$	10.3	\$	18.9	\$	14.9	\$	8.2	\$	2.7	\$	4.0	\$	3.6	\$	62.6
Total long-term debt	\$	18.4	\$	23.1	\$	36.0	\$	33.4	\$	21.8	\$	20.6	\$	14.8	\$	102.6	\$	252.2

# Secured Funding Transactions and Short-Term Borrowings

Citi supplements its primary sources of funding with short-term financings which 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.

### Secured Funding Transactions

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 \$181 billion as of June 30, 2019 increased 2% from the prior-year period and declined 5% sequentially. Excluding the impact of FX translation, secured funding increased 3% from the prior-year period and declined 5% sequentially, both driven by normal business activity. Average balances for secured funding were approximately \$189 billion for the quarter ended June 30, 2019.

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, 2019.

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.

### Short-Term Borrowings

Citi's short-term borrowings of \$42 billion increased 14% year-over-year and 8% sequentially. Both the year-over-year and sequential increases reflected growth in commercial paper outstanding. Sequentially, the increase was also driven by FHLB advances (see Note 16 to the Consolidated Financial Statements for further information on Citigroup's and its affiliates' outstanding short-term borrowings).

### **Credit Ratings**

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, 2019.

### Ratings as of June 30, 2019

		Citigroup Inc	Citibank, N.A.					
	Senior debt	Commercial paper	Outlook	Long- term	Short- term	Outlook		
Fitch Ratings (Fitch)	A	F1	Stable	<b>A</b> +	F1	Stable		
Moody's Investors Service (Moody's)	A3	P-2	Stable	Aa3	P-1	Stable		
Standard & Poor's (S&P)	BBB+	A-2	Stable	A+	A-1	Stable		

### Recent Credit Ratings Developments

On June 12, 2019 Fitch Ratings affirmed Citigroup Inc.'s Long-Term Issuer Default Rating (IDR) at 'A' and Citibank, N.A.'s IDR at 'A+'. The Rating Outlooks for the Long-Term IDRs are 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 reevaluate 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 2018 Annual Report on Form 10-K.

Citigroup Inc. and Citibank—Potential Derivative Triggers As of June 30, 2019, 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 \$0.3 billion, unchanged from March 31, 2019. 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, 2019, 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 \$0.5 billion, unchanged from March 31, 2019.

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 \$0.8 billion unchanged from March 31, 2019 (see also Note 19 to the Consolidated Financial Statements). As detailed under "High-Quality Liquid Assets" above, the liquidity resources that are eligible for inclusion in the calculation of Citi's consolidated HQLA were approximately \$318 billion for Citibank and approximately \$89 billion for Citi's non-bank and other entities, for a total of approximately \$407 billion for the quarter ended June 30, 2019. 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 downgrade of Citibank's senior debt/long-term rating across any of the three major rating agencies could also have an adverse impact on the commercial paper/short-term rating of Citibank. As of June 30, 2019, Citibank had liquidity commitments of approximately \$12.9 billion to consolidated asset-backed commercial paper conduits, compared to \$13.1 billion as of March 31, 2019 (as referenced in Note 18 to the Consolidated Financial Statements).

In addition to the above-referenced liquidity resources of certain Citibank 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 2018 Annual Report on Form 10-K.

### **Market Risk of Non-Trading Portfolios**

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 basis point (bps) increase in interest rates:

In millions of dollars, except as otherwise noted	Jun	. 30, 2019	M	Iar. 31, 2019	Ju	n. 30, 2018
Estimated annualized impact to net interest revenue						
U.S. dollar <sup>(1)</sup>	\$	404	\$	527	\$	1,046
All other currencies		659		677		635
Total	\$	1,063	\$	1,204	\$	1,681
As a percentage of average interest-earning assets		0.06%	Ď	0.07%	)	0.10%
Estimated initial impact to AOCI (after-tax) <sup>(2)</sup>	\$	(3,738)	\$	(3,828)	\$	(4,713)
Estimated initial impact on Common Equity Tier 1 Capital ratio (bps)		(23)		(25)		(32)

- (1) 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 \$(230) million for a 100 bps instantaneous increase in interest rates as of June 30, 2019.
- (2) Includes the effect of changes in interest rates on AOCI related to investment securities, cash flow hedges and pension liability adjustments.

The estimated impact to net interest revenue decreased on a sequential basis, reflecting changes in balance sheet composition and Citi Treasury positioning. 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, 2019, Citi expects that the negative \$3.7 billion impact to AOCI in such a scenario could potentially be offset over approximately 26 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 five different changes in interest rate scenarios for the U.S. dollar and Citi's other currencies.

In millions of dollars, except as otherwise noted	Sce	enario 1	Scenari	o 2	Scenario 3	Scenario 4	Scenario 5
Overnight rate change (bps)		100		100	_	_	(100)
10-year rate change (bps)		100		_	100	(100)	(100)
Estimated annualized impact to net interest revenue							
U.S. dollar	\$	404	\$	452	\$ 50	\$ (81)	\$ (864)
All other currencies		659		632	38	(38)	(450)
Total	\$	1,063	\$ 1.	,084	\$ 88	\$ (119)	\$ (1,314)
Estimated initial impact to AOCI (after-tax) <sup>(1)</sup>	\$	(3,738)	) \$ (2,	,394)	\$ (1,364)	\$ 940	\$ 3,082
Estimated initial impact to Common Equity Tier 1 Capital ratio (bps)		(23)	)	(15)	(9)	) 5	17

Note: Each scenario 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.

## Changes in Foreign Exchange Rates—Impacts on AOCI and Capital

As of June 30, 2019, 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 Indian rupee.

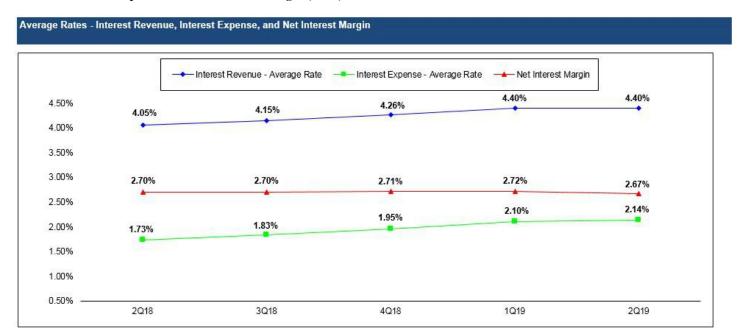
This impact is also before any mitigating actions Citi may take, including ongoing management of its foreign currency translation exposure. Specifically, as currency movements change the value of Citi's net investments in foreign currency-denominated capital, these movements also change the value of 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.

	Fo	r the quarter en	ded
In millions of dollars, except as otherwise noted	Jun. 30, 2019	Mar. 31, 2019	Jun. 30, 2018
Change in FX spot rate <sup>(1)</sup>	0.4%	0.49	(5.8)%
Change in TCE due to FX translation, net of hedges	\$ 56	\$ 65	\$ (2,241)
As a percentage of TCE	<b>—%</b>	<u> </u>	(1.5)%
Estimated impact to Common Equity Tier 1 Capital ratio (on a fully implemented basis) due to changes in FX translation, net of hedges (bps)	_	_	_

<sup>(1)</sup> 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 (NIM)



	2nd Qtr.	1st Qtr.	2nd Qtr.	Change
In millions of dollars, except as otherwise noted	2019	2019	2018	2Q19 vs. 2Q18
Interest revenue <sup>(1)</sup>	\$ 19,761	\$ 19,140	\$ 17,613	12%
Interest expense <sup>(2)</sup>	7,762	7,317	5,885	32
Net interest revenue	\$ 11,999	\$ 11,823	\$ 11,728	2%
Interest revenue—average rate <sup>(3)</sup>	4.40%	4.40%	4.05%	35 bps
Interest expense—average rate	2.14	2.10	1.73	41 bps
Net interest margin <sup>(3)(4)</sup>	2.67	2.72	2.70	(3) bps
Interest-rate benchmarks				
Two-year U.S. Treasury note—average rate	2.13%	2.49%	2.48%	(35) bps
10-year U.S. Treasury note—average rate	2.34	2.65	2.92	(58) bps
10-year vs. two-year spread	21 bp	os 16 b	ops 44 bps	

Note: All interest expense amounts include FDIC, as well as other similar deposit insurance assessments outside of the U.S. As of the fourth quarter of 2018, Citi's FDIC surcharge was eliminated (approximately \$130 million per quarter).

- (1) Net interest revenue includes the taxable equivalent adjustments related to the tax-exempt bond portfolio (based on the U.S. federal statutory tax rates of 21% in 2019 and 2018) of \$49 million, \$64 million and \$63 million for the three months ended June 30, 2019, March 31, 2019 and June 30, 2018, respectively.
- (2) Interest expense associated with certain hybrid financial instruments, which are classified as Long-term debt and accounted for at fair value, is reported together with any changes in fair value as part of Principal transactions in the Consolidated Statement of Income and is therefore not reflected in Interest expense in the table above.
- (3) The average rate on interest revenue and net interest margin reflects the taxable equivalent gross-up adjustment. See footnote 1 on "Average Balances and Interest Rates—Assets" below.
- (4) Citi's net interest margin (NIM) is calculated by dividing net interest revenue by average interest-earning assets.

Citi's net interest revenue in the second quarter of 2019 increased 2% to \$12.0 billion (as set forth in the table above, also up 2% on a taxable equivalent basis) versus the prior-year period. Excluding the impact of FX translation, net interest revenue increased 4%, or approximately \$450 million. The increase in net interest revenue primarily reflected higher rates, loan growth and a favorable loan mix as well as higher trading-related net interest revenue, along with the absence of the FDIC surcharge.

As set forth above, Citi's NIM was 2.67% on a taxable equivalent basis in the second quarter of 2019, a decrease of 5 basis points from the prior quarter, as higher net interest revenue was more than offset by higher cash balances reflecting strong deposit growth in the current quarter.

### **Additional Interest Rate Details**

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

	 A	ve	rage volum	ıe		Interest reve					!	% Average rate			
	2nd Qtr.		1st Qtr.		2nd Qtr.	2	nd Qtr.	1	st Qtr.	2	nd Qtr.	2nd Qtr.	1st Qtr.	2nd Qtr.	
In millions of dollars, except rates	2019		2019		2018		2019		2019		2018	2019	2019	2018	
Assets															
Deposits with banks <sup>(4)</sup>	\$ 192,483	\$	171,369	\$	176,151	\$	736	\$	607	\$	493	1.53%	1.44%	1.12%	
Securities borrowed or purchased under agreements to resell <sup>(5)</sup>															
In U.S. offices	\$ 147,677	\$	152,530	\$	153,273	\$	1,345	\$	1,262	\$	838	3.65%	3.36%	2.19%	
In offices outside the U.S. (4)	118,973		123,109		118,098		552		528		498	1.86	1.74	1.69	
Total	\$ 266,650	\$	275,639	\$	271,371	\$	1,897	\$	1,790	\$	1,336	2.85%	2.63%	1.97%	
Trading account assets (6)(7)															
In U.S. offices	\$ 108,993	\$	95,904	\$	92,791	\$	1,014	\$	940	\$	851	3.73%	3.98%	3.68%	
In offices outside the U.S. <sup>(4)</sup>	136,733		124,673		117,840		1,129		752		922	3.31	2.45	3.14	
Total	\$ 245,726	\$	220,577	\$	210,631	\$	2,143	\$	1,692	\$	1,773	3.50%	3.11%	3.38%	
Investments															
In U.S. offices															
Taxable	\$ 217,593	\$	225,733	\$	225,886	\$	1,273	\$	1,509	\$	1,315	2.35%	2.71%	2.34%	
Exempt from U.S. income tax	15,233		16,287		17,339		196		129		180	5.16	3.21	4.16	
In offices outside the U.S. <sup>(4)</sup>	114,575		108,988		104,562		1,060		940		913	3.71	3.50	3.50	
Total	\$ 347,401	\$	351,008	\$	347,787	\$	2,529	\$	2,578	\$	2,408	2.92%	2.98%	2.78%	
Loans (net of unearned income) <sup>(8)</sup>															
In U.S. offices	\$ 393,694	\$	393,398	\$	382,972	\$	7,614	\$	7,649	\$	6,958	7.76%	7.89%	7.29%	
In offices outside the U.S. <sup>(4)</sup>	285,928		285,811		286,772		4,385		4,341		4,251	6.15	6.16	5.95	
Total	\$ 679,622	\$	679,209	\$	669,744	\$	11,999	\$	11,990	\$	11,209	7.08%	7.16%	6.71%	
Other interest-earning assets <sup>(9)</sup>	\$ 67,885	\$	66,925	\$	69,341	\$	457	\$	483	\$	394	2.70%	2.93%	2.28%	
Total interest-earning assets	\$ 1,799,767	\$	1,764,727	\$	1,745,025	\$	19,761	\$	19,140	\$	17,613	4.40%	4.40%	4.05%	
Non-interest-earning assets <sup>(6)</sup>	\$ 179,357	\$	174,687	\$	172,077										
Total assets	\$ 1,979,124	\$	1,939,414	\$	1,917,102										

<sup>(1)</sup> Net interest revenue includes the taxable equivalent adjustments related to the tax-exempt bond portfolio (based on the U.S. federal statutory tax rates of 21% in 2019 and 2018) of \$49 million, \$64 million and \$63 million for the three months ended June 30, 2019, March 31, 2019 and June 30, 2018, respectively.

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

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

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

<sup>(5)</sup> 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.

<sup>(6)</sup> 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*.

<sup>(7)</sup> 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.

<sup>(8)</sup> Includes cash-basis loans.

<sup>(9)</sup> Includes Brokerage receivables.

## Average Balances and Interest Rates—Liabilities and Equity, and Net Interest Revenue<sup>(1)(2)(3)</sup>

	Average volume							In	ter	est expei	ıse		% Average rate			
		2nd Qtr.		1st Qtr.		2nd Qtr.	2	2nd Qtr.	1	lst Qtr.	2	nd Qtr.	2nd Qtr.	1st Qtr.	2nd Qtr.	
In millions of dollars, except rates		2019		2019		2018	İ	2019		2019		2018	2019	2019	2018	
Liabilities																
Deposits																
In U.S. offices <sup>(4)</sup>	\$	377,651	\$	366,247	\$	332,595	\$	1,627	\$	1,489	\$	1,041	1.73%	1.65%	1.26%	
In offices outside the U.S. (5)		485,069		473,142		453,025		1,657		1,538		1,203	1.37	1.32	1.07	
Total	\$	862,720	\$	839,389	\$	785,620	\$	3,284	\$	3,027	\$	2,244	1.53%	1.46%	1.15%	
Securities loaned or sold under agreements to repurchase <sup>(6)</sup>																
In U.S. offices	\$	112,386	\$	111,033	\$	102,517	\$	1,149	\$	1,107	\$	796	4.10%	4.04%	3.11%	
In offices outside the U.S. <sup>(5)</sup>		76,659		72,904		68,556		575		482		428	3.01	2.68	2.50	
Total	\$	189,045	\$	183,937	\$	171,073	\$	1,724	\$	1,589	\$	1,224	3.66%	3.50%	2.87%	
Trading account liabilities <sup>(7)(8)</sup>																
In U.S. offices	\$	35,939	\$	40,163	\$	36,103	\$	215	\$	196	\$	140	2.40%	1.98%	1.56%	
In offices outside the U.S. <sup>(5)</sup>		59,065		55,127		61,048		105		131		96	0.71	0.96	0.63	
Total	\$	95,004	\$	95,290	\$	97,151	\$	320	\$	327	\$	236	1.35%	1.39%	0.97%	
Short-term borrowings <sup>(9)</sup>																
In U.S. offices	\$	84,091	\$	75,440	\$	84,338	\$	630	\$	571	\$	439	3.00%	3.07%	2.09%	
In offices outside the U.S. <sup>(5)</sup>		22,114		23,740		23,854		85		81		84	1.54	1.38	1.41	
Total	\$	106,205	\$	99,180	\$	108,192	\$	715	\$	652	\$	523	2.70%	2.67%	1.94%	
Long-term debt <sup>(10)</sup>																
In U.S. offices	\$	197,578	\$	191,903	\$	198,291	\$	1,685	\$	1,685	\$	1,620	3.42%	3.56%	3.28%	
In offices outside the U.S. (5)		4,946		5,060		4,980		34		37		38	2.76	2.97	3.06	
Total	\$	202,524	\$	196,963	\$	203,271	\$			1,722	\$	1,658	3.40%	3.55%		
Total interest-bearing liabilities	\$	1,455,498	\$			1,365,307	\$	7,762	\$	7,317	\$	5,885	2.14%	2.10%	1.73%	
Demand deposits in U.S. offices	\$	29,929	\$	26,893	\$	33,737										
Other non-interest-bearing liabilities <sup>(7)</sup>		296,747		301,259		316,907										
Total liabilities	\$ 1			1,742,911		, ,										
Citigroup stockholders' equity	\$		\$	195,705	\$	200,295										
Noncontrolling interest		713		798		856										
Total equity	\$	196,950	\$	196,503	\$	201,151										
Total liabilities and stockholders' equity	\$	1,979,124	\$	1,939,414	\$	1,917,102										
Net interest revenue as a percentage of average interest-earning assets <sup>(11)</sup>																
In U.S. offices	\$	1,015,979	\$	996,867	\$	983,786	\$	7,029	\$	7,232	\$	6,710	2.77%	2.94%		
In offices outside the U.S. <sup>(6)</sup>		783,788		768,160		761,239	_	4,970		4,591		5,018	2.54	2.42	2.64	
Total	\$	1,799,767	\$	1,765,027	\$	1,745,025	\$	11,999	\$	11,823	\$	11,728	2.67%	2.72%	2.70%	

<sup>(1)</sup> Net interest revenue includes the taxable equivalent adjustments related to the tax-exempt bond portfolio (based on the U.S. federal statutory tax rates of 21% in 2019 and 2018) of \$49 million, \$64 million and \$63 million for the three months ended June 30, 2019, March 31, 2019 and June 30, 2018, respectively.

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

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

<sup>(4)</sup> 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 assessments.

<sup>(5)</sup> Average rates reflect prevailing local interest rates, including inflationary effects and monetary corrections in certain countries.

<sup>(6)</sup> 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.

<sup>(7)</sup> 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*.

<sup>(8)</sup> 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 *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)

		Average	vol	lume		Interest	rev	venue	% Average rate			
	S	ix Months	S	ix Months	S	ix Months	S	Six Months	Six Months	Six Months		
In millions of dollars, except rates		2019		2018		2019		2018	2019	2018		
Assets												
Deposits with banks <sup>(4)</sup>	\$	181,926	\$	173,509	\$	1,343	\$	925	1.49%	1.08%		
Securities borrowed or purchased under agreements to resell <sup>(5)</sup>												
In U.S. offices	\$	150,104	\$	146,816	\$	2,607	\$	1,551	3.50%	2.13%		
In offices outside the U.S. (4)		121,041		116,009		1,080		824	1.80	1.43		
Total	\$	271,145	\$	262,825	\$	3,687	\$	2,375	2.74%	1.82%		
Trading account assets <sup>(6)(7)</sup>												
In U.S. offices	\$	102,449	\$	95,175	\$	1,954	\$	1,720	3.85%	3.64%		
In offices outside the U.S. (4)		130,703		118,222		1,881		1,434	2.90	2.45		
Total	\$	233,152	\$	213,397	\$	3,835	\$	3,154	3.32%	2.98%		
Investments												
In U.S. offices												
Taxable	\$	221,663	\$	227,647	\$	2,782	\$	2,539	2.53%	2.25%		
Exempt from U.S. income tax		15,760		17,435		325		350	4.16	4.05		
In offices outside the U.S. (4)		111,782		104,935		2,000		1,790	3.61	3.44		
Total	\$	349,205	\$	350,017	\$	5,107	\$	4,679	2.95%	2.70%		
Loans (net of unearned income) <sup>(8)</sup>												
In U.S. offices	\$	393,546	\$	381,665	\$	15,263	\$	13,690	7.82%	7.23%		
In offices outside the U.S. (4)		285,870		287,170		8,726		8,428	6.16	5.92		
Total	\$	679,416	\$	668,835	\$	23,989	\$	22,118	7.12%	6.67%		
Other interest-earning assets <sup>(9)</sup>	\$	67,405	\$	68,051	\$	940	\$	758	2.81%	2.25%		
Total interest-earning assets	\$	1,782,249	\$	1,736,634	\$	38,901	\$	34,009	4.40%	3.95%		
Non-interest-earning assets <sup>(6)</sup>	\$	177,022	\$	174,032								
Total assets	\$	1,959,271	\$	1,910,666								

- (1) Net interest revenue includes the taxable equivalent adjustments (based on the U.S. federal statutory tax rates of 21% in 2019 and 2018) of \$113 million and \$127 million for the six months ended June 30, 2019 and 2018, 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) 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 FIN 41 (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 in Non-interest-earning assets and Other non-interest-bearing liabilities.
- (7) 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.

## Average Balances and Interest Rates—Liabilities and Equity, and Net Interest Revenue<sup>(1)(2)(3)</sup>

	Average volume					Interest	ex	xpense	% Average rate			
	S	ix Months	S	Six Months	S	ix Months		Six Months	Six Months	Six Months		
In millions of dollars, except rates		2019		2018		2019		2018	2019	2018		
Liabilities												
Deposits												
In U.S. offices <sup>(4)</sup>	\$	371,949	\$	327,974	\$	3,118	\$	1,938	1.69%	1.19%		
In offices outside the U.S. <sup>(5)</sup>		479,106		449,721		3,193		2,303	1.34	1.03		
Total	\$	851,055	\$	777,695	\$	6,311	\$	4,241	1.50%	1.10%		
Securities loaned or sold under agreements to repurchase <sup>(6)</sup>												
In U.S. offices	\$	111,709	\$	100,766	\$	2,256	\$	1,400	4.07%	2.80 %		
In offices outside the U.S. <sup>(5)</sup>		74,782		67,003		1,057		773	2.85	2.33		
Total	\$	186,491	\$	167,769	\$	3,313	\$	2,173	3.58%	2.61 %		
Trading account liabilities <sup>(7)(8)</sup>												
In U.S. offices	\$	38,051	\$	35,050	\$	411	\$	267	2.18%	1.54 %		
In offices outside the U.S. <sup>(5)</sup>		57,096		59,387		236		184	0.83	0.62		
Total	\$	95,147	\$	94,437	\$	647	\$	451	1.37%	0.96%		
Short-term borrowings <sup>(9)</sup>												
In U.S. offices	\$	79,766	\$	86,770	\$	1,201	\$	828	3.04%	1.92 %		
In offices outside the U.S. <sup>(5)</sup>		22,927		23,668		166		166	1.46	1.41		
Total	\$	102,693	\$	110,438	\$	1,367	\$	994	2.68%	1.82 %		
Long-term debt <sup>(10)</sup>												
In U.S. offices	\$	194,741	\$	199,108	\$	3,370	\$	3,102	3.49%	3.14%		
In offices outside the U.S. <sup>(5)</sup>		5,003		4,667		71		84	2.86	3.63		
Total	\$	199,744		203,775	\$	3,441		,	3.47%	3.15%		
Total interest-bearing liabilities	\$	1,435,130		1,354,114	\$	15,079	\$	11,045	2.12%	1.64%		
Demand deposits in U.S. offices	\$	28,411	\$	34,633								
Other non-interest-bearing liabilities <sup>(7)</sup>		299,003		320,455								
Total liabilities	\$	1,762,544		1,709,202								
Citigroup stockholders' equity <sup>(11)</sup>	\$	195,971	\$	200,564								
Noncontrolling interest		756		899								
Total equity <sup>(11)</sup>	\$	196,727		201,463								
Total liabilities and stockholders' equity	\$	1,959,271	\$	1,910,665								
Net interest revenue as a percentage of average interest-earning assets												
In U.S. offices	\$	1,006,273	\$	978,772	\$	14,261	\$		2.86%	2.77 %		
In offices outside the U.S. <sup>(5)</sup>		775,974		757,862		9,561		9,537	2.48	2.54		
Total	\$	1,782,247	\$	1,736,634	\$	23,822	\$	22,964	2.70%	2.67 %		

- (1) Net interest revenue includes the taxable equivalent adjustments (based on the U.S. federal statutory tax rates of 21% in 2019 and 2018) of \$113 million and \$127 million for the six months ended June 30, 2019 and 2018, 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) 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.
- (5) Average rates reflect prevailing local interest rates, including inflationary effects and monetary corrections in certain countries.
- (6) 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 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.
- (8) 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 *Long-term debt*, as these obligations are accounted for in changes in fair value recorded in *Principal transactions*.
- (11) Includes allocations for capital and funding costs based on the location of the asset.

	2n	d Qtr. 2	019 vs. 1st	Qtr. 2019	2nd Qtr. 2019 vs. 2nd Qtr. 2018					
			ease (decre to change		Increase (decrease) due to change in:					
In millions of dollars		erage lume	Average rate	Net change		verage olume	Average rate	Net change		
Deposits with banks <sup>(3)</sup>	\$	78	\$ 51	\$ 129	\$	49	\$ 194	\$ 243		
Securities borrowed or purchased under agreements to resell										
In U.S. offices	\$	(41)	<b>\$</b> 124	\$ 83	\$   \$	(32)	\$ 539	\$ 507		
In offices outside the U.S. <sup>(3)</sup>		(18)	42	24	1	4	50	54		
Total	\$	(59)	\$ 166	\$ 107	\$	(28)	\$ 589	\$ 561		
Trading account assets <sup>(4)</sup>										
In U.S. offices	\$	124	\$ (50)	\$ 74	\$	151	\$ 12	\$ 163		
In offices outside the U.S. <sup>(3)</sup>		78	299	377	'	154	53	207		
Total	\$	202	\$ 249	\$ 451	. \$	305	\$ 65	\$ 370		
Investments <sup>(1)</sup>					Т			_		
In U.S. offices	\$	(61)	\$ (108)	\$ (169	<b>()</b>	(65)	\$ 39	\$ (26)		
In offices outside the U.S. <sup>(3)</sup>		50	70	120		91	56	147		
Total	\$	(11)	\$ (38)	\$ (49	) \$	26	\$ 95	\$ 121		
Loans (net of unearned income) <sup>(5)</sup>								_		
In U.S. offices	\$	6	\$ (41)	\$ (35	<b>(</b> )	199	\$ 457	\$ 656		
In offices outside the U.S. <sup>(3)</sup>		2	42	44		(13)	147	134		
Total	\$	8	\$ 1	\$ 9	\$	186	\$ 604	\$ 790		
Other interest-earning assets <sup>(6)</sup>	\$	7	\$ (33)	\$ (26	<b>\$</b>	(8)	\$ 71	\$ 63		
Total interest revenue	\$	225	\$ 396	\$ 621	. \$	530	\$ 1,618	\$ 2,148		

<sup>(1)</sup> The taxable equivalent adjustment is related to the tax-exempt bond portfolio based on the U.S. federal statutory tax rates of 21% in 2019 and 2018 and is included in this presentation.

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

<sup>(3)</sup> Changes in average rates reflect changes in prevailing local interest rates, including inflationary effects and monetary corrections in certain countries.

<sup>(4)</sup> 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.

<sup>(5)</sup> Includes cash-basis loans.

<sup>(6)</sup> Includes Brokerage receivables.

	2ne	2nd Qtr. 2019 vs. 2nd Qtr. 2018								
		Increase (decrease due to change in:								
In millions of dollars		erage lume	Average rate		Net change		verage olume	Average rate		Net change
Deposits										
In U.S. offices	\$	47	<b>\$</b> 91	\$	138	\$	155	\$	131	\$ 586
In offices outside the U.S. (3)		39	80	)	119		90	(	364	454
Total	\$	86	\$ 171	\$	257	\$	245	\$ '	795	\$ 1,040
Securities loaned or sold under agreements to repurchase										
In U.S. offices	\$	14	\$ 28	\$	42	\$	82	\$	271	\$ 353
In offices outside the U.S. <sup>(3)</sup>		26	67	7	93		54		93	147
Total	\$	40	\$ 95	5 \$	135	\$	136	\$ :	364	\$ 500
Trading account liabilities <sup>(4)</sup>										
In U.S. offices	\$	(22)	\$ 41	\$	19	\$	(1)	\$	76	\$ 75
In offices outside the U.S. <sup>(3)</sup>		9	(35	5)	(26)		(3)		12	9
Total	\$	(13)	\$ (	5 \$	(7)	\$	(4)	\$	88	\$ 84
Short-term borrowings <sup>(5)</sup>										
In U.S. offices	\$	65	\$ (6	<b>5)</b> \$	59	\$	(1)	\$	192	\$ 191
In offices outside the U.S. <sup>(3)</sup>		(6)	10	)	4		(6)		7	1
Total	\$	59	\$ 4	\$	63	\$	(7)	\$	199	\$ 192
Long-term debt										
In U.S. offices	\$	49	\$ (49	) \$		\$	(6)	\$	71	\$ 65
In offices outside the U.S. <sup>(3)</sup>		(1)	(2	2)	(3)		_		(4)	(4)
Total	\$	48	\$ (51	<b>()</b> \$	(3)	\$	(6)	\$	67	\$ 61
Total interest expense	\$	220	\$ 225	\$	445	\$	364	\$ 1,	513	\$ 1,877

<sup>(1)</sup> The taxable equivalent adjustment is related to the tax-exempt bond portfolio based on the U.S. federal statutory tax rates of 21% in 2019 and 2018 and is included in this presentation.

\$

172 \$

176 \$

165 \$

106 \$

271

4 \$

Net interest revenue

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

<sup>(3)</sup> Changes in average rates reflect changes in prevailing local interest rates, including inflationary effects and monetary corrections in certain countries.

<sup>(4)</sup> 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.

<sup>(5)</sup> Includes Brokerage payables.

	Six Months 2019 vs. Six Months 2018										
		I	ncr du	ease (decrease e to change in:	)						
In millions of dollars		Average volume	Average rate			Net change					
Deposits with banks <sup>(3)</sup>	\$	47	\$	371	\$	418					
Securities borrowed or purchased under agreements to resell											
In U.S. offices	\$	35	\$	1,021	\$	1,056					
In offices outside the U.S. <sup>(3)</sup>		37		219		256					
Total	\$	72	\$	1,240	\$	1,312					
Trading account assets <sup>(4)</sup>											
In U.S. offices	\$	136	\$	98	\$	234					
In offices outside the U.S. <sup>(3)</sup>		162		285		447					
Total	\$	298	\$	383	\$	681					
Investments <sup>(1)</sup>											
In U.S. offices	\$	(92)	\$	310	\$	218					
In offices outside the U.S. <sup>(3)</sup>		120		90		210					
Total	\$	28	\$	400	\$	428					
Loans (net of unearned income) <sup>(5)</sup>											
In U.S. offices	\$	436	\$	1,137	\$	1,573					
In offices outside the U.S. <sup>(3)</sup>		(38)		336		298					
Total	\$	398	\$	1,473	\$	1,871					
Other interest-earning assets <sup>(6)</sup>	\$	(7)	\$	189	\$	182					
Total interest revenue	\$	836	\$	4,056	\$	4,892					

<sup>(1)</sup> The taxable equivalent adjustment is related to the tax-exempt bond portfolio based on the U.S. federal statutory tax rates of 21% in 2019 and 2018 and is included in this presentation.

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

<sup>(3)</sup> Changes in average rates reflect changes in prevailing local interest rates, including inflationary effects and monetary corrections in certain countries.

<sup>(4)</sup> 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.

<sup>(5)</sup> Includes cash-basis loans.

<sup>(6)</sup> Includes Brokerage receivables.

Six N	Months	2019 vs.	Six N	lonths	2018

	_	Increase (decrease) due to change in:							
In millions of dollars		Average volume	Average rate		Net change				
Deposits									
In U.S. offices	\$	286	\$ 892	\$	1,178				
In offices outside the U.S. <sup>(3)</sup>		159	733		892				
Total	\$	445	\$ 1,625	\$	2,070				
Securities loaned or sold under agreements to repurchase									
In U.S. offices	\$	165	\$ 691	\$	856				
In offices outside the U.S. <sup>(3)</sup>		97	187		284				
Total	\$	262	\$ 878	\$	1,140				
Trading account liabilities <sup>(4)</sup>									
In U.S. offices	\$	24	\$ 120	\$	144				
In offices outside the U.S. <sup>(3)</sup>		(7)	59		52				
Total	\$	17	\$ 179	\$	196				
Short-term borrowings <sup>(5)</sup>									
In U.S. offices	\$	(72)	\$ 445	\$	373				
In offices outside the U.S. <sup>(3)</sup>		(5)	5		_				
Total	\$	(77)	\$ 450	\$	373				
Long-term debt									
In U.S. offices	\$	(69)	\$ 337	\$	268				
In offices outside the U.S. <sup>(3)</sup>		6	(19)	)	(13)				
Total	\$	(63)	\$ 318	\$	255				
Total interest expense	\$	584	\$ 3,450	\$	4,034				
Net interest revenue	\$	252	\$ 606	\$	858				

<sup>(1)</sup> The taxable equivalent adjustment is related to the tax-exempt bond portfolio based on the U.S. federal statutory tax rates of 21% in 2019 and 2018 and is included in this presentation.

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

<sup>(3)</sup> Changes in average rates reflect changes in prevailing local interest rates, including inflationary effects and monetary corrections in certain countries.

<sup>(4)</sup> 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.

<sup>(5)</sup> Includes Brokerage payables.

### **Market Risk of Trading Portfolios**

### Value at Risk

As of June 30, 2019, 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, 2019, the add-on was 26%.

As set forth in the table below, Citi's average trading VAR decreased from March 31, 2019 to June 30, 2019. The decrease was mainly due to a decrease in exposure and a reduction in credit spread risk in the *Markets* businesses within *ICG*.

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

				Second Quarter			First Quarter				Second Quarter
In millions of dollars	June	30, 2019	1	2019 Average	March 31, 2019	1	2019 Average	Jı	une 30, 2018	A	2018 Average
Interest rate	\$	40	\$	36	\$ 32	\$	37	\$	60	\$	61
Credit spread		46		43	43		48		46		47
Covariance adjustment <sup>(1)</sup>		(24)		(20)	(21)		(23)		(25)		(26)
Fully diversified interest rate and credit spread <sup>(2)</sup>	\$	62	\$	59	\$ 54	\$	62	\$	81	\$	82
Foreign exchange		29		25	15		26		29		30
Equity		22		13	20		17		23		20
Commodity		25		25	30		28		16		17
Covariance adjustment <sup>(1)</sup>		(69)		(63)	(66)		(67)		(74)		(69)
Total trading VAR—all market risk factors, including general and specific risk (excluding credit portfolios) <sup>(2)</sup>	\$	69	\$	59	\$ 53	\$	66	\$	75	\$	80
Specific risk-only component <sup>(3)</sup>	\$	2	\$	2	\$ 2	\$	3	\$	2	\$	3
Total trading VAR—general market risk factors only (excluding credit portfolios)	\$	67	\$	57	\$ 51	\$	63	\$	73	\$	77
Incremental impact of the credit portfolio <sup>(4)</sup>	\$	7	\$	10	\$ 14	\$	15	\$	16	\$	10
Total trading and credit portfolio VAR	\$	76	\$	69	\$ 67	\$	81	\$	91	\$	90

- (1) 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 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.
- (2) The total trading VAR includes mark-to-market and certain fair value option trading positions in *ICG*, with the 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			First	Qua	ırter	Second Quarter			
	2019			2	019			8		
In millions of dollars	Lov	V		High	Low		High		Low	High
Interest rate	\$	27	\$	47	\$ 30	\$	58	\$	38	\$ 91
Credit spread		39		48	41		55		43	52
Fully diversified interest rate and credit spread	\$	49	\$	72	\$ 51	\$	89	\$	59	\$ 118
Foreign exchange		20		32	15		34		20	44
Equity		7		22	10	)	29		15	26
Commodity		20		33	19	)	43		13	22
Total trading	\$	46	\$	69	\$ 53	\$	87	\$	57	\$ 120
Total trading and credit portfolio		59		77	62	,	103		69	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:

In millions of dollars

Jun. 30, 2019

In millions of dollars	Juli. C	0, 2017
Total—all market risk factors, including general and specific risk	·	
Average—during quarter	\$	58
High—during quarter		68
Low—during quarter		46

### 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, 2019, there were no back-testing exceptions observed for Citi's Regulatory VAR for the prior 12 months.

### STRATEGIC RISK

For additional information on strategic risk at Citi, see "Strategic Risk" in Citi's 2018 Annual Report on Form 10-K.

### **Country Risk**

### Top 25 Country Exposures

The following table presents Citi's top 25 exposures by country (excluding the U.S.) as of June 30, 2019. The total exposure as of June 30, 2019 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 29% of corporate loans presented in the table below are to U.K. domiciled entities (29% for unfunded commitments), with the balance of the loans predominately to European domiciled counterparties. Approximately 85% of the total U.K. funded loans and 90% of the total U.K. unfunded commitments were investment grade as of June 30, 2019. 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 additional information on strategic risk at Citi, see "Strategic Risk" in Citi's 2018 Annual Report on Form 10-K.

In billions of dollars	ICG loans <sup>(1)</sup>	GCB loans	Other funded <sup>(2)</sup>	Unfunded <sup>(3)</sup>	Net MTM on derivatives /repos <sup>(4)</sup>	Total hedges (on loans and CVA)	Investment securities <sup>(5)</sup>	Trading account assets <sup>(6)</sup>	Total as of 2Q19	Total as of 1Q19	Total as of 2Q18	Total as a % of Citi as of 2Q19
United Kingdom	\$ 42.4	\$ —	\$ 10.3	\$ 55.2	\$ 11.0	\$ (4.4)	\$ 5.6	\$ (2.4)	\$ 117.7	\$ 122.3	\$ 125.8	7.2 %
Mexico	10.3	25.8	0.3	8.4	1.2	(0.7)	14.9	6.6	66.8	63.4	60.2	4.1
Hong Kong	17.8	14.0	0.7	7.3	1.4	(0.4)	7.5	1.2	49.5	50.3	45.1	3.0
Singapore	13.2	13.2	0.2	4.8	1.0	(0.1)	8.7	1.7	42.7	41.0	41.2	2.6
Ireland	13.4	_	0.5	18.1	0.3	_	_	0.6	32.9	33.5	31.3	2.0
Korea	1.7	17.7	0.2	2.5	1.1	(0.4)	8.0	0.8	31.6	33.7	35.0	1.9
India	4.3	7.3	1.0	5.6	1.9	(0.6)	9.9	1.9	31.3	32.0	27.6	1.9
Brazil	12.3	_	_	3.5	3.9	(1.0)	4.2	3.5	26.4	26.8	24.4	1.6
Australia	4.8	9.9	_	6.7	1.2	(0.4)	1.5	(1.9)	21.8	22.9	23.2	1.3
Japan	2.7	_	0.1	2.5	4.5	(1.6)	6.2	4.6	19.0	14.4	15.9	1.2
Germany	0.8	_	_	6.2	2.4	(3.3)	8.8	3.9	18.8	22.2	16.8	1.2
China	6.1	4.7	0.4	1.8	1.1	(0.4)	4.3	0.3	18.3	17.4	19.5	1.1
Taiwan	5.0	8.8	0.1	1.0	0.3	(0.1)	0.8	1.7	17.6	17.6	19.0	1.1
Canada	2.3	0.7	0.4	7.5	2.3	(0.4)	2.9	0.7	16.4	15.3	15.8	1.0
Poland	3.7	2.0	0.1	3.3	0.2	(0.1)	5.1	1.0	15.3	15.3	13.0	0.9
Jersey	7.2	_	0.1	5.5	_	_	_	_	12.8	9.9	10.0	0.8
United Arab Emirates	6.9	1.4	0.1	3.1	0.4	(0.1)	_	_	11.8	12.4	10.2	0.7
Malaysia	1.8	4.5	0.2	1.0	0.1	(0.1)	1.7	0.5	9.7	10.0	9.7	0.6
Thailand	0.8	2.6	0.2	1.7	0.1	_	1.9	1.2	8.5	6.8	6.9	0.5
Indonesia	2.3	1.0	0.1	1.4	0.1	(0.1)	1.2	0.2	6.2	6.1	6.2	0.4
Italy	0.3	_	_	2.1	4.6	(1.5)	_	0.6	6.1	2.6	3.2	0.4
Russia	1.9	0.9		0.8	0.7	(0.1)	0.9	0.3	5.4	4.7	4.6	0.3
Philippines	0.7	1.4	_	0.5	0.2	_	1.9	0.5	5.2	5.9	5.2	0.3
South Africa	1.4	_	0.1	0.7	0.3	(0.1)	1.6	0.1	4.1	3.9	5.3	0.3
Czech Republic	0.9	_	_	0.7	2.4	_	_	_	4.0	3.3	2.2	0.2
Total as a %												36.6%
Total as a %	of Citi's n	on-U.S.	Total Exp	osure								90.4%

<sup>(1)</sup> ICG loans reflect funded corporate loans and private bank loans, net of unearned income. As of June 30, 2019, private bank loans in the table above totaled \$27.8 billion, concentrated in Hong Kong (\$8.9 billion), Singapore (\$7.0 billion) and the U.K. (\$6.7 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.

#### Venezuela

Citi continues to monitor the political and economic environment and uncertainties in Venezuela. As of June 30, 2019, Citi's net investment in its on-shore Venezuelan operations was approximately \$40 million.

#### Potential Exit of U.K. from EU

As widely reported, the U.K. and EU agreed to extend the U.K.'s scheduled exit from the EU to October 31, 2019. For additional information regarding the U.K.'s potential exit from the EU, see "Risk Factors—Strategic Risk" and "Strategic Risk—Potential Exit of U.K. from EU" in Citi's 2018 Annual Report on Form 10-K.

#### 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 2018 Annual Report on Form 10-K.

At June 30, 2019, Citigroup had recorded net DTAs of approximately \$22.3 billion, a decrease of \$0.5 billion from March 31, 2019 and a decrease of \$0.6 billion from December 31, 2018. The decrease for the quarter was primarily driven by gains in *Other comprehensive income* and taxable earnings.

The table below summarizes Citi's net DTAs balance:

Jurisdiction/Component	DTAs balance						
In billions of dollars		June 30, 2019	De	ecember 31, 2018			
Total U.S.	\$	20.4	\$	20.7			
Total foreign		1.9		2.2			
Total	\$	22.3	\$	22.9			

Of Citi's total net DTAs of \$22.3 billion as of June 30, 2019, \$10.4 billion (primarily relating to net operating losses, foreign tax credits and general business credit carry-forwards, which Citi reduced by \$0.2 billion in the current quarter) was deducted in calculating Citi's regulatory capital. Net DTAs resulting from temporary differences are deducted from regulatory capital if in excess of the 10%/15% limitations (see "Capital Resources" above). For the quarter ended June 30, 2019, Citi did not have any such DTAs. Accordingly, the remaining \$11.9 billion of net DTAs as of June 30, 2019 was not deducted in calculating regulatory capital pursuant to Basel III standards and was appropriately risk weighted under those rules.

#### **Effective Tax Rate**

Citi's effective tax rate for the second quarter of 2019 was 22.3%, compared to 24.3% in the prior-year period. The tax rate for the remainder of the year is expected to be between 22% and 23%.

# FUTURE APPLICATION OF ACCOUNTING STANDARDS

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

Accounting for Financial Instruments—Credit Losses

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 measured at amortized cost at the time the financial asset is originated or acquired. The allowance for credit losses is 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. Within the life cycle of a loan or other financial asset, the ASU will generally result in the earlier recognition of the provision for credit losses and the related allowance for credit losses than current practice. For available-for-sale debt securities that Citi intends to hold and 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, among other things, depend upon the state of the economy, forecasted macroeconomic conditions and Citi's portfolios at the date of adoption. Based on a preliminary analysis performed in the second quarter of 2019 and forecasts of macroeconomic conditions and exposures at that time, the overall impact is estimated to be an approximate 20% to 30% increase in expected credit loss reserves. The ASU will be effective for Citi as of January 1, 2020. This increase would be reflected as a decrease to opening *Retained earnings*, net of income taxes, at January 1, 2020.

Implementation efforts have been underway, including model development and validation, fulfillment of additional data needs for new disclosures and reporting requirements, and drafting of accounting policies. Substantial progress has been made in model development. Model validations and user acceptance testing commenced in the first quarter of 2019, with parallel runs to begin in the third quarter of 2019. The Company intends to utilize a single macroeconomic scenario in estimating expected credit losses. Reasonable and supportable forecast periods and methods to revert to historical averages to arrive at lifetime expected credit losses vary by product.

For additional information on regulatory capital treatment, see "Capital Resources—Regulatory Capital

Standards Developments-Regulatory Capital Treatment— Implementation and Transition of the Current Expected Credit Losses (CECL) Methodology" in Citi's 2018 Annual Report on Form 10-K.

#### **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, 2019 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. Citi disclosed reportable activities pursuant to Section 219 in the first quarter of 2019.

During the second quarter of 2019, and as a result of an operational error, on March 28, 2019, the Czech Republic branch of Citibank Europe plc ("CEP Czech Republic"), a non-U.S. subsidiary of Citigroup Inc., on behalf of its client, provided a performance bond for the benefit of Mapna Europe GmbH ("Mapna"), an entity that appears to be majority owned by the Government of Iran. The aggregate value of the bond was EUR 100,670.00 (approximately \$113,118.62). Mapna did not make any claims against the bond and CEP Czech Republic did not make any payments to Mapna. Citi realized CZK 106,273.59 (approximately \$4,673.91) in administrative fees from its client. The transaction was voluntarily self-disclosed to the U.S. Office of Foreign Asset Control (OFAC) on June 10, 2019.

#### 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 2018 Annual Report on Form 10-K and other SEC filings; (ii) the factors listed and described under "Risk Factors" in Citi's 2018 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 planning efforts and targets, due to, among other things, regulatory approval, Citi's results of operations, financial condition and effectiveness in managing 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, such as the proposed integration of the annual stress testing requirements with ongoing regulatory capital requirements, including introduction of a firm-specific "stress capital buffer" (SCB), and any resulting year-to-year variability in the SCB, impact on Citi's estimated management buffer and the impact of incorporating CECL in future stress testing requirements;
- the ongoing regulatory and other uncertainties and changes faced by financial institutions, including Citi, in the U.S. and globally, such as potential fiscal, monetary and regulatory changes from the U.S. Presidential administration and Congress, potential changes to various aspects of the regulatory capital framework and the terms of and other uncertainties resulting from the U.K.'s potential exit from the European Union, 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 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 its expected results from its continued investments and efficiency initiatives, such as revenue growth and expense savings, as part of Citi's operational and financial objectives and targets, including as a result of factors that Citi cannot control;
- the potential impact from a deterioration in or failure to maintain Citi's co-branding or private label credit card relationships, for example with Sears, due to, among other things, the general economic environment, declining sales and revenues or other operational difficulties of the retailer or merchant, termination of a particular relationship, or other factors, such as bankruptcies, liquidations, restructurings, consolidations or other similar events;
- the potential impact to Citi's businesses, credit costs, revenues or other results of operations and financial condition as a result of macroeconomic and geopolitical challenges and uncertainties and volatilities, including, among others, changes in U.S. trade policies and resulting retaliatory measures from other countries, including imposition of tariffs, geopolitical tensions and conflicts and the terms or conditions regarding the U.K.'s potential withdrawal from the European Union;
- the various risks faced by Citi as a result of weakening economic conditions or changes in governmental fiscal or monetary actions by central banks, such as interest rates and other policies, in the U.S. or Citi's other target markets;
- the various risks faced by Citi as a result of its presence in the emerging markets, including, among others, sovereign volatility, regulatory changes and political events, foreign exchange controls, limitations on foreign investment, sociopolitical instability (including from hyperinflation), 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 resulting 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 resolution plan guidance, provided by the Federal Reserve Board and FDIC;
- the potential impact on Citi's performance and the performance of its individual businesses, including its competitive position and ability to effectively manage its businesses and continue to execute its strategies, if Citi is unable to attract, retain and motivate highly qualified employees;

- Citi's ability to effectively compete with U.S. and non-U.S. financial services companies and others, including as a result of emerging technologies;
- the discontinuance of LIBOR or any other interest rate benchmark and the adverse consequences it could have for market participants, including Citi;
- the potential impact on Citi's results of operations from the CECL methodology, subsequent to its initial adoption on January 1, 2020, including due to changes in estimates of expected credit losses resulting from Citi's CECL models and assumptions, existing and forecasted macroeconomic conditions and the credit quality, composition and other characteristics of Citi's loan and other applicable portfolios;
- the reclassification of any foreign currency translation adjustment (CTA) components of AOCI, including related hedges and taxes, into earnings, due to the sale or substantial liquidation of any foreign entity, such as those related to Citi's legacy operations;
- the potential impact of credit risk and concentrations of risk on Citi's results of operations, whether due to a default of or deterioration involving consumer, corporate or public sector counterparties in the U.S. or in various countries and jurisdictions globally, including as a result of declines in commodity prices;
- the potential impacts on Citi's liquidity and/or costs of funding as a result of external factors, including, among others, the competitive environment for U.S. retail deposits, 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 activities faced by financial institutions and others, including Citi and third parties with whom it does business, such as, among other things, theft, loss, misuse or disclosure of confidential or proprietary client, customer or corporate information or assets and a disruption of computer or network systems, and the potential impact from such risks, including, reputational damage, regulatory penalties, loss of revenues, additional costs (including credit, remediation and other costs), exposure to litigation 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 and mitigation processes, 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 related 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, including on Citi's compliance risks and costs, reputational and legal risks as well as the impact of any remediation and other financial costs, such as penalties and fines; and
- the potential outcomes of the extensive legal and regulatory proceedings, as well as regulatory examinations, investigations and other inquiries, to which Citi is or may be subject at any given time, particularly given the increased focus on conduct and controls 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 forward-looking statements were made.

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## CONSOLIDATED FINANCIAL STATEMENTS

# CONSOLIDATED STATEMENT OF INCOME (UNAUDITED)

Citigroup Inc. and Subsidiaries

		Three Months	End	led June 30,		Six Months Ended	June 30,
In millions of dollars, except per share amounts		2019		2018		2019	2018
Revenues							
Interest revenue	\$	19,712	\$	17,550	\$	38,788 \$	33,882
Interest expense		7,762		5,885		15,079	11,045
Net interest revenue	\$	11,950	\$	11,665	\$	23,709 \$	22,837
Commissions and fees	\$	2,881	\$	3,111	\$	5,807 \$	6,141
Principal transactions		1,874		2,126		4,678	5,368
Administration and other fiduciary fees		869		934		1,708	1,839
Realized gains on sales of investments, net		468		102		598	272
Impairment losses on investments							
Gross impairment losses		(5)	)	(15)		(13)	(43
Net impairment losses recognized in earnings	\$	(5)		(15)	\$	(13) \$	(43
Other revenue	\$	721		546	\$	847 \$	927
Total non-interest revenues	\$	6,808		6,804	\$	13,625 \$	14,504
Total revenues, net of interest expense	\$	18,758			\$	37,334 \$	37,341
Provisions for credit losses and for benefits and claims			_	,	-		
Provision for loan losses	\$	2,089	\$	1,795	\$	4,033 \$	3,598
Policyholder benefits and claims	4	19	Ψ	21	Ψ	31	47
Provision for unfunded lending commitments		(15)	1	(4)		9	24
Total provisions for credit losses and for benefits and claims	\$	2,093		1,812	S	4,073 \$	3,669
Operating expenses	Ψ	2,095	Ψ	1,012	Ψ	4,075 ψ	3,007
Compensation and benefits	\$	5,381	¢	5,452	\$	11,039 \$	11,259
Premises and equipment	Ψ	569	Ψ	570	Ψ	1,133	1,163
Technology/communication		1,724		1,797		3,444	3,555
Advertising and marketing		434		411		793	792
Other operating		2,392		2,482		4,675	4,868
Total operating expenses	\$	10,500	¢	10,712	<b>©</b>	21,084 \$	21,637
Income from continuing operations before income taxes	<u>\$</u>	6,165		5,945		12,177 \$	12,035
Provision for income taxes	Φ	1,373	Ф	1,444	Ф	2,648	2,885
Income from continuing operations	\$	4,792	¢	4,501	<b>©</b>	9,529 \$	9,150
Discontinued operations	φ	4,732	Ф	4,501	Ф	9,349 B	9,130
Loss from discontinued operations	\$	(10)	, e	(2)	e e	(12) \$	(0
Benefit for income taxes	J	` ′		(17)	Ф		(9
Income from discontinued operations, net of taxes	•	(27)		, ,	e e	(27) 15 \$	(17
	\$ \$	4,809		4,516		9,544 \$	9,158
Net income before attribution of noncontrolling interests	Ф		Ф	· ·	Þ		
Noncontrolling interests	•	4,799	Φ	26	₽.	35 0.500 ¢	48
Citigroup's net income  Basic earnings per share <sup>(1)</sup>	\$	4,799	Þ	4,490	Þ	9,509 \$	9,110
- ·	ø.	1.04	φ	1.72	€ C	2.01 Ф	2.20
Income from continuing operations	\$	1.94	Э	1.62	Þ	3.81 \$	3.30
Income from discontinued operations, net of taxes	•	0.01	Ф	0.01	Φ.	0.01	0.01
Net income	\$	1.95	\$		\$	3.82 \$	3.31
Weighted average common shares outstanding (in millions)		2,286.1		2,530.9		2,313.2	2,546.2
Diluted earnings per share <sup>(1)</sup>	_		<b>.</b>		Φ.	4 A4 #	2
Income from continuing operations	\$	1.94	\$	1.62	\$	3.81 \$	3.30
Income (loss) from discontinued operations, net of taxes		0.01		0.01	#	0.01	0.01
Net income	\$	1.95	\$	1.63	\$	3.82 \$	3.31
Adjusted weighted average common shares outstanding (in millions)		2,289.0		2,532.3		2,315.7	2,547.6

<sup>(1)</sup> 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 (UNAUDITED)

Citigroup Inc. and Subsidiaries

	Three Months	En	ded June 30,	Six Months E	nde	d June 30,
In millions of dollars	2019		2018	2019		2018
Citigroup's net income	\$ 4,799	\$	4,490	\$ 9,509	\$	9,110
Add: Citigroup's other comprehensive income						
Net change in unrealized gains and losses on debt securities, net of $taxes^{(1)}$	\$ 703	\$	(498)	\$ 1,838	\$	(1,556)
Net change in debt valuation adjustment (DVA), net of taxes <sup>(1)</sup>	3		318	(568)		446
Net change in cash flow hedges, net of taxes	517		(101)	803		(323)
Benefit plans liability adjustment, net of taxes	(253)	)	301	(317)		389
Net change in foreign currency translation adjustment, net of taxes and hedges	91		(2,867)	149		(1,747)
Net change in excluded component of fair value hedges, net of taxes	44		(28)	62		(32)
Citigroup's total other comprehensive income	\$ 1,105	\$	(2,875)	\$ 1,967	\$	(2,823)
Citigroup's total comprehensive income	\$ 5,904	\$	1,615	\$ 11,476	\$	6,287
Add: Other comprehensive income (loss) attributable to noncontrolling interests	\$ 20	\$	(57)	\$ 7	\$	(43)
Add: Net income attributable to noncontrolling interests	10		26	35		48
Total comprehensive income	\$ 5,934	\$	1,584	\$ 11,518	\$	6,292

<sup>(1)</sup> See Note 1 to the Consolidated Financial Statements in Citi's 2018 Annual Report on Form 10-K.

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

In millions of dollars	June 30, 2019 (Unaudited)	December 31, 2018
Assets		
Cash and due from banks (including segregated cash and other deposits)	\$ 24,997 \$	- ,
Deposits with banks	178,246	164,460
Securities borrowed and purchased under agreements to resell (including \$178,108 and \$147,701 as of June 30, 2019 and December 31, 2018, respectively, at fair value)	259,769	270,684
Brokerage receivables	50,027	35,450
Trading account assets (including \$132,781 and \$112,932 pledged to creditors at June 30, 2019 and December 31, 2018, respectively)	306,831	256,117
Investments:		
Available-for-sale debt securities (including \$10,488 and \$9,289 pledged to creditors as of June 30, 2019 and December 31, 2018, respectively)	273,435	288,038
Held-to-maturity debt securities (including \$1,521 and \$971 pledged to creditors as of June 30, 2019 and December 31, 2018, respectively)	68,693	63,357
Equity securities (including \$1,273 and \$1,109 at fair value as of June 30, 2019 and December 31, 2018, respectively)	7,574	7,212
Total investments	\$ 349,702 \$	358,607
Loans:		
Consumer (including \$20 and \$20 as of June 30, 2019 and December 31, 2018, respectively, at fair value)	325,995	330,487
Corporate (including \$3,804 and \$3,203 as of June 30, 2019 and December 31, 2018, respectively, at fair value)	362,675	353,709
Loans, net of unearned income	\$ 688,670 \$	684,196
Allowance for loan losses	(12,466)	(12,315)
Total loans, net	\$ 676,204 \$	
Goodwill	22,065	22,046
Intangible assets (including MSRs of \$508 and \$584 as of June 30, 2019 and December 31, 2018, at fair value)	5,026	5,220
Other assets (including \$22,597 and \$20,788 as of June 30, 2019 and December 31, 2018, respectively, at fair value)	115,359	109,273
Total assets	\$ 1,988,226 \$	1,917,383

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.

In millions of dollars	une 30, 2019 audited)	December 31, 2018
Assets of consolidated VIEs to be used to settle obligations of consolidated VIEs		
Cash and due from banks	\$ 127 \$	270
Trading account assets	1,255	917
Investments	1,617	1,796
Loans, net of unearned income		
Consumer	46,124	49,403
Corporate	16,940	19,259
Loans, net of unearned income	\$ 63,064 \$	68,662
Allowance for loan losses	(1,833)	(1,852)
Total loans, net	\$ 61,231 \$	66,810
Other assets	120	151
Total assets of consolidated VIEs to be used to settle obligations of consolidated VIEs	\$ 64,350 \$	69,944

Statement continues on the next page.

# **CONSOLIDATED BALANCE SHEET** (Continued)

In millions of dollars, except shares and per share amounts	June 30, 2019 (Unaudited)	D	ecember 31, 2018
Liabilities			
Non-interest-bearing deposits in U.S. offices	\$ 95,659	\$	105,836
Interest-bearing deposits in U.S. offices (including \$1,634 and \$717 as of June 30, 2019 and December 31, 2018, respectively, at fair value)	382,738		361,573
Non-interest-bearing deposits in offices outside the U.S.	82,750		80,648
Interest-bearing deposits in offices outside the U.S. (including \$1,005 and \$758 as of June 30, 2019 and December 31, 2018, respectively, at fair value)	484,460		465,113
Total deposits	\$ 1,045,607	\$	1,013,170
Securities loaned and sold under agreements to repurchase (including \$45,137 and \$44,510 as of June 30, 2019 and December 31, 2018, respectively, at fair value)	181,133		177,768
Brokerage payables	69,839		64,571
Trading account liabilities	136,294		144,305
Short-term borrowings (including \$5,291 and \$4,483 as of June 30, 2019 and December 31, 2018, respectively, at fair value)	42,442		32,346
Long-term debt (including \$49,488 and \$38,229 as of June 30, 2019 and December 31, 2018, respectively, at fair value)	252,189		231,999
Other liabilities (including \$16,799 and \$15,906 as of June 30, 2019 and December 31, 2018, respectively, at fair value)	62,612		56,150
Total liabilities	\$ 1,790,116	\$	1,720,309
Stockholders' equity			
Preferred stock (\$1.00 par value; authorized shares: 30 million), issued shares: <b>as of June 30, 2019—719,200</b> and as of December 31, 2018—738,400, at aggregate liquidation value	\$ 17,980	\$	18,460
Common stock (\$0.01 par value; authorized shares: 6 billion), issued shares: <b>as of June 30, 2019—3,099,602,856</b> and as of December 31, 2018—3,099,567,177	31		31
Additional paid-in capital	107,657		107,922
Retained earnings	158,321		151,347
Treasury stock, at cost: <b>June 30, 2019—840,546,390 shares</b> and December 31, 2018—731,099,833 shares	(51,427)		(44,370)
Accumulated other comprehensive income (loss) (AOCI)	(35,203)		(37,170)
Total Citigroup stockholders' equity	\$ 197,359	\$	196,220
Noncontrolling interest	751		854
Total equity	\$ 198,110		197,074
Total liabilities and equity	\$ 1,988,226	\$	1,917,383

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.

	J		
		2019	December 31,
In millions of dollars	(Ur	naudited)	2018
Liabilities of consolidated VIEs for which creditors or beneficial interest holders do not have recourse to the general credit of Citigroup			
Short-term borrowings	\$	12,865 \$	13,134
Long-term debt		25,877	28,514
Other liabilities		820	697
Total liabilities of consolidated VIEs for which creditors or beneficial interest holders do not have recourse to the general credit of Citigroup	\$	39,562 \$	42,345

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

# CONSOLIDATED STATEMENT OF CHANGES IN STOCKHOLDERS' EQUITY (UNAUDITED)

	Th	ree Months End	ed June 30,	Six Months Ended June 30,				
In millions of dollars		2019	2018	2019	2018			
Preferred stock at aggregate liquidation value	1							
Balance, beginning of period	\$	17,980 \$	19,156	\$ 18,460 \$	19,253			
Redemption of preferred stock		_	(121)	(480)	(218)			
Balance, end of period	\$	17,980 \$	19,035	\$ 17,980 \$	19,035			
Common stock and additional paid-in capital	,							
Balance, beginning of period	\$	107,582 \$	107,630	\$ 107,953 \$	108,039			
Employee benefit plans		112	120	(270)	(285)			
Other		(6)	5	5	1			
Balance, end of period	\$	107,688 \$	107,755	\$ 107,688 \$	107,755			
Retained earnings								
Balance, beginning of period	\$	154,859 \$	141,863	\$ 151,347 \$	138,425			
Adjustment to opening balance, net of taxes <sup>(1)</sup>		_	_	151	(84)			
Adjusted balance, beginning of period	\$	154,859 \$	141,863	\$ 151,498 \$	138,341			
Citigroup's net income		4,799	4,490	9,509	9,110			
Common dividends <sup>(2)</sup>		(1,041)	(824)	(2,116)	(1,650)			
Preferred dividends		(296)	(318)	(558)	(590)			
Other <sup>(3)</sup>		_	_	(12)	_			
Balance, end of period	\$	158,321 \$	145,211	\$ 158,321 \$	145,211			
Treasury stock, at cost								
Balance, beginning of period	\$	(47,861) \$	(32,115)	\$ (44,370) \$	(30,309)			
Employee benefit plans <sup>(4)</sup>		9	2	573	471			
Treasury stock acquired <sup>(5)</sup>		(3,575)	(2,300)	(7,630)	(4,575)			
Balance, end of period	\$	(51,427) \$	(34,413)	\$ (51,427) \$	(34,413)			
Citigroup's accumulated other comprehensive income (loss)								
Balance, beginning of period	\$	(36,308) \$	(34,619)	\$ (37,170) \$	(34,668)			
Adjustment to opening balance, net of taxes		<del>_</del>	_	<del>_</del>	(3)			
Adjusted balance, beginning of period	\$	(36,308) \$	(34,619)	\$ (37,170) \$	(34,671)			
Citigroup's total other comprehensive income		1,105	(2,875)	1,967	(2,823)			
Balance, end of period	\$	(35,203) \$	(37,494)	\$ (35,203) \$	(37,494)			
Total Citigroup common stockholders' equity	\$	179,379 \$	181,059	\$ 179,379 \$	181,059			
Total Citigroup stockholders' equity	\$	197,359 \$	200,094	\$ 197,359 \$	200,094			
Noncontrolling interests								
Balance, beginning of period	\$	763 \$	951	\$ 854 \$	932			
Transactions between Citigroup and the noncontrolling-interest shareholders		_	(1)	(99)	(16)			
Net income attributable to noncontrolling-interest shareholders		10	26	35	48			
Distributions paid to noncontrolling-interest shareholders		(33)	(36)	(37)	(36)			
Other comprehensive income (loss) attributable to noncontrolling-interest shareholders	t	20	(57)	7	(43)			
Other		(9)	(9)	(9)	(11)			
Net change in noncontrolling interests	\$	(12) \$	(77)	<b>\$</b> (103) \$	(58)			
Balance, end of period	\$	751 \$	874	\$ 751 \$	874			
Total equity	\$	198,110 \$	200,968	\$ 198,110 \$	200,968			

<sup>(1)</sup> See Note 1 to the Consolidated Financial Statements for additional details.

<sup>(2)</sup> Common dividends declared were \$0.45 per share in the first and second quarters of 2019 and \$0.32 for the first and second quarters of 2018.

<sup>(3)</sup> 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.

<sup>(4)</sup> Includes treasury stock related to (i) certain activity on employee stock option program exercises where the 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.

<sup>(5)</sup> 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 (UNAUDITED)

Net income before attribution of noncontrolling interests       \$ 9,544 \$         Net income attributable to noncontrolling interests       35         Citigroup's net income       \$ 9,509 \$         Income from discontinued operations, net of taxes       15         Income from continuing operations—excluding noncontrolling interests       \$ 9,494 \$         Adjustments to reconcile net income to net cash provided by operating activities of continuing operations       1,883         Depreciation and amortization       1,883         Provision for loan losses       4,033         Realized gains from sales of investments       (598)         Net impairment losses on investments, goodwill and intangible assets       13         Change in trading account assets       (50,776)	
Net income attributable to noncontrolling interests  Citigroup's net income  Income from discontinued operations, net of taxes  Income from continuing operations—excluding noncontrolling interests  Adjustments to reconcile net income to net cash provided by operating activities of continuing operations  Depreciation and amortization  Provision for loan losses  Realized gains from sales of investments  Net impairment losses on investments, goodwill and intangible assets  Change in trading account assets	
Citigroup's net income Income from discontinued operations, net of taxes Income from continuing operations—excluding noncontrolling interests  Adjustments to reconcile net income to net cash provided by operating activities of continuing operations  Depreciation and amortization  1,883  Provision for loan losses  Realized gains from sales of investments  Net impairment losses on investments, goodwill and intangible assets  Change in trading account assets  \$ 9,509 \$  9,494 \$  1,883  4,033  Change in trading account assets	9,158
Income from discontinued operations, net of taxes  Income from continuing operations—excluding noncontrolling interests  Adjustments to reconcile net income to net cash provided by operating activities of continuing operations  Depreciation and amortization  1,883  Provision for loan losses  4,033  Realized gains from sales of investments  (598)  Net impairment losses on investments, goodwill and intangible assets  13  Change in trading account assets  (50,776)	48
Income from continuing operations—excluding noncontrolling interests  Adjustments to reconcile net income to net cash provided by operating activities of continuing operations  Depreciation and amortization  1,883  Provision for loan losses  Realized gains from sales of investments  (598)  Net impairment losses on investments, goodwill and intangible assets  13  Change in trading account assets  (50,776)	9,110
Adjustments to reconcile net income to net cash provided by operating activities of continuing operations  Depreciation and amortization  1,883  Provision for loan losses  4,033  Realized gains from sales of investments  (598)  Net impairment losses on investments, goodwill and intangible assets  13  Change in trading account assets  (50,776)	8
continuing operationsDepreciation and amortization1,883Provision for loan losses4,033Realized gains from sales of investments(598)Net impairment losses on investments, goodwill and intangible assets13Change in trading account assets(50,776)	9,102
Provision for loan losses  Realized gains from sales of investments  (598)  Net impairment losses on investments, goodwill and intangible assets  Change in trading account assets  (50,776)	
Realized gains from sales of investments(598)Net impairment losses on investments, goodwill and intangible assets13Change in trading account assets(50,776)	1,855
Net impairment losses on investments, goodwill and intangible assets  Change in trading account assets  (50,776)	3,598
Change in trading account assets (50,776)	(272)
	43
	(10,235)
Change in trading account liabilities (8,011)	15,575
Change in brokerage receivables net of brokerage payables (9,309)	7,737
Change in loans HFS 1,029	(147)
Change in other assets (5,442)	(5,799)
Change in other liabilities 6,462	(2,685)
Other, net 13,466	(10,453)
Total adjustments \$ (47,250) \$	(783)
Net cash provided by (used in) operating activities of continuing operations \$ (37,756) \$	8,319
Cash flows from investing activities of continuing operations	
Change in securities borrowed and purchased under agreements to resell \$ 10,915 \$	(33,048)
Change in loans (7,803)	(10,132)
Proceeds from sales and securitizations of loans 2,249	3,217
Purchases of investments (118,132)	(81,871)
Proceeds from sales of investments 63,595	41,808
Proceeds from maturities of investments 57,684	44,846
Capital expenditures on premises and equipment and capitalized software (3,349)	(1,690)
Proceeds from sales of premises and equipment, subsidiaries and affiliates and repossessed assets  68	143
Other, net 71	98
Net cash provided by (used in) investing activities of continuing operations \$ 5,298 \$	(36,629)
Cash flows from financing activities of continuing operations	
Dividends paid \$ (2,650) \$	(2,232)
Redemption of preferred stock (480)	(218)
Treasury stock acquired (7,518)	(4,686)
Stock tendered for payment of withholding taxes (359)	(475)
Change in securities loaned and sold under agreements to repurchase 3,365	21,551
Issuance of long-term debt 31,849	40,757
Payments and redemptions of long-term debt (18,428)	(35,087)
Change in deposits 32,437	36,908
Change in short-term borrowings 10,096	-

## CONSOLIDATED STATEMENT OF CASH FLOWS

(UNAUDITED) (Continued)	Six Months Ended	June 30,
In millions of dollars	 2019	2018
Net cash provided by financing activities of continuing operations	\$ 48,312 \$	49,299
Effect of exchange rate changes on cash and due from banks	\$ (716) \$	(603)
Change in cash and due from banks and deposits with banks	\$ 15,138 \$	20,386
Cash, due from banks and deposits with banks at beginning of period	188,105	180,516
Cash, due from banks and deposits with banks at end of period	\$ 203,243 \$	200,902
Cash and due from banks	\$ 24,997 \$	21,077
Deposits with banks	178,246	179,825
Cash, due from banks and deposits with banks at end of period	\$ 203,243 \$	200,902
Supplemental disclosure of cash flow information for continuing operations		
Cash paid during the period for income taxes	\$ 2,814 \$	2,239
Cash paid during the period for interest	14,000	9,957
Non-cash investing activities		
Transfers to loans HFS from loans	\$ 3,600 \$	2,900

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, 2019 and for the three- and sixmonth periods ended June 30, 2019 and 2018 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, 2018 (2018 Annual Report on Form 10-K) and Citigroup's Quarterly Report on Form 10-Q for the quarter ended March 31, 2019 (First Quarter of 2019 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**

### **Lease Accounting**

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*, which increases the transparency and comparability of accounting for lease transactions. The ASU requires lessees to recognize liabilities for operating leases and corresponding right-of-use (ROU) assets on the balance sheet. The ASU also requires quantitative and qualitative disclosures regarding key information about leasing arrangements. Lessee accounting for finance leases, as well as lessor accounting, are largely unchanged.

Effective January 1, 2019, the Company prospectively adopted the provisions of the ASU. At adoption, Citi recognized a lease liability and a corresponding ROU asset of approximately \$4.4 billion on the Consolidated Balance Sheet related to its future lease payments as a lessee under operating leases. Additionally, the Company recorded a \$151 million increase in *Retained earnings* for the cumulative effect of recognizing previously deferred gains on sale/leaseback transactions. Adoption of the ASU did not have a

material impact on the Consolidated Statement of Income. See Notes 13 and 22 for additional details.

The Company has elected not to separate lease and non-lease components in its lease contracts and accounts for them as a single lease component. Citi has also elected not to record a ROU asset for short-term leases that have a term of 12 months or less and do not contain purchase options that Citi is reasonably certain to exercise. The cost of short-term leases is recognized in the Consolidated Statement of Income on a straight-line basis over the lease term. Additionally, Citi applies the portfolio approach to account for certain equipment leases with nearly identical contractual terms

#### Lessee accounting

Operating lease ROU assets and lease liabilities are included in Other assets and Other liabilities, respectively, on the Consolidated Balance Sheet. Finance lease assets and liabilities are included in Other assets and Long-term debt, respectively, on the Consolidated Balance Sheet. The Company uses its incremental borrowing rate, factoring in the lease term, to determine the lease liability, which is measured at the present value of future lease payments. The ROU asset is measured at the amount of the lease liability plus any prepaid rent and remaining initial direct costs, less any remaining lease incentives and accrued rent. The ROU asset is subject to impairment, during the lease term, in a manner consistent with the impairment of long-lived assets. The lease terms include periods covered by options to extend or terminate the lease depending on whether Citi is reasonably certain to exercise such options.

#### Lessor accounting

Lessor accounting is largely unchanged under the ASU. Citi acts as a lessor for power, railcar, shipping and aircraft assets, where the Company has executed operating, direct financing and leveraged leasing arrangements. In a direct financing or a leveraged lease, Citi derecognizes the leased asset and records a lease financing receivable at lease commencement in *Loans*. Upon lease termination, Citi may obtain control of the asset, which is then recorded in *Other assets* on the Consolidated Balance Sheet and any remaining receivable for the asset's residual value is derecognized. Under the ASU, leveraged lease accounting is grandfathered and may continue to be applied until the leveraged lease is terminated or modified. Upon modification, the lease must be classified as an operating, direct finance or sales-type lease in accordance with the ASU.

Separately, as part of managing its real estate footprint, Citi subleases excess real estate space via operating lease arrangements, while retaining its obligations as a lessee.

# 2. DISCONTINUED OPERATIONS AND SIGNIFICANT DISPOSALS

The Company's *Discontinued operations* consisted of residual activities related to the sales of the German Retail Banking operations and the Egg Banking plc Credit Card business in 2008 and 2011, respectively. All *Discontinued operations* results are recorded within Corporate/Other.

The following summarizes financial information for all *Discontinued operations*:

	T	hree I End Jund	ded	l	Six Months Ended June 30,				
In millions of dollars	2	019	2	018	2	2019	2	2018	
Total revenues, net of interest expense	\$	_	\$		\$	_	\$	_	
Loss from discontinued operations	\$	(10)	\$	(2)	\$	(12)	\$	(9)	
Provision (benefit) for income taxes		(27)		(17)		(27)		(17)	
Income from discontinued operations, net of taxes	\$	17	\$	15	\$	15	\$	8	

Cash flows from *Discontinued operations* were not material for the periods presented. For a description of the Company's significant disposal transactions and financial impact, see Note 2 to the Consolidated Financial Statements in Citi's 2018 Annual Report on Form 10-K.

#### 3. BUSINESS SEGMENTS

Citigroup's activities are conducted through the following business segments: *Global Consumer Banking (GCB)* and *Institutional Clients Group (ICG)*. In addition, *Corporate/Other* includes activities not assigned to a specific business segment, as well as certain *North America* 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, 2019, financial data was reclassified to reflect:

- 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 2018 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,

	ne	Reve		Provision for incor		co	Income (lontinuing o	oss pe	s) from erations <sup>(2)</sup>	•	Identifiab	le a	ssets
In millions of dollars, except identifiable assets in billions		2019	2018	2019	2018		2019		2018		June 30, 2019	De	ecember 31, 2018
Global Consumer Banking	\$	8,505	\$ 8,244	\$ 417	\$ 411	\$	1,413	\$	1,276	\$	437	\$	432
Institutional Clients Group		9,721	9,697	919	971		3,343		3,241		1,454		1,394
Corporate/Other		532	528	37	62		36		(16)		97		91
Total	\$	18,758	\$ 18,469	\$ 1,373	\$ 1,444	\$	4,792	\$	4,501	\$	1,988	\$	1,917

- (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 \$3.0 billion; in *Latin America* of \$2.6 billion and \$2.5 billion; and in *Asia* of \$4.0 billion and \$3.8 billion for the three months ended June 30, 2019 and 2018, 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 \$2.0 billion and \$1.9 billion; in the *ICG* results of \$103 million and \$25 million; and in the *Corporate/Other* results of \$(22) million and \$(118) million for the three months ended June 30, 2019 and 2018, respectively.

Six Months Ended June 30,

	ne	Reve et of intere	es, expense <sup>(1)</sup>	Provision for inco		Income (loss) from continuing operations <sup>(2)</sup>						
In millions of dollars		2019		2018	2019	2018		2019		2018		
Global Consumer Banking	\$	16,956	\$	16,670	\$ 839	\$ 865	\$	2,850	\$	2,666		
Institutional Clients Group		19,415		19,552	1,843	2,027		6,665		6,575		
Corporate/Other		963		1,119	(34)	(7)		14		(91)		
Total	\$	37,334	\$	37,341	\$ 2,648	\$ 2,885	\$	9,529	\$	9,150		

- (1) Includes total revenues, net of interest expense, in *North America* of \$17.0 billion and \$16.9 billion; in *EMEA* of \$6.1 billion and \$6.2 billion; in *Latin America* of \$5.2 billion and \$5.1 billion; and in *Asia* of \$8.1 billion and \$8.0 billion for the six months ended June 30, 2019 and 2018, respectively. 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 \$4.0 billion and \$3.8 billion; in the *ICG* results of \$124 million and \$(16) million; and in the *Corporate/Other* results of \$(47) million and \$(125) million for the six months ended June 30, 2019 and 2018, respectively.

## 4. INTEREST REVENUE AND EXPENSE

Interest revenue and Interest expense consisted of the following:

	Three Months Ended June 30,						Six Months I June 30					
In millions of dollars		2019		2018		2019		2018				
Interest revenue												
Loan interest, including fees	\$	11,981	\$	11,190	\$	23,949	\$	22,082				
Deposits with banks		736		493		1,343		925				
Securities borrowed or purchased under agreements to resell		1,893		1,336		3,677		2,375				
Investments, including dividends		2,505		2,374		5,053		4,608				
Trading account assets <sup>(1)</sup>		2,140		1,763		3,826		3,134				
Other interest		457		394		940		758				
Total interest revenue	\$	19,712	\$	17,550	\$	38,788	\$	33,882				
Interest expense												
Deposits <sup>(2)</sup>	\$	3,284	\$	2,244	\$	6,311	\$	4,241				
Securities loaned or sold under agreements to repurchase		1,724		1,224		3,313		2,173				
Trading account liabilities <sup>(1)</sup>		320		236		647		451				
Short-term borrowings		715		523		1,367		994				
Long-term debt		1,719		1,658		3,441		3,186				
Total interest expense	\$	7,762	\$	5,885	\$	15,079	\$	11,045				
Net interest revenue	\$	11,950	\$	11,665	\$	23,709	\$	22,837				
Provision for loan losses		2,089		1,795		4,033		3,598				
Net interest revenue after provision for loan losses	\$	9,861	\$	9,870	\$	19,676	\$	19,239				

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

<sup>(2)</sup> Includes deposit insurance fees and charges of \$189 million and \$319 million for the three months ended June 30, 2019 and 2018, respectively, and \$382 million and \$695 million for the six months ended June 30, 2019 and 2018, respectively.

#### 5. COMMISSIONS AND FEES; ADMINISTRATION AND OTHER FIDUCIARY FEES

For additional information on Citi's Commissions and Fees; Administration and Other Fiduciary Fees, see Note 5 to the Consolidated Financial Statements in Citi's 2018 Annual Report on Form 10-K.

The following tables present *Commissions and fees* revenue:

	Th	ree Months E	Ended June 30,		Six Months Ended June 30,								
		201	.9		2019								
In millions of dollars	ICG	GCB	Corporate/ Other	Total	ICG	GCB	Corporate /Other	Total					
Investment banking	\$ 934 \$	_ :	<u>s                                    </u>	\$ 934	\$ 1,844	<u> </u>	s — s	1,844					
Brokerage commissions	438	211	_	649	909	397	-	1,306					
Credit- and bank-card income													
Interchange fees	313	2,198	_	2,511	591	4,182	-	4,773					
Card-related loan fees	16	183	_	199	29	343	-	372					
Card rewards and partner payments	(174)	(2,277)	_	(2,451)	(327)	(4,338)	_	(4,665)					
Deposit-related fees <sup>(1)</sup>	247	138	_	385	492	277	_	769					
Transactional service fees	194	36	_	230	389	71	-	460					
Corporate finance <sup>(2)</sup>	150	1	_	151	328	2	-	330					
Insurance distribution revenue	2	129	_	131	6	261	_	267					
Insurance premiums	_	26	1	27	_	55	-	55					
Loan servicing	_	16	3	19	42	46	9	97					
Other	2	94	_	96	19	179	1	199					
Total commissions and fees <sup>(3)</sup>	\$ 2,122 \$	755	\$ 4	\$ 2,881	\$ 4,322	\$ 1,475	\$ 10:5	5,807					

	T	nree Months E	nded June 30,		Six Months Ended June 30,						
		201	8		2018						
In millions of dollars	ICG	GCB	Corporate/ Other	Total	ICG	GCB	Corporate/ Other	Total			
Investment banking	\$ 1,012 \$	_ 5	\$ —	\$ 1,012	\$ 1,834	\$ —	\$ —	\$ 1,834			
Brokerage commissions	491	206	_	697	1,057	454	_	1,511			
Credit- and bank-card income											
Interchange fees	276	2,025	5	2,306	536	3,899	10	4,445			
Card-related loan fees	17	147	6	170	31	302	12	345			
Card rewards and partner payments	(126)	(2,065)	(6)	(2,197)	(250)	(3,939)	(11)	(4,200)			
Deposit-related fees <sup>(1)</sup>	236	160	1	397	472	343	2	817			
Transactional service fees	182	21	1	204	372	42	3	417			
Corporate finance <sup>(2)</sup>	219	1	_	220	361	2	_	363			
Insurance distribution revenue	5	142	5	152	10	285	10	305			
Insurance premiums	_	32	1	33	_	65	_	65			
Loan servicing	33	40	9	82	71	62	21	154			
Other	_	34	1	35	15	67	3	85			
Total commissions and fees <sup>(3)</sup>	\$ 2,345 \$	743 5	\$ 23	\$ 3,111	\$ 4,509	\$ 1,582	\$ 50	\$ 6,141			

<sup>(1)</sup> Includes overdraft fees of \$31 million and \$30 million for the three months ended June 30, 2019 and 2018, respectively, and \$61 million and \$62 million for the six months ended June 30, 2019 and 2018, respectively. Overdraft fees are accounted for under ASC 310.

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

(3) Commissions and fees includes \$(2,025) million and \$(1,648) million not accounted for under ASC 606, Revenue from Contracts with Customers, for the three months ended June 30, 2019 and 2018, respectively, and \$(3,746) million and \$(3,193) million for the six months ended June 30, 2019 and 2018, 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**

The following table presents Administration and other fiduciary fees:

	Three Months Ended June 30,							Six Months Ended June 30,							
	2019								2019						
In millions of dollars	ICG	GC	В	Corpor /Othe		Total		ICG		GCB		orporate /Other	Т	otal	
Custody fees	\$ 381	\$	6	\$	18	\$ 405	\$	745	\$	9	\$	34	\$	788	
Fiduciary fees	163		154		(1)	316		315		300		11		626	
Guarantee fees	132		14		2	148	1	262		28		4		294	
Total administration and other fiduciary fees <sup>(1)</sup>	\$ 676	\$	174	\$	19	\$ 869	\$	1,322	\$	337	\$	49	\$	1,708	

	Three Months Ended June 30,							Six Months Ended June 30,						
		20		2018										
	ICC	CCD	Co	orporate/	T . 1		ICC		CCD		orporate/		. 1	
In millions of dollars	ICG	GCB		Other	Total		ICG		GCB		Other	10	otal	
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 <sup>(1)</sup>	\$ 694	\$ 209	\$	31	\$ 934	\$	1,366	\$	418	\$	55	\$ 1	1,839	

<sup>(1)</sup> Administration and other fiduciary fees includes \$148 million and \$146 million for the three months ended June 30, 2019 and 2018, respectively, and \$294 million and \$300 million for the six months ended June 30, 2019 and 2018, 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 that 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) and FVA (funding valuation adjustments) on over-the-counter derivatives, and gains (losses) on certain economic hedges on loans in ICG. 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:

	7	Three Months Ended	Six Months Ended June 30,					
In millions of dollars		2019	2018	2019	2018			
Interest rate risks <sup>(1)</sup>	\$	1,320 \$	1,550	\$ 3,038	\$ 3,116			
Foreign exchange risks <sup>(2)</sup>		427	175	900	905			
Equity risks <sup>(3)</sup>		(1)	120	455	709			
Commodity and other risks <sup>(4)</sup>		89	208	208	309			
Credit products and risks <sup>(5)</sup>		39	73	77	329			
Total	\$	1,874 \$	2,126	\$ 4,678	\$ 5,368			

<sup>(1)</sup> 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.

<sup>(2)</sup> Includes revenues from foreign exchange spot, forward, option and swap contracts, as well as foreign currency translation (FX translation) gains and losses.

<sup>(3)</sup> Includes revenues from common, preferred and convertible preferred stock, convertible corporate debt, equity-linked notes and exchange-traded and OTC equity options and warrants.

<sup>(4)</sup> Primarily includes revenues from crude oil, refined oil products, natural gas and other commodities trades.

<sup>(5)</sup> 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 2018 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 2018 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:

Three Months Ended June 30,

	In the Month's Ended value 50,												
		·	Pension	lans		Postretirement benefit plans							
		U.S. pla	ins		Non-U.S	S. plans		U.S. pla	ans		Non-U.S	. plans	
In millions of dollars		2019	2018		2019	2018		2019	2018		2019	2018	
Benefits earned during the period	\$	<b>—</b> \$	_	\$	35	\$ 38	\$	<b>—</b> \$	_	\$	2	\$ 3	
Interest cost on benefit obligation		123	126		73	72		6	7		26	25	
Expected return on plan assets		(202)	(211)		(68)	(72)		(4)	(3)		(21)	(22)	
Amortization of unrecognized:													
Prior service cost (benefit)		(1)	_		(1)	(1)		_	_		(3)	(3)	
Net actuarial loss		48	42		15	14		_	_		6	8	
Curtailment loss <sup>(1)</sup>		_	1		_	_		_	_		_	_	
Settlement loss <sup>(1)</sup>		_	_		2	1		_	_		_	_	
<b>Total net (benefit) expense</b>	\$	(32) \$	(42)	\$	56	\$ 52	\$	2 \$	4	\$	10	\$ 11	

<sup>(1)</sup> Losses due to curtailment and settlement relate to repositioning and divestiture activities.

Six Months Ended June 30,

	Six Months Ended Jule 30,													
			Pension	n pl	lans		Postretirement benefit plans							
		U.S. pla	ins		Non-U.S	. plans	U.S. plans				Non-U.S. plans			
In millions of dollars	2	2019	2018		2019	2018		2019	2018		2019	2018		
Benefits earned during the period	\$	<b>—</b> \$	1	\$	71	\$ 76	\$	<b>—</b> \$	_	\$	4	\$ 5		
Interest cost on benefit obligation		253	249		148	147		13	13		52	51		
Expected return on plan assets		(405)	(424)	)	(136)	(150)	)	(9)	(6)	)	(42)	(45)		
Amortization of unrecognized														
Prior service benefit		_	_		(2)	(2)	)	_	_		(5)	(5)		
Net actuarial loss		92	89		30	27		_	_		11	15		
Curtailment loss (1)		_	1		_	_		_	_		_	_		
Settlement loss <sup>(1)</sup>		<u> </u>	_		2	5		_	_		_	_		
Total net (benefit) expense	\$	(60) \$	(84)	\$	113	\$ 103	\$	4 \$	7	\$	20	\$ 21		

<sup>1)</sup> Losses due to curtailment and settlement relate to repositioning and divestiture activities.

# Funded Status and Accumulated Other Comprehensive Income (AOCI)

The following table summarizes the funded status and amounts recognized on the Consolidated Balance Sheet for the Company's Significant Plans:

Six Months Ended June 30, 2019

	Pension plans				Postretiremen	t benefit plans	
In millions of dollars		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	\$	12,655	\$ 7,149	\$	662	\$	1,159
Plans measured annually		(25)	(1,862	)	_		(307)
Projected benefit obligation at beginning of year—Significant Plans	\$	12,630	\$ 5,287	\$	662	\$	852
First quarter activity		408	293		13		62
Projected benefit obligation at March 31, 2019—Significant Plans	\$	13,038	\$ 5,580	\$	675	\$	914
Benefits earned during the period		<u> </u>	21		_		1
Interest cost on benefit obligation		122	60		6		23
Actuarial loss		548	172		42		48
Benefits paid, net of participants' contributions and government subsidy		(233)	(79	)	(13)		(19)
Foreign exchange impact and other		_	3		_		8
Projected benefit obligation at period end—Significant Plans	\$	13,475	\$ 5,757	\$	710	\$	975
1 Tojected benefit obligation at period chd—Significant Flans	Ψ	13,473	5,757	Φ	/10	Φ	

Six Months Ended June 30, 2019

	_				_			
		Pensio	on plans			Postretirement	t bei	nefit plans
In millions of dollars		U.S. plans	N	on-U.S. plans		U.S. plans	No	n-U.S. plans
Change in plan assets								
Plan assets at fair value at beginning of year	\$	11,490	\$	6,699	\$	345	\$	1,036
Plans measured annually		_		(1,248)		_		(9)
Plan assets at fair value at beginning of year—Significant Plans	\$	11,490	\$	5,451	\$	345	\$	1,027
First quarter activity		487		257		2		32
Plan assets at fair value at March 31, 2019—Significant Plans	\$	11,977	\$	5,708	\$	347	\$	1,059
Actual return on plan assets		449		206		9		62
Company contributions, net of reimbursements		438		14		5		218
Benefits paid, net of participants' contributions and government subsidy		(233)	)	(79)		(13)		(19)
Foreign exchange impact and other		_		250		_		(236)
Plan assets at fair value at period end—Significant Plans	\$	12,631	\$	6,099	\$	348	\$	1,084
Funded status of the Significant Plans								
Qualified plans <sup>(1)</sup>	\$	(151)	\$	342	\$	(362)	\$	109
Nonqualified plans		(693)	)	_		_		_
Funded status of the plans at period end—Significant Plans	\$	(844)	\$	342	\$	(362)	\$	109
Net amount recognized at period end								
Benefit asset	\$	_	\$	920	\$	_	\$	109
Benefit liability		(844)	)	(578)		(362)		_
Net amount recognized on the balance sheet—Significant Plans	\$	(844)	\$	342	\$	(362)	\$	109
Amounts recognized in AOCI at period end								
Prior service benefit	\$		\$	14	\$		\$	72
Net actuarial (loss) gain		(7,101)	)	(995)		13		(320)
Net amount recognized in equity (pretax)—Significant Plans	\$	(7,101)	\$	(981)	\$	13	\$	(248)
Accumulated benefit obligation at period end—Significant Plans	\$	13,469	\$	5,467	\$	710	\$	975
Net actuarial (loss) gain  Net amount recognized in equity (pretax)—Significant Plans	\$	(7,101) (7,101)	\$	(995) (981)	\$	13 13	\$	(3

<sup>(1)</sup> 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, 2019 and no minimum required funding is expected for 2019.

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

In millions of dollars	 Months Ended ne 30, 2019	Six Months Ended June 30, 2019		
Beginning of period balance, net of tax <sup>(1)(2)</sup>	\$ (6,321) \$	\$ (6,257)		
Actuarial assumptions changes and plan experience	(814)	(1,609)		
Net asset gain (loss) due to difference between actual and expected returns	443	1,133		
Net amortization	66	128		
Prior service cost	(5)	(5)		
Curtailment/settlement gain <sup>(3)</sup>	2	2		
Foreign exchange impact and other	(22)	(47)		
Change in deferred taxes, net	77	81		
Change, net of tax	\$ (253) \$	\$ (317)		
End of period balance, net of tax <sup>(1)(2)</sup>	\$ (6,574) \$	\$ (6,574)		

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

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

<sup>(3)</sup> 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:

	Three Months Ended							
Net (benefit) expense assumed discount rates during the period	Jun. 30, 2019	Jun. 30, 2018						
U.S. plans								
Qualified pension	3.85%	3.95%						
Nonqualified pension	3.90	3.95						
Postretirement	3.80	3.90						
Non-U.S. plans								
Pension	0.45-10.30	0.75-9.90						
Weighted average	4.74	4.86						
Postretirement	10.30	9.50						

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, 2019	Mar. 31, 2019	Dec. 31, 2018
U.S. plans	=		
Qualified pension	3.45%	3.85%	4.25%
Nonqualified pension	3.50	3.90	4.25
Postretirement	3.35	3.80	4.20
Non-U.S. plans			
Pension	0.30-9.55	0.45-10.30	0.75-10.75
Weighted average	4.52	4.74	5.09
Postretirement	9.70	10.30	10.75

## 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:

	Three Months Ended June 30, 2019									
In millions of dollars	One-percentage- point increase	One-percentage- point decrease								
Pension		_								
U.S. plans	\$ 7 5	<b>\$</b> (10)								
Non-U.S. plans	(3)	5								
Postretirement										
U.S. plans	1	(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 2019. The Company made a discretionary contribution of \$425 million and \$220 million to the U.S. qualified defined benefit plan and Mexico—Banco Nacional Healthcare Postretirement Plan, respectively, during the second quarter of 2019.

The following table summarizes the Company's actual contributions for the six months ended June 30, 2019 and 2018, as well as estimated expected Company contributions for the remainder of 2019 and the actual contributions made for the remainder of 2018:

		Pension plans							Postretirement plans							
		U.S. plans <sup>(1)</sup>			Non-U.S. plans			olans	U.S. plans				N	Non-U.S. plans		
In millions of dollars	2	019	- 2	2018		2019	2	2018	2	019	2	018	- 2	2019	20	018
Company contributions <sup>(2)</sup> for the six months ended June 30	\$	463	\$	28	\$	64	\$	112	\$	_	\$	7	\$	223	\$	5
Company contributions made during the remainder of the year		_		27		_		70		_		143		_		4
Company contributions expected to be made during the remainder of the year		30		_		70		_		2		_		5		_

- (1) The U.S. 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 I			Six Months End June 30,							
In millions of dollars	2	019	2	2018	2	019		2018				
U.S. plans	\$	99	\$	99	\$	198	\$	203				
Non-U.S. plans		71		72		139		148				

### **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 I nded J		Six Months Ended June 30,								
In millions of dollars	2	019	2018		2019	2018						
Service-related expense				\$	_	\$	_					
Interest cost on benefit obligation	\$	1	\$ 1	\$	1	\$	1					
Expected return on plan assets		(1)	(1)		(1)		(1)					
Amortization of unrecognized:												
Prior service benefit		_	(7)		_		(15)					
Net actuarial loss		_	_		1		1					
Total service-related (benefit) expense	\$	_	\$ (7)	\$	1	\$	(14)					
Non-service-related expense (benefit)	\$	2	\$ (3)	\$	6	\$	3					
Total net expense (benefit)	\$	2	\$ (10)	\$	7	\$	(11)					

#### 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,				
In millions of dollars, except per share amounts		2019		2018		2019		2018		
Income from continuing operations before attribution of noncontrolling interests	\$	4,792	\$	4,501	\$	9,529	\$	9,150		
Less: Noncontrolling interests from continuing operations		10		26		35		48		
Net income from continuing operations (for EPS purposes)	\$	4,782	\$	4,475	\$	9,494	\$	9,102		
Loss from discontinued operations, net of taxes		17		15		15		8		
Citigroup's net income	\$	4,799	\$	4,490	\$	9,509	\$	9,110		
Less: Preferred dividends <sup>(1)</sup>		296		318		558		590		
Net income available to common shareholders	\$	4,503	\$	4,172	\$	8,951	\$	8,520		
Less: Dividends and undistributed earnings allocated to employee restricted and deferred shares with nonforfeitable rights to dividends, applicable to basic EPS		50		49		109		90		
Net income allocated to common shareholders for basic and diluted EPS		4,453		4,123		8,842		8,430		
Weighted-average common shares outstanding applicable to basic EPS (in millions)		2,286.1		2,530.9		2,313.2		2,546.2		
Effect of dilutive securities										
Options <sup>(2)</sup>		_		0.1		0.1		0.1		
Other employee plans		2.9		1.3		2.4		1.3		
Adjusted weighted-average common shares outstanding applicable to diluted EPS <sup>(3)</sup>		2,289.0		2,532.3		2,315.7		2,547.6		
Basic earnings per share <sup>(4)</sup>										
Income from continuing operations	\$	1.94	\$	1.62	\$	3.81	\$	3.30		
Discontinued operations		0.01		0.01		0.01		0.01		
Net income	\$	1.95	\$	1.63	\$	3.82	\$	3.31		
Diluted earnings per share <sup>(4)</sup>										
Income from continuing operations	\$	1.94	\$	1.62	\$	3.81	\$	3.30		
Discontinued operations		0.01		0.01		0.01		0.01		
Net income	\$	1.95	\$	1.63	\$	3.82	\$	3.31		

<sup>(1)</sup> As of June 30, 2019, Citi estimates it will distribute preferred dividends of approximately \$550 million during the remainder of 2019, assuming such dividends are declared by the Citi Board of Directors.

<sup>(2)</sup> During the second quarter of 2019, no significant options to purchase shares of common stock were outstanding. During the second quarter of 2018, weighted-average options to purchase 0.5 million shares of common stock were outstanding but not included in the computation of earnings per share because the weighted-average exercise price of \$148.77 per share was anti-dilutive.

<sup>(3)</sup> 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.

<sup>(4)</sup> Due to rounding, earnings per share on continuing operations and discontinued operations may not sum to earnings per share on net income.

# 10. 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 2018 Annual Report on Form 10-K.

Securities borrowed and purchased under agreements to resell, at their respective carrying values, consisted of the following:

In millions of dollars	J	une 30, 2019	December 31, 2018			
Securities purchased under agreements to resell	\$	163,786	\$	159,364		
Deposits paid for securities borrowed		95,983		111,320		
Total <sup>(1)</sup>	\$	259,769	\$	270,684		

Securities loaned and sold under agreements to repurchase, at their respective carrying values, consisted of the following:

In millions of dollars	June 30, 2019	D	ecember 31, 2018
Securities sold under agreements to repurchase	\$ 168,861	\$	166,090
Deposits received for securities loaned	12,272		11,678
Total <sup>(1)</sup>	\$ 181,133	\$	177,768

(1) The above tables do not include securities-for-securities lending transactions of \$16.8 billion and \$15.9 billion at June 30, 2019 and December 31, 2018, 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.

As	of	J	une	30,	201	9
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In millions of dollars	of r	es amounts ecognized assets	(	ross amounts offset on the Consolidated Ilance Sheet <sup>(1)</sup>	a	Net amounts of ssets included on the Consolidated Balance Sheet	Co Sh	Amounts not offset on the insolidated Balance neet but eligible for offsetting upon interparty default <sup>(2)</sup>	a	Net mounts <sup>(3)</sup>
Securities purchased under agreements to resell	\$	292,088	\$	128,302	\$	163,786	\$	128,476	\$	35,310
Deposits paid for securities borrowed		95,983		_		95,983		26,429		69,554
Total	\$	388,071	\$	128,302	\$	259,769	\$	154,905	\$	104,864

In millions of dollars	Gross amounts of recognized liabilities		Gross amounts offset on the Consolidated Balance Sheet <sup>(1)</sup>	Net amounts of bilities included on the Consolidated Balance Sheet	not offset on the Consolidated Balance Sheet but eligible for offsetting upon counterparty default <sup>(2)</sup>	Net amounts <sup>(3)</sup>	
Securities sold under agreements to repurchase	\$	297,163	\$ 128,302	\$ 168,861	\$ 87,803	\$ 81,058	
Deposits received for securities loaned		12,272	_	12,272	2,551	9,721	
Total	\$	309,435	\$ 128,302	\$ 181,133	\$ 90,354	\$ 90,779	

				As	s of December 31, 20	)18			
In millions of dollars	oss amounts recognized assets	(	Gross amounts offset on the Consolidated alance Sheet <sup>(1)</sup>		Net amounts of assets included on the Consolidated Balance Sheet	5	Amounts not offset on the Consolidated Balance Sheet but eligible for offsetting upon ounterparty default <sup>(2)</sup>	aı	Net mounts <sup>(3)</sup>
Securities purchased under agreements to resell	\$ 246,788	\$	87,424	\$	159,364	\$	124,557	\$	34,807
Deposits paid for securities borrowed	111,320		_		111,320		35,766		75,554
Total	\$ 358,108	\$	87,424	\$	270,684	\$	160,323	\$	110,361

In millions of dollars	of r	ss amounts recognized abilities	Gross ar offset o Consol Balance	on the idated	liabi th	Net amounts of ilities included on the Consolidated Balance Sheet	Co. Sh	Amounts not offset on the nsolidated Balance eet but eligible for offsetting upon interparty default <sup>(2)</sup>	ar	Net nounts <sup>(3)</sup>
Securities sold under agreements to repurchase	\$	253,514	\$	87,424	\$	166,090	\$	82,823	\$	83,267
Deposits received for securities loaned		11,678		_		11,678		3,415		8,263
Total	\$	265,192	\$	87,424	\$	177,768	\$	86,238	\$	91,530

- (1) Includes financial instruments subject to enforceable master netting agreements that are permitted to be offset under ASC 210-20-45.
- (2) 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.
- (3) 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:

	As of June 30, 2019									
In millions of dollars		open and vernight		Up to 30 days	31	–90 days	_	reater than 90 days		Total
Securities sold under agreements to repurchase	2	152 704	2	69 173	2	34 516	2	40 770	2	297 163

In millions of dollars	overnight		uays	31–90 days		90 days	Total	
Securities sold under agreements to repurchase	\$	152,704 \$	69,173	\$ 34,51	16 \$	40,770	\$	297,163
Deposits received for securities loaned		7,576	155	2,35	59	2,182		12,272
Total	\$	160,280 \$	69,328	\$ 36,87	75 \$	42,952	\$	309,435

**Amounts** 

In millions of dollars	Open and overnight		Up to 30 days		31–90 days		Greater than 90 days		Total	
Securities sold under agreements to repurchase	\$	108,405	\$	70,850	\$	29,898	\$	44,361	\$	253,514
Deposits received for securities loaned		6,296		774		2,626		1,982		11,678
Total	\$	114,701	\$	71,624	\$	32,524	\$	46,343	\$	265,192

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

	As of June 30, 2019									
In millions of dollars	Repurchase agreements	1								
U.S. Treasury and federal agency securities	\$ 114,49	2 \$	\$ 114,492							
State and municipal securities	2,22	6 11	2,237							
Foreign government securities	110,79	6 269	111,065							
Corporate bonds	21,90	9 597	22,506							
Equity securities	17,91	9 10,677	28,596							
Mortgage-backed securities	18,54	<b>–</b>	18,541							
Asset-backed securities	6,54		6,540							
Other	4,74	718	5,458							
Total	\$ 297,16	<b>i</b> 3 \$ 12,272	\$ 309,435							

		As of December 31, 2018									
In millions of dollars		Repurchase agreements	Securities lending agreements		Total						
U.S. Treasury and federal agency securities	\$	86,785	\$ 41	\$	86,826						
State and municipal securities		2,605	_		2,605						
Foreign government securities		99,131	179		99,310						
Corporate bonds		21,719	749		22,468						
Equity securities		12,920	10,664		23,584						
Mortgage-backed securities		19,421	_		19,421						
Asset-backed securities		6,207	_		6,207						
Other		4,726	45		4,771						
Total	\$	253,514	\$ 11,678	\$	265,192						

# 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 2018 Annual Report on Form 10-K.

*Brokerage receivables* and *Brokerage payables* consisted of the following:

In millions of dollars	June 30, 2019	December 31, 2018			
Receivables from customers	\$ 15,887	\$	14,415		
Receivables from brokers, dealers and clearing organizations	34,140		21,035		
Total brokerage receivables <sup>(1)</sup>	\$ 50,027	\$	35,450		
Payables to customers	\$ 38,589	\$	40,273		
Payables to brokers, dealers and clearing organizations	31,250		24,298		
Total brokerage payables <sup>(1)</sup>	\$ 69,839	\$	64,571		

Includes brokerage receivables and payables recorded by Citi brokerdealer 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 2018 Annual Report on Form 10-K.

The following table presents Citi's investments by category:

In millions of dollars	•	June 30, 2019	December 31, 2018
Debt securities available-for-sale (AFS)	\$	273,435	\$ 288,038
Debt securities held-to-maturity (HTM) <sup>(1)</sup>		68,693	63,357
Marketable equity securities carried at fair value <sup>(2)</sup>		533	220
Non-marketable equity securities carried at fair value <sup>(2)</sup>		740	889
Non-marketable equity securities measured using the measurement alternative <sup>(3)</sup>		642	538
Non-marketable equity securities carried at cost <sup>(4)</sup>		5,659	5,565
Total investments	\$	349,702	\$ 358,607

- (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	Ended June 30,	Six Months Ended June 30,					
In millions of dollars	 2019	2018	2019	2018				
Taxable interest	\$ 2,324	\$ 2,158	\$ 4,69	96 \$ 4,200				
Interest exempt from U.S. federal income tax	126	132	25	53 262				
Dividend income	55	84	10	<b>04</b> 146				
Total interest and dividend income	\$ 2,505	\$ 2,374	\$ 5,05	53 \$ 4,608				

The following table presents realized gains and losses on the sales of investments, which exclude OTTI losses:

	Thr	ee Months E	nded June 30,	Six Months Ended June 30			
In millions of dollars		2019	2018	2	019	2018	
Gross realized investment gains	\$	474 \$	170	\$	642 \$	396	
Gross realized investment losses		(6)	(68)		(44)	(124)	
Net realized gains on sale of investments	\$	468 \$	102	\$	598 \$	272	

#### **Debt Securities Available-for-Sale**

The amortized cost and fair value of AFS debt securities were as follows:

June 30, 2019 December 31, 2018 Gross Gross Gross Gross Amortized unrealized unrealized Fair Amortized Fair unrealized unrealized gains In millions of dollars cost gains losses value cost losses value **Debt securities AFS** Mortgage-backed securities<sup>(1)</sup> U.S. government-sponsored agency guaranteed 37,488 \$ 717 \$ 345 \$ 37,860 \$ 43,504 \$ 241 \$ 725 \$ 43,020 Alt-A 1 1 3 2 Non-U.S. residential 907 1 909 1,310 4 1,312 Commercial 114 1 2 115 173 1 172 38,510 \$ Total mortgage-backed securities 721 \$ 346 \$ 38,885 44,988 \$ 246 \$ 729 \$ 44,505 U.S. Treasury and federal agency securities U.S. Treasury \$ 102,563 \$ 82 \$ 583 \$ 102,062 109,376 \$ 33 \$ 1,339 \$ 108,070 Agency obligations 7,488 7 48 7,447 9,283 1 132 9,152 Total U.S. Treasury and federal agency 89 \$ 631 \$ 109,509 \$ 110,051 \$ 118,659 \$ 34 \$ 1,471 \$ 117,222 securities State and municipal 6,228 \$ 139 \$ 197 \$ 6,170 9,372 \$ 96 262 9,206 803 100,872 415 596 Foreign government 101,400 463 101,740 100,691 Corporate 12,380 74 131 12,323 11,714 42 157 11,599 Asset-backed securities(1) 2 2 2 4 618 618 845 843 4,190 Other debt securities 4,191 1 3,973 1 3,972 Total debt securities AFS 273,378 \$ 1,828 \$ 1,771 \$ 273,435 290,423 \$ 835 \$ 3,220 \$ 288,038

<sup>(1)</sup> The Company invests in mortgage- 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- and asset-backed securitizations in which the Company has other involvement, see Note 18 to the Consolidated Financial Statements.

The following table shows the fair value of AFS debt securities that have been in an unrealized loss position:

	L	Less than 12 months				2 month	longer	Total				
In millions of dollars		Fair value		Gross realized losses	Fair value		Gross unrealized losses		Fair value		Gross unrealized losses	
June 30, 2019												
Debt securities AFS												
Mortgage-backed securities												
U.S. government agency guaranteed	\$	8,595	\$	255	\$	5,718	\$	90	\$	14,313	\$	345
Non-U.S. residential		175		1		1		_		176		1
Commercial		7		_		61		_		68		_
Total mortgage-backed securities	\$	8,777	\$	256	\$	5,780	\$	90	\$	14,557	\$	346
U.S. Treasury and federal agency securities	'											
U.S. Treasury	\$	19,187	\$	135	\$	54,921	\$	448	\$	74,108	\$	583
Agency obligations		316		2		6,857		46		7,173		48
Total U.S. Treasury and federal agency securities	\$	19,503	\$	137	\$	61,778	\$	494	\$	81,281	\$	631
State and municipal	\$	925	\$	156	\$	960	\$	41	\$	1,885	\$	197
Foreign government		25,294		337		7,038		126		32,332		463
Corporate		2,598		126		493		5		3,091		131
Asset-backed securities		476		2		29		_		505		2
Other debt securities		1,535		1		_		_		1,535		1
Total debt securities AFS	\$	59,108	\$	1,015	\$	76,078	\$	756	\$	135,186	\$	1,771
December 31, 2018												
Debt securities AFS												
Mortgage-backed securities												
U.S. government agency guaranteed	\$	11,160	\$	286	\$	13,143	\$	439	\$	24,303	\$	725
Non-U.S. residential		284		2		2		_		286		2
Commercial		79		1		82		1		161		2
Total mortgage-backed securities	\$	11,523	\$	289	\$	13,227	\$	440	\$	24,750	\$	729
U.S. Treasury and federal agency securities												
U.S. Treasury	\$	8,389	\$	42	\$	77,883	\$	1,297	\$	86,272	\$	1,339
Agency obligations		277		2		8,660		130		8,937		132
Total U.S. Treasury and federal agency securities	\$	8,666	\$	44	\$	86,543	\$	1,427	\$	95,209	\$	1,471
State and municipal	\$	1,614	\$	34	\$	1,303	\$	228	\$	2,917	\$	262
Foreign government		40,655		265		15,053		331		55,708		596
Corporate		4,547		115		2,077		42		6,624		157
Asset-backed securities		441		4		55		_		496		4
Other debt securities		1,790		1		_		_		1,790		1
Total debt securities AFS	\$	69,236	\$	752	\$	118,258	\$	2,468	\$	187,494	\$	3,220

The following table presents the amortized cost and fair value of AFS debt securities by contractual maturity dates:

	_	June 30, 2019				December 31, 2018				
In millions of dollars	A	Amortized Fair cost value			A	mortized cost	Fair value			
Mortgage-backed securities <sup>(1)</sup>		Cost		value		COSt		varue		
Due within 1 year	\$	12	\$	12	\$	14	\$	14		
After 1 but within 5 years		589		590		662		661		
After 5 but within 10 years		1,986		2,133		2,779		2,828		
After 10 years <sup>(2)</sup>		35,923		36,150		41,533		41,002		
Total	\$	38,510	\$	38,885	\$	44,988	\$	44,505		
U.S. Treasury and federal agency securities										
Due within 1 year	\$	42,893	\$	42,803	\$	41,941	\$	41,867		
After 1 but within 5 years		66,636		66,189		76,139		74,800		
After 5 but within 10 years		497		489		489		462		
After 10 years <sup>(2)</sup>		25		28		90		93		
Total	\$	110,051	\$	109,509	\$	118,659	\$	117,222		
State and municipal										
Due within 1 year	\$	1,282	\$	1,251	\$	2,586	\$	2,586		
After 1 but within 5 years		1,188		1,165		1,676		1,675		
After 5 but within 10 years		446		454		585		602		
After 10 years <sup>(2)</sup>		3,312		3,300		4,525		4,343		
Total	\$	6,228	\$	6,170	\$	9,372	\$	9,206		
Foreign government										
Due within 1 year	\$	41,222	\$	41,247	\$	39,078	\$	39,028		
After 1 but within 5 years		49,183		49,472		50,125		49,962		
After 5 but within 10 years		9,758		9,836		10,153		10,149		
After 10 years <sup>(2)</sup>		1,237		1,185		1,516		1,552		
Total	\$	101,400	\$	101,740	\$	100,872	\$	100,691		
All other <sup>(3)</sup>										
Due within 1 year	\$	7,424	\$	7,420	\$	6,166	\$	6,166		
After 1 but within 5 years		8,297		8,306		8,459		8,416		
After 5 but within 10 years		1,249		1,213		1,474		1,427		
After 10 years <sup>(2)</sup>		219		192		433		405		
Total	\$	17,189		17,131	—	16,532		16,414		
Total debt securities AFS	\$	273,378	\$	273,435	\$	290,423	\$	288,038		

<sup>(1)</sup> Includes mortgage-backed securities of U.S. government-sponsored agencies.

<sup>(2)</sup> 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.

<sup>(3)</sup> 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 unrealiz		Gross unrealized gains	Gross unrealized losses		Fair value
June 30, 2019						
Debt securities HTM						
Mortgage-backed securities <sup>(1)</sup>						
U.S. government agency guaranteed <sup>(2)</sup>	\$ 38,885	\$	726	\$	80	\$ 39,531
Non-U.S. residential	1,242		11		1	1,252
Commercial	443		_		1	442
Total mortgage-backed securities	\$ 40,570	\$	737	\$	82	\$ 41,225
State and municipal	\$ 7,892	\$	359	\$	13	\$ 8,238
Foreign government	1,920		17		8	1,929
Asset-backed securities <sup>(1)</sup>	18,311		8		51	18,268
Total debt securities HTM	\$ 68,693	\$	1,121	\$	154	\$ 69,660
December 31, 2018						
Debt securities HTM						
Mortgage-backed securities <sup>(1)</sup>						
U.S. government agency guaranteed	\$ 34,239	\$	199	\$	578	\$ 33,860
Non-U.S. residential	1,339		12		1	1,350
Commercial	368		_		_	368
Total mortgage-backed securities	\$ 35,946	\$	211	\$	579	\$ 35,578
State and municipal	\$ 7,628	\$	167	\$	138	\$ 7,657
Foreign government	1,027		_		24	1,003
Asset-backed securities <sup>(1)</sup>	18,756		8		112	18,652
Total debt securities HTM	\$ 63,357	\$	386	\$	853	\$ 62,890

<sup>(1)</sup> The Company invests in mortgage- 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- and asset-backed securitizations in which the Company has other involvement, see Note 18 to the Consolidated Financial Statements.

<sup>(2)</sup> In March 2019, Citibank transferred \$5 billion of agency residential mortgage-backed securities (RMBS) from AFS classification to HTM classification in accordance with ASC 320. At the time of transfer, the securities were in an unrealized loss position of \$56 million. The loss amounts will remain in AOCI and be amortized over the remaining life of the securities.

The table below shows the fair value of debt securities HTM that have been in an unrecognized loss position:

	Less tha	n 1	2 months	12 months or longer					Total			
In millions of dollars	 Fair value	uı	Gross precognized losses		Fair value	u	Gross nrecognized losses		Fair value	u	Gross nrecognized losses	
June 30, 2019												
Debt securities held-to-maturity												
Mortgage-backed securities	\$ 304	\$	1	\$	9,980	\$	81	\$	10,284	\$	82	
State and municipal	9		_		268		13		277		13	
Foreign government	1,929		8		_		_		1,929		8	
Asset-backed securities	11,532		46		501		5		12,033		51	
Total debt securities held-to-maturity	\$ 13,774	\$	55	\$	10,749	\$	99	\$	24,523	\$	154	
December 31, 2018												
Debt securities held-to-maturity												
Mortgage-backed securities	\$ 2,822	\$	20	\$	18,086	\$	559	\$	20,908	\$	579	
State and municipal	981		34		1,242		104		2,223		138	
Foreign government	1,003		24		_		_		1,003		24	
Asset-backed securities	13,008		112		_		_		13,008		112	
Total debt securities held-to-maturity	\$ 17,814	\$	190	\$	19,328	\$	663	\$	37,142	\$	853	

Note: Excluded from the gross unrecognized losses presented in the table above are \$(658) million and \$(653) million of net unrealized losses recorded in AOCI as of June 30, 2019 and December 31, 2018, 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, 2019 and December 31, 2018.

The following table presents the carrying value and fair value of HTM debt securities by contractual maturity dates:

		June 30	June 30, 2019						
In millions of dollars		Carrying value	Fair value		Carrying value		Fair value		
Mortgage-backed securities		value	Tan value	+	varue		Tan value		
Due within 1 year	\$	3	\$	\$   \$	3	\$	3		
After 1 but within 5 years	*	534	54	, ·	539	Ψ	540		
After 5 but within 10 years		1,816	1,88		997		1,011		
After 10 years <sup>(1)</sup>		38,217	38,79		34,407		34,024		
Total	\$	40,570		_	35,946	\$	35,578		
State and municipal				T					
Due within 1 year	\$	38	\$ 38	\$	37	\$	37		
After 1 but within 5 years		229	239	•	168		174		
After 5 but within 10 years		502	520	5	540		544		
After 10 years <sup>(1)</sup>		7,123	7,43	5	6,883		6,902		
Total	\$	7,892	\$ 8,23	\$	7,628	\$	7,657		
Foreign government				П					
Due within 1 year	\$	661	\$ 664	\$	60	\$	36		
After 1 but within 5 years		823	82:	5	967		967		
After 5 but within 10 years		436	440		_		_		
After 10 years <sup>(1)</sup>		_	_	- [	_		_		
Total	\$	1,920	\$ 1,929	\$	1,027	\$	1,003		
All other <sup>(2)</sup>									
Due within 1 year	\$	_	\$ -	- \$	_	\$	_		
After 1 but within 5 years		_	_	-	_		_		
After 5 but within 10 years		3,161	3,162	2	2,535		2,539		
After 10 years <sup>(1)</sup>		15,150	15,100	5	16,221		16,113		
Total	\$	18,311	\$ 18,268	\$	18,756	\$	18,652		
Total debt securities HTM	\$	68,693	\$ 69,660	\$	63,357	\$	62,890		

<sup>(1)</sup> 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.

<sup>(2)</sup> Includes corporate and asset-backed securities.

# **Evaluating Investments for Other-Than-Temporary Impairment**

#### **Debt Securities**

#### Overview

The Company conducts periodic reviews of all debt securities with unrealized losses to evaluate whether the impairment is other-than-temporary. This review applies to all debt securities that are not measured at fair value through earnings.

An unrealized loss exists when the current fair value of an individual debt 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 debt 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.

Regardless of the classification of debt 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-thantemporary impairment; and
- documentation of the results of these analyses, as required under business policies.

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 debt 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.

The sections below describe the Company's process for identifying credit-related impairments for debt security types that have the most significant unrealized losses as of June 30, 2019.

## 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.

#### **Equity Method Investments**

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.

## **Recognition and Measurement of OTTI**

The following tables present total OTTI on *Investments* recognized in earnings:

	 Thr	Months I ie 30, 20		ed		Ionths End ine 30, 2019	
In millions of dollars	AFS	нтм		Total	AFS <sup>(1)</sup>	нтм	Total
Impairment losses related to debt securities that the Company does not intend to sell nor will likely be required to sell:							
Total OTTI losses recognized during the period	\$ _	\$ _	- \$	_	\$ <b>— \$</b>		<b>s</b> —
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	\$ _	\$ _	- \$	_	\$ <b>— \$</b>		s —
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	2	_	_	2	5	_	5
Total OTTI losses recognized in earnings	\$ 2	\$ _	- \$	2	\$ 5 \$		\$ 5

		 Months Ende e 30, 2018	d			Months Endine 30, 201		
In millions of dollars	AFS	HTM	Total	_	AFS(1)	HTM	7	Fotal
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	\$ _	\$ — \$	_	\$	<b>—</b> \$	<b>—</b>	\$	_
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	\$ _	\$ — \$	_	\$	_ \$	S —	\$	
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	12	_	12		39	_		39
Total impairment losses recognized in earnings	\$ 12	\$ — \$	12	\$	39 \$	; —	\$	39

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 will likely be required to sell:

	C	umulative	O	TTI credit losse	s r	ecognized in earı	ning	gs on debt securit	ies st	ill held
In millions of dollars		rch 31, balance	1	Credit impairments recognized in earnings on securities not previously impaired	!	Credit impairments recognized in earnings on securities that have been previously impaired	c	Changes due to redit-impaired securities sold, transferred or matured		e 30, 2019 palance
AFS debt securities										
Mortgage-backed securities <sup>(1)</sup>	\$	1	\$	<del>_</del>	\$	_	\$	_	\$	1
State and municipal		_		_		_				_
Foreign government securities		_		_		_		_		_
Corporate		4		_		_		_		4
All other debt securities		_		_		_		_		_
Total OTTI credit losses recognized for AFS debt securities	\$	5	\$	_	\$	_	\$		\$	5
HTM debt securities										
Mortgage-backed securities <sup>(2)</sup>	\$	_	\$	_	\$	_	\$	_	\$	_
State and municipal		_		_		_		_		
Total OTTI credit losses recognized for HTM debt securities	\$	_	\$	_	\$	_	\$	_	\$	_

Cumulative OTTI credit losses recognized in earnings on debt securities still held

In millions of dollars	ch 31, palance	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 \$	S —	\$	\$ (24)	\$ 1
State and municipal	_	_	_	_	_
Foreign government securities	_	_	_	<u> </u>	_
Corporate	4	_	_	_	4
All other debt securities	2	_	_	<u> </u>	2
Total OTTI credit losses recognized for AFS debt securities	\$ 31 \$	S –	\$ —	\$ (24)	\$ 7
HTM debt securities					
Mortgage-backed securities <sup>(2)</sup>	\$ <b>—</b> \$	<b>—</b>	\$ —	\$ —	\$ —
State and municipal	_	_	_	_	_
Total OTTI credit losses recognized for HTM debt securities	\$ <b>—</b> \$	S —	\$ —	\$ _	\$ —

Primarily consists of Prime securities.
 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 that the Company does not intend to sell nor likely will be required to sell:

Cumulative (	OTTI credit losses	recognized in earnings	on debt securities	still held
Cumumutt	O I I I CI CUIT IUSSCS	i ccoznizca in cai nings	on acot securities	Juli nelu

In millions of dollars	nber 31, balance	ľ	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, 2 balanc	
AFS debt securities							
Mortgage-backed securities <sup>(1)</sup>	\$ 1	\$	<u> </u>	s —	<b>s</b> —	\$	1
State and municipal	_			_	_		_
Foreign government securities	_		_		_		_
Corporate	4		_	_	_		4
All other debt securities	_		<u> </u>		<u> </u>		_
Total OTTI credit losses recognized for AFS debt securities	\$ 5	\$	_	<b>s</b> —	s –	\$	5
HTM debt securities							
Mortgage-backed securities <sup>(2)</sup>	\$ _	\$	_	\$	<b>s</b> —	\$	_
State and municipal	_		_	_	_		_
Total OTTI credit losses recognized for HTM debt securities	\$ _	\$	_	\$	s –	\$	_

Cumulative OTTI			

In millions of dollars	nber 31, balance	1	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 <sup>(3)</sup>	June 30, 2018 balance
AFS debt securities						
Mortgage-backed securities <sup>(1)</sup>	\$ 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 <sup>(2)</sup>	\$ 54	\$	_	\$ —	\$ (54)	\$
State and municipal	3		_	_	(3)	_
Total OTTI credit losses recognized for HTM debt securities	\$ 57	\$	_	\$ —	\$ (57)	\$

<sup>(1)</sup> Primarily consists of Prime securities.

<sup>(2)</sup> Primarily consists of Alt-A securities.

<sup>(3)</sup> 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.

# Non-Marketable Equity Securities Not Carried at Fair Value

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.

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. 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.

Equity securities under the measurement alternative are also assessed for impairment. 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, 2019 and December 31, 2018:

In millions of dollars	June	30, 2019	December 31, 2018
Measurement alternative:			
Carrying value	\$	642 \$	538

Below are amounts recognized in earnings and life-todate amounts for non-marketable equity securities measured using the measurement alternative:

	Т	hree I End June	de	d		Six M End Jund	ded	
In millions of dollars	20	19		2018		2019		2018
Measurement alternative:								
Impairment losses <sup>(1)</sup>	\$	3	\$		3	\$ 8	\$	4
Downward changes for observable prices <sup>(1)</sup>		12			2	12		4
Upward changes for observable prices <sup>(1)</sup>		19			4	85		112

 See Note 20 to the Consolidated Financial Statements for additional information on these nonrecurring fair value measurements.

		date amounts rities still held
In millions of dollars	Jun	e 30, 2019
Measurement alternative:		
Impairment losses	\$	15
Downward changes for observable prices		30
Upward changes for observable prices		304

A similar impairment analysis is performed for non-marketable equity securities carried at cost. For the three and six months ended June 30, 2019 and 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 five 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.

	Fair v	value	Unfu commi		Redemption frequency (if currently eligible) monthly, quarterly, annually	Redemption notice period
In millions of dollars	ne 30, 2019	December 31, 2018	June 30, 2019	December 31, 2018	_	
Hedge funds	\$ _	\$ —	\$ _	\$ —	Generally quarterly	10–95 days
Private equity funds <sup>(1)(2)</sup>	158	168	62	62	<u> </u>	_
Real estate funds <sup>(2)(3)</sup>	12	14	18	19	_	_
Mutual/collective investment funds	26	25	_	_	_	_
Total	\$ 196	\$ 207	\$ 80	\$ 81	<del>_</del>	_

<sup>(1)</sup> Private equity funds include funds that invest in infrastructure, emerging markets and venture capital.

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.

<sup>(3)</sup> Includes several real estate funds that invest primarily in commercial real estate in the U.S., Europe and Asia.

## 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 2018 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:

#### Consumer Loans, Delinquencies and Non-Accrual Details at June 30, 2019

In millions of dollars	cu	Total rrent <sup>(1)(2)</sup>	-89 days st due <sup>(3)</sup>	≥ pa	90 days st due <sup>(3)</sup>	g	Past due overnment aranteed <sup>(4)</sup>	Total loans <sup>(2)</sup>		Total oans <sup>(2)</sup>		Total al non- s <sup>(2)</sup> accrual		days past due nd accruing
In North America offices <sup>(5)</sup>														
Residential first mortgages <sup>(6)</sup>	\$	44,122	\$ 480	\$	224	\$	648	\$	45,474	\$	582	\$ 407		
Home equity loans <sup>(7)(8)</sup>		10,028	153		223		_		10,404		476	_		
Credit cards		137,091	1,536		1,639		_		140,266		_	1,639		
Installment and other		3,193	40		12		_		3,245		19	_		
Commercial banking loans		10,655	22		13		_		10,690		139	_		
Total	\$	205,089	\$ 2,231	\$	2,111	\$	648	\$	210,079	\$	1,216	\$ 2,046		
In offices outside North America <sup>(5)</sup>														
Residential first mortgages <sup>(6)</sup>	\$	36,226	\$ 207	\$	147	\$	_	\$	36,580	\$	405	\$ _		
Credit cards		24,188	416		371		_		24,975		302	238		
Installment and other		26,970	241		110		_		27,321		146	_		
Commercial banking loans		26,926	60		54		_		27,040		159	_		
Total	\$	114,310	\$ 924	\$	682	\$	_	\$	115,916	\$	1,012	\$ 238		
Total Citigroup <sup>(9)</sup>	\$	319,399	\$ 3,155	\$	2,793	\$	648	\$	325,995	\$	2,228	\$ 2,284		

- (1) Loans less than 30 days past due are presented as current.
- (2) Includes \$20 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 \$0.4 billion.
- (5) North America includes the U.S., Canada and Puerto Rico. Mexico is included in offices outside North America.
- (6) Includes approximately \$0.1 billion of residential first mortgage loans in process of foreclosure.
- (7) Includes approximately \$0.1 billion of home equity loans in process of foreclosure.
- (8) Fixed-rate home equity loans and loans extended under home equity lines of credit, which are typically in junior lien positions.
- (9) Consumer loans are net of unearned income of \$713 million. Unearned income on consumer loans primarily represents unamortized origination fees and costs, premiums and discounts.

During the three and six months ended June 30, 2019 and 2018, the Company sold and/or reclassified to HFS \$0.4 billion and \$2.3 billion and \$1.9 billion and \$2.8 billion, respectively, of consumer loans.

In millions of dollars	cu	Total rrent <sup>(1)(2)</sup>	30- pa	–89 days ist due <sup>(3)</sup>	≥ pa	90 days st due <sup>(3)</sup>	Past due government guaranteed <sup>(4)</sup> l		Total loans <sup>(2)</sup>		Total non- accrual		90 days past due and accruing	
In North America offices <sup>(5)</sup>														
Residential first mortgages <sup>(6)</sup>	\$	45,953	\$	420	\$	253	\$	786	\$	47,412	\$	583	\$	549
Home equity loans <sup>(7)(8)</sup>		11,135		161		247		_		11,543		527		_
Credit cards		141,106		1,687		1,764		_		144,557		_		1,764
Installment and other		3,395		43		16		_		3,454		22		_
Commercial banking loans		9,662		20		46		_		9,728		109		_
Total	\$	211,251	\$	2,331	\$	2,326	\$	786	\$	216,694	\$	1,241	\$	2,313
In offices outside North America <sup>(5)</sup>														
Residential first mortgages <sup>(6)</sup>	\$	35,624	\$	203	\$	145	\$	_	\$	35,972	\$	383	\$	_
Credit cards		24,131		425		370		_		24,926		312		235
Installment and other		25,773		254		107		_		26,134		152		_
Commercial banking loans		26,657		51		53		_		26,761		138		_
Total	\$	112,185	\$	933	\$	675	\$	_	\$	113,793	\$	985	\$	235
Total Citigroup <sup>(9)</sup>	\$	323,436	\$	3,264	\$	3,001	\$	786	\$	330,487	\$	2,226	\$	2,548

- (1) Loans less than 30 days past due are presented as current.
- (2) Includes \$20 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 \$0.6 billion.
- (5) North America includes the U.S., Canada and Puerto Rico. Mexico is included in offices outside North America.
- (6) Includes approximately \$0.1 billion of residential first mortgage loans in process of foreclosure.
- 7) Includes approximately \$0.1 billion of home equity loans in process of foreclosure.
- (8) Fixed-rate home equity loans and loans extended under home equity lines of credit, which are typically in junior lien positions.
- (9) Consumer loans are net of unearned income of \$708 million. Unearned income on consumer loans primarily represents unamortized origination fees and costs, premiums and discounts.

## 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<sup>(1)(2)</sup>

U.S. portfolio <sup>(1)(2)</sup>	June 30, 2019										
In millions of dollars	L	ess than 680	6	80 to 760		Greater than 760					
Residential first mortgages	\$	3,803	\$	12,699	\$	26,618					
Home equity loans		2,172		3,920		3,994					
Credit cards		31,445		57,173		49,715					
Installment and other		602		967		1,078					
Total	\$	38,022	\$	74,759	\$	81,405					

FICO score distribution in U.S. portfolio<sup>(1)(2)</sup>

In millions of dollars

Home equity loans

\$

\$

Residential first

mortgages

Credit cards

other

Total

Installment and

 December 31, 2018

 Less than 680
 680 to 760
 Greater than 760

 4,530
 \$ 13,848
 \$ 26,546

 2,438
 4,296
 4,471

 32,686
 58,722
 51,299

1,097

77,963 \$

1,121

83,437

 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.

40,279 \$

(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		

c P											
In millions of dollars		ess than or qual to 80%		80% but less an or equal to 100%	Greater than 100%						
Residential first mortgages	\$	40,482	\$	2,577	\$	168					
Home equity loans		8,635		1,079		332					
Total	\$	49,117	\$	3,656	\$	500					

LTV distribution in U.S. portfolio<sup>(1)(2)</sup>

December 31, 2018

In millions of dollars	ess than or equal to 80%	80% but less n or equal to 100%	Greater than 100%
Residential first mortgages	\$ 42,379	\$ 2,474	\$ 197
Home equity loans	9,465	1,287	390
Total	\$ 51,844	\$ 3,761	\$ 587

- 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:

									Three Months Ended June 30,				Six Months Ended June 30,			
			Bal	ance at Ju	ıne	30, 2019			<b>2019</b> 2018			2019		2018		
In millions of dollars	in	Recorded vestment (1)(2)	p	Inpaid rincipal oalance	al	Related specific llowance <sup>(3)</sup>		Average carrying value <sup>(4)</sup>	re	Interest income cognized <sup>(5)</sup>	re	Interest income ecognized <sup>(5)</sup>	r	Interest income ecognized <sup>(5)</sup>	re	Interest income ecognized <sup>(5)</sup>
Mortgage and real estate																
Residential first mortgages	\$	2,022	\$	2,222	\$	219	\$	2,133	\$	18	\$	21	\$	35	\$	42
Home equity loans		652		914		124		678		2		2		4		8
Credit cards		1,873		1,892		711		1,838		26		25		52		55
Installment and other																
Individual installment and other		400		431		142		401		6		6		11		12
Commercial banking		365		534		35		316		7		5		10		8
Total	\$	5,312	\$	5,993	\$	1,231	\$	5,366	\$	59	\$	59	\$	112	\$	125

<sup>(1)</sup> 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.

<sup>(5)</sup> Includes amounts recognized on both an accrual and cash basis.

	Balance at December 31, 2018										
In millions of dollars	Reinvest	corded tment <sup>(1)(2)</sup>	Unpaid principal balance	Related specific allowance <sup>(3)</sup>	Average carrying value <sup>(4)</sup>						
Mortgage and real estate	·										
Residential first mortgages	\$	2,130	\$ 2,329	\$ 178	\$ 2,483						
Home equity loans		684	946	122	698						
Credit cards		1,818	1,842	677	1,815						
Installment and other											
Individual installment and other		400	434	146	414						
Commercial banking		252	432	55	286						
Total	\$	5,284	\$ 5,983	\$ 1,178	\$ 5,696						

<sup>(1)</sup> 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.

<sup>(2) \$414</sup> million of residential first mortgages, \$245 million of home equity loans and \$9 million of commercial market loans do not have a specific allowance.

<sup>(3)</sup> Included in the Allowance for loan losses.

<sup>(4)</sup> Average carrying value represents the average recorded investment ending balance for the last four quarters and does not include the related specific allowance.

<sup>(2) \$484</sup> million of residential first mortgages, \$263 million of home equity loans and \$2 million of commercial market loans do not have a specific allowance.

<sup>3)</sup> Included in the Allowance for loan losses.

<sup>(4)</sup> 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**

For the Three Months Ended June 30, 2019

In millions of dollars, except number of loans modified	Number of loans modified	Post- modification recorded investment <sup>(1)(2)</sup>	Deferred principal <sup>(3)</sup>	Contingent principal forgiveness <sup>(4)</sup>	Principal forgiveness <sup>(5)</sup>	Average interest rate reduction
North America						
Residential first mortgages	137	\$ 21	<b>s</b> —	<b>s</b> —	<b>s</b> —	_%
Home equity loans	188	22	1	_	_	1
Credit cards	63,281	273	_	_	_	17
Installment and other revolving	340	3	_	_	_	6
Commercial banking <sup>(6)</sup>	12	10	_		_	_
Total <sup>(8)</sup>	63,958	\$ 329	\$ 1	s —	s —	
International						_
Residential first mortgages	638	\$ 17	<b>s</b> —	<b>s</b> —	<b>s</b> —	<u>_%</u>
Credit cards	18,453	73	_	_	3	16
Installment and other revolving	7,073	44	_	_	2	10
Commercial banking <sup>(6)</sup>	89	9	<del>_</del>		<u> </u>	
Total <sup>(8)</sup>	26,253	\$ 143	s —	<b>s</b> —	\$ 5	

For the Three Months Ended June 30, 2018

		Tot the Time World's Ended Julie 50, 2016												
In millions of dollars, except number of loans modified	Number of loans modified	Post- modification recorded investment <sup>(1)(7)</sup>	Deferred principal <sup>(3)</sup>	Contingent principal forgiveness <sup>(4)</sup>	Principal forgiveness <sup>(5)</sup>	Average interest rate reduction								
North America														
Residential first mortgages	495	\$ 77	\$ 1	\$ —	\$ —	<u> </u>								
Home equity loans	380	37	1	_	_	1								
Credit cards	55,459	220	_	_	_	17								
Installment and other revolving	292	2	_	_	_	5								
Commercial banking <sup>(6)</sup>	17	1	_	_	_	_								
Total <sup>(8)</sup>	56,643	\$ 337	\$ 2	\$	\$ —									
International														
Residential first mortgages	624	\$ 22	\$ —	\$ —	\$	%								
Credit cards	17,782	78	_	_	2	16								
Installment and other revolving	7,172	43	_	_	2	11								
Commercial banking <sup>(6)</sup>	157	22	_	_	_	_								
Total <sup>(8)</sup>	25,735	\$ 165	\$ —	\$	\$ 4									

- (1) Post-modification balances include past due amounts that are capitalized at the modification date.
- (2) Post-modification balances in *North America* include \$5 million of residential first mortgages and \$2 million of home equity loans to borrowers who have gone through Chapter 7 bankruptcy in the three months ended June 30, 2019. These amounts include \$3 million of residential first mortgages and \$1 million of home equity loans that were newly classified as TDRs in the three months ended June 30, 2019, based on previously received OCC guidance.
- (3) Represents portion of contractual loan principal that is non-interest bearing, but still due from the borrower. Such deferred principal is charged off at the time of permanent modification to the extent that the related loan balance exceeds the underlying collateral value.
- (4) Represents portion of contractual loan principal that is non-interest bearing and, depending upon borrower performance, eligible for forgiveness.
- (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 \$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.
- (8) The above tables reflect activity for loans outstanding that were considered TDRs as of the end of the reporting period.

For the Six Months Ended June 30, 2019

In millions of dollars, except number of loans modified	Number of loans modified	Post- modification recorded investment <sup>(1)(2)</sup>	Deferred principal <sup>(3)</sup>	Contingent principal forgiveness <sup>(4)</sup>	Principal forgiveness <sup>(5)</sup>	Average interest rate reduction
North America						
Residential first mortgages	630	\$ 95	<b>\$</b>	<b>\$</b>	<b>s</b> —	<u>%</u>
Home equity loans	394	42	2	_	_	1
Credit cards	135,528	578	_	_	_	17
Installment and other revolving	691	6	_	_	_	6
Commercial banking <sup>(6)</sup>	27	48	_	_	_	_
Total <sup>(8)</sup>	137,270	\$ 769	\$ 2	<b>\$</b>	s —	
International						
Residential first mortgages	1,363	\$ 37	<b>\$</b>	<b>\$</b>	<b>s</b> —	<u> </u>
Credit cards	36,946	148	_	_	6	16
Installment and other revolving	14,625	88	_	_	3	10
Commercial banking <sup>(6)</sup>	188	41	_	_	_	_
Total <sup>(8)</sup>	53,122	\$ 314	<b>\$</b>	<b>\$</b> —	\$ 9	

## For the Six Months Ended June 30, 2018

In millions of dollars, except number of loans modified	Number of loans modified	Post- modification recorded investment <sup>(1)(7)</sup>	Deferred principal <sup>(3)</sup>	1	ontingent principal Pri giveness <sup>(4)</sup> forgi	incipal veness <sup>(5)</sup>	Average interest rate reduction
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 <sup>(6)</sup>	26	2	-	_	_	_	_
Total <sup>(8)</sup>	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 <sup>(6)</sup>	302	50	_	_	<u> </u>	_	1
Total <sup>(8)</sup>	59,148	\$ 366	\$ -	<b>- \$</b>	<b>—</b> \$	9	

- (1) Post-modification balances include past due amounts that are capitalized at the modification date.
- (2) Post-modification balances in *North America* include \$12 million of residential first mortgages and \$4 million of home equity loans to borrowers who have gone through Chapter 7 bankruptcy in the six months ended June 30, 2019. These amounts include \$7 million of residential first mortgages and \$3 million of home equity loans that were newly classified as TDRs in the six months ended June 30, 2019, based on previously received OCC guidance.
- (3) Represents portion of contractual loan principal that is non-interest bearing, but still due from the borrower. Such deferred principal is charged off at the time of permanent modification to the extent that the related loan balance exceeds the underlying collateral value.
- (4) Represents portion of contractual loan principal that is non-interest bearing and, depending upon borrower performance, eligible for forgiveness.
- (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 \$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.
- (8) The above tables reflect activity for loans outstanding that were considered TDRs as of the end of the reporting period.

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	s Ended June 30,	Six Months I	Ended June 30,
In millions of dollars	2019	2018	2019	2018
North America				
Residential first mortgages	\$ 26	5 \$ 30	\$ 50	\$ 74
Home equity loans	4	<b>4</b> 6	7	16
Credit cards	73	<b>3</b> 57	144	116
Installment and other revolving	1	1	2	1
Commercial banking	1	1 13	1	. 21
Total	\$ 105	5 \$ 107	\$ 204	\$ 228
International		,		
Residential first mortgages	\$ 4	1 \$ 2	\$ 7	\$ 4
Credit cards	36	55	75	108
Installment and other revolving	19	20	37	44
Commercial banking	2	2 9	2	10
Total	\$ 61	1 \$ 86	\$ 121	\$ 166

## **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, 2019	December 31, 2018			
In North America offices <sup>(1)</sup>						
Commercial and industrial	\$	54,519	\$	52,063		
Financial institutions		47,610		48,447		
Mortgage and real estate <sup>(2)</sup>		51,321		50,124		
Installment, revolving credit and other		33,555		32,425		
Lease financing		1,385		1,429		
Total	\$	188,390	\$	184,488		
In offices outside North America <sup>(1)</sup>						
Commercial and industrial	\$	98,351	\$	94,701		
Financial institutions		37,523		36,837		
Mortgage and real estate <sup>(2)</sup>		7,577		7,376		
Installment, revolving credit and other		27,333		25,684		
Lease financing		92		103		
Governments and official institutions		3,409		4,520		
Total	\$	174,285	\$	169,221		
Corporate loans, net of unearned income <sup>(3)</sup>	\$	362,675	\$	353,709		

- North America includes the U.S., Canada and Puerto Rico. Mexico is included in offices outside North America.
- (2) Loans secured primarily by real estate.
- (3) Corporate loans are net of unearned income of (\$815) million and (\$822) million at June 30, 2019 and December 31, 2018, respectively. Unearned income on corporate loans primarily represents interest received in advance, but not yet earned, on loans originated on a discounted basis.

The Company sold and/or reclassified to held-for-sale \$0.8 billion and \$1.3 billion of corporate loans during the three and six months ended June 30, 2019, respectively, and \$0.4 billion and \$0.5 billion during the three and six months ended June 30, 2018, 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, 2019 or 2018.

## Lease financing

Citi is a lessor in the power, railcars, shipping and aircraft sectors, where the Company has executed operating, direct financing and leveraged leases. Citi's \$1.5 billion of lease financing receivables, as of June 30, 2019, is composed of approximately equal balances of direct financing lease receivables and net investments in leveraged leases. Citi uses the interest rate implicit in the lease to determine the present value of its lease financing receivables. Citi recognized \$21 million and \$42 million, respectively, of interest income on direct financing and leveraged leases during the three and six months ended June 30, 2019.

The Company's leases have an average remaining maturity of approximately four years. In certain cases, Citi obtains residual value insurance from third parties and/or the lessee to manage the risk associated with the residual value of the leased assets. The receivable related to the residual value of the leased assets is approximately \$0.9 billion as of June 30, 2019, while the amount covered by residual value guarantees is approximately \$0.3 billion.

The Company's operating leases, where Citi is a lessor, are not significant to the Consolidated Financial Statements.

## Corporate Loan Delinquency and Non-Accrual Details at June 30, 2019

In millions of dollars	pas	9 days t due cruing <sup>(1)</sup>	≥90 days past due and accruing <sup>(1)</sup>	Total past due and accruing	Total non-accrual <sup>(2)</sup>	Total current <sup>(3)</sup>	Total loans <sup>(4)</sup>
Commercial and industrial	\$	473	\$ 32	\$ 505	\$ 1,064	\$ 149,418	\$ 150,987
Financial institutions		245	15	260	36	82,983	83,279
Mortgage and real estate		234	4	238	204	58,438	58,880
Lease financing		_	19	19	_	1,458	1,477
Other		159	56	215	106	63,927	64,248
Loans at fair value							3,804
Total	\$	1,111	\$ 126	\$ 1,237	\$ 1,410	\$ 356,224	\$ 362,675

## Corporate Loan Delinquency and Non-Accrual Details at December 31, 2018

In millions of dollars	pa	89 days st due ccruing <sup>(1)</sup>	≥ 90 days past due and accruing <sup>(1)</sup>	i	Total past due and accruing	Total non-accrual <sup>(2)</sup>	Total current <sup>(3)</sup>	Total loans <sup>(4)</sup>
Commercial and industrial	\$	365	\$	12	\$ 407	\$ 919	\$ 143,960	\$ 145,286
Financial institutions		87		7	94	102	83,672	83,868
Mortgage and real estate		128		5	133	215	57,116	57,464
Lease financing		5		10	15	_	1,516	1,531
Other		151	:	52	203	75	62,079	62,357
Loans at fair value								3,203
Total	\$	736	\$ 1	16	\$ 852	\$ 1,311	\$ 348,343	\$ 353,709

<sup>(1)</sup> 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.

<sup>(2)</sup> Non-accrual loans generally include those loans that are 90 days or more 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 and/or principal is doubtful.

<sup>(3)</sup> Loans less than 30 days past due are presented as current.

<sup>(4)</sup> Total loans include loans at fair value, which are not included in the various delinquency columns.

# **Corporate Loans Credit Quality Indicators**

	Recorded investment in loans(1)						
In millions of dollars		June 30, 2019	D	ecember 31, 2018			
Investment grade <sup>(2)</sup>							
Commercial and industrial	\$	106,432	\$	102,722			
Financial institutions		72,625		73,080			
Mortgage and real estate		26,569		25,855			
Lease financing		945		1,036			
Other		56,651		57,299			
Total investment grade	\$	263,222	\$	259,992			
Non-investment grade <sup>(2)</sup>							
Accrual							
Commercial and industrial	\$	43,491	\$	41,645			
Financial institutions		10,618		10,686			
Mortgage and real estate		3,222		3,793			
Lease financing		532		496			
Other		7,491		4,981			
Non-accrual							
Commercial and industrial		1,064		919			
Financial institutions		36		102			
Mortgage and real estate		204		215			
Lease financing		_		_			
Other		106		75			
Total non-investment grade	\$	66,764	\$	62,912			
Non-rated private bank							
loans managed on a delinquency basis <sup>(2)</sup>	\$	28,885	\$	27,602			
Loans at fair value		3,804		3,203			
Corporate loans, net of unearned income	\$	362,675	\$	353,709			

<sup>(1)</sup> Recorded investment in a loan includes net deferred loan fees and costs, unamortized premium or discount, less any direct write-downs.

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 3	Three Months Ended June 30, 2019			Six Months Ended June 30, 2019			
In millions of dollars	ecorded estment <sup>(1)</sup>	Unpaid principal balance	í	Related specific allowance	Average carrying value <sup>(2)</sup>	]	Interest income recognized <sup>(3)</sup>	1	Interest income recognized <sup>(3)</sup>
Non-accrual corporate loans									
Commercial and industrial	\$ 1,064	\$ 1,320	\$	138	\$ 1,071	\$	1	\$	15
Financial institutions	36	57		9	76		_		_
Mortgage and real estate	204	416		16	215		_		_
Lease financing	_	_		_	_		_		_
Other	106	193		40	74		_		_
Total non-accrual corporate loans	\$ 1,410	\$ 1,986	\$	203	\$ 1,436	\$	1	\$	15

		December 31, 2018								
In millions of dollars		corded stment <sup>(1)</sup>	Unpaid principal balance	Related specific allowance	Average carrying value <sup>(2)</sup>					
Non-accrual corporate loans	·									
Commercial and industrial	\$	919 \$	1,070	\$ 183	\$ 1,099					
Financial institutions		102	123	35	99					
Mortgage and real estate		215	323	39	233					
Lease financing		_	28	_	21					
Other		75	165	6	83					
Total non-accrual corporate loans	\$	1,311 \$	1,709	\$ 263	\$ 1,535					

		June 3	0, 2019	December 31, 2018			
In millions of dollars		Recorded investment <sup>(1)</sup>	Related specific allowance		Recorded investment <sup>(1)</sup>	Related specific allowance	
Non-accrual corporate loans with valuation allowances							
Commercial and industrial	\$	452	\$ 138	\$	603	\$	183
Financial institutions		10	9		76		35
Mortgage and real estate		81	16		100		39
Lease financing		_	_		_		_
Other		73	40		24		6
Total non-accrual corporate loans with specific allowance	\$	616	\$ 203	\$	803	\$	263
Non-accrual corporate loans without specific allowance							
Commercial and industrial	\$	612		\$	316		
Financial institutions		26			26		
Mortgage and real estate		123			115		
Lease financing		_			_		
Other		33			51		
Total non-accrual corporate loans without specific allowance	\$	794	N/A	\$	508		N/A

<sup>(1)</sup> Recorded investment in a loan includes net deferred loan fees and costs, unamortized premium or discount, less any direct write-downs.

<sup>(2)</sup> Average carrying value represents the average recorded investment balance and does not include related specific allowance.

<sup>(3)</sup> Interest income recognized for the three and six months ended June 30, 2018 was \$13 million and \$17 million, respectively.

N/A Not applicable

## **Corporate Troubled Debt Restructurings**

## For the three months ended June 30, 2019:

In millions of dollars	TDŘs r	g value of nodified ne period	TDRs involving changes in the amount and/or timing of principal payments <sup>(1)</sup>	TDRs involving changes in the amount and/or timing of interest payments <sup>(2)</sup>	TDRs involving changes in the amount and/or timing of both principal and interest payments
Commercial and industrial	\$	42 \$	19	\$ — S	\$ 23
Mortgage and real estate		3	_	_	3
Other		6	6	_	_
Total	\$	51 \$	25	<u> </u>	\$ 26

For the three months ended June 30, 2018:

In millions of dollars	of T	urrying value DRs modified ing the period	TDRs involving changes in the amount and/or timing of principal payments <sup>(1)</sup>	TDRs involving changes in the amount and/or timing of interest payments <sup>(2)</sup>		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

## For the six months ended June 30, 2019:

In millions of dollars	TDŘs i	g value of nodified he period p	TDRs involving changes in the amount and/or timing of orincipal payments <sup>(1)</sup>	TDRs involving changes in the amount and/or timing of interest payments <sup>(2)</sup>	TDRs involving changes in the amount and/or timing of both principal and interest payments
Commercial and industrial	\$	58 \$	19	<u> </u>	\$ 39
Mortgage and real estate		7	_	_	7
Other		6	6	_	_
Total	\$	71 \$	25	<u>s</u> —	\$ 46

For the six months ended June 30, 2018:

In millions of dollars	TDRs n	ving value of nodified during the period	I	TDRs involving changes in the amount and/or timing of principal payments <sup>(1)</sup>		TDRs involving changes in the amount and/or timing of interest payments <sup>(2)</sup>		TDRs involving changes in the amount and/or timing of both principal and interest payments
Commercial and industrial	\$	41	\$	3	3 \$		4	\$ 34
Mortgage and real estate		3		_	-		_	3
Total	\$	44	\$	3	3 \$		4	\$ 37

<sup>(1)</sup> 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.

<sup>(2)</sup> 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.

		TDR loans in pa	TDR loans in p	ayment default		
In millions of dollars	TDR balances at June 30, 2019	Three Months Ended June 30, 2019	Six Months Ended June 30, 2019	TDR balances at June 30, 2018	Three Months Ended June 30, 2018	Six Months Ended June 30, 2018
Commercial and industrial	\$ 424	\$ 19	\$ 19	\$ 440	\$ 11	\$ 70
Financial institutions	10	_	_	34	_	_
Mortgage and real estate	112	_	_	87	_	_
Other	6	_	_	37	_	_
Total <sup>(1)</sup>	\$ 552	\$ 19	\$ 19	\$ 598	\$ 11	\$ 70

<sup>(1)</sup> The above table reflects activity for loans outstanding that were considered TDRs as of the end of the reporting period.

## 14. ALLOWANCE FOR CREDIT LOSSES

	Three Months Ended June 30,				Six Months June 3			
In millions of dollars		2019	2018		2019	2018		
Allowance for loan losses at beginning of period	\$	12,329 \$	12,354	\$	12,315 \$	12,355		
Gross credit losses		(2,354)	(2,109)		(4,699)	(4,405)		
Gross recoveries <sup>(1)</sup>		391	405		788	834		
Net credit losses (NCLs)	\$	(1,963) \$	(1,704)	\$	(3,911) \$	(3,571)		
NCLs	\$	1,963 \$	1,704	\$	3,911 \$	3,571		
Net reserve builds (releases)		53	31		120	133		
Net specific reserve builds (releases)		73	60		2	(106)		
Total provision for loan losses	\$	2,089 \$	1,795	\$	4,033 \$	3,598		
Other, net (see table below)		11	(319)		29	(256)		
Allowance for loan losses at end of period	\$	12,466 \$	12,126	\$	12,466 \$	12,126		
Allowance for credit losses on unfunded lending commitments at beginning of period	\$	1,391 \$	1,290	\$	1,367 \$	1,258		
Provision (release) for unfunded lending commitments		(15)	(4)		9	24		
Other, net		_	(8)		_	(4)		
Allowance for credit losses on unfunded lending commitments at end of period <sup>(2)</sup>	\$	1,376 \$	1,278	\$	1,376 \$	1,278		
Total allowance for loans, leases and unfunded lending commitments	\$	13,842 \$	13,404	\$	13,842 \$	13,404		

(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.

Other, net details	Thre	e Month June 3		Six Month June	
In millions of dollars	20	19	2018	2019	2018
Sales or transfers of various consumer loan portfolios to HFS					
Transfer of real estate loan portfolios	\$	(4) \$	(33)	\$ (4)	\$ (86)
Transfer of other loan portfolios		_	(104)	_	(106)
Sales or transfers of various consumer loan portfolios to HFS	\$	(4) \$	(137)	\$ (4)	\$ (192)
FX translation, consumer		13	(164)	39	(46)
Other		2	(18)	(6)	(18)
Other, net	\$	11 \$	(319)	\$ 29	\$ (256)

## Allowance for Credit Losses and End-of-Period Loans

	Three Months Ended										
			June 30, 20	19			June 30, 2018				
In millions of dollars	Co	rporate	Consumer	•	Total	Corporate	Consumer	Total			
Allowance for loan losses at beginning of period	\$	2,303	\$ 10,02	6 \$	12,329	\$ 2,315	\$ 10,039	\$ 12,354			
Charge-offs		(83)	(2,27	1)	(2,354)	(20)	(2,089)	(2,109)			
Recoveries		13	37	8	391	22	383	405			
Replenishment of net charge-offs		70	1,89	3	1,963	(2)	1,706	1,704			
Net reserve builds (releases)		38	1	5	53	(30)	61	31			
Net specific reserve builds (releases)		9	6	4	73	63	(3)	60			
Other		3		8	11	(18)	(301)	(319)			
Ending balance	\$	2,353	\$ 10,11	3 \$	12,466	\$ 2,330	\$ 9,796	\$ 12,126			

## Six Months Ended

		Jui	ne 30, 2019		June 30, 2018				
In millions of dollars	Co	rporate C	Consumer	Total	Corporate	Consumer	Total		
Allowance for loan losses at beginning of period	\$	2,365 \$	9,950	\$ 12,315	\$ 2,486	\$ 9,869 \$	12,355		
Charge-offs		(156)	(4,543)	(4,699)	(159)	(4,246)	(4,405)		
Recoveries		30	758	788	65	769	834		
Replenishment of net charge-offs		126	3,785	3,911	94	3,477	3,571		
Net reserve builds (releases)		45	75	120	(49)	182	133		
Net specific reserve builds (releases)		(52)	54	2	(92)	(14)	(106)		
Other		(5)	34	29	(15)	(241)	(256)		
Ending balance	\$	2,353 \$	10,113	\$ 12,466	\$ 2,330	\$ 9,796 \$	12,126		

	June 30, 2019						December 31, 2018					
In millions of dollars	C	orporate	C	onsumer		Total	(	Corporate	C	Consumer		Total
Allowance for loan losses					l I							
Collectively evaluated in accordance with ASC 450	\$	2,150	\$	8,881	\$	11,031	\$	2,102	\$	8,770	\$	10,872
Individually evaluated in accordance with ASC 310-10-35		203		1,231		1,434		263		1,178		1,441
Purchased credit impaired in accordance with ASC 310-30		_		1		1		_		2		2
Total allowance for loan losses	\$	2,353	\$	10,113	\$	12,466	\$	2,365	\$	9,950	\$	12,315
Loans, net of unearned income												
Collectively evaluated in accordance with ASC 450	\$	357,487	\$	320,540	\$	678,027	\$	349,292	\$	325,055	\$	674,347
Individually evaluated in accordance with ASC 310-10-35		1,384		5,312		6,696		1,214		5,284		6,498
Purchased credit impaired in accordance with ASC 310-30		_		123		123		_		128		128
Held at fair value		3,804		20		3,824		3,203		20		3,223
Total loans, net of unearned income	\$	362,675	\$	325,995	\$	688,670	\$	353,709	\$	330,487	\$	684,196

## 15. GOODWILL AND INTANGIBLE ASSETS

## Goodwill

The changes in Goodwill were as follows:

In millions of dollars	 l Consumer anking	Institutional Clients Group	Total
Balance at December 31, 2018	\$ 12,743 \$	9,303	\$ 22,046
Foreign currency translation	_	(9)	(9)
Balance at March 31, 2019	\$ 12,743 \$	9,294	\$ 22,037
Foreign exchange translation	\$ (15) \$	43	\$ 28
Balance at June 30, 2019	\$ 12,728 \$	9,337	\$ 22,065

There were no triggering events identified and no goodwill was impaired during the three and six months ended June 30, 2019.

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 2018 Annual Report on Form 10-K.

## **Intangible Assets**

The components of intangible assets were as follows:

	June 30, 2019							December 31, 2018					
In millions of dollars		Gross carrying amount		ccumulated mortization		Net carrying amount		Gross carrying amount		ccumulated mortization		Net carrying amount	
Purchased credit card relationships	\$	5,666	\$	3,964	\$	1,702	\$	5,733	\$	3,936	\$	1,797	
Credit card contract-related intangibles <sup>(1)</sup>		5,375		2,959		2,416		5,225		2,791		2,434	
Core deposit intangibles		428		427		1		419		415		4	
Other customer relationships		465		302		163		470		299		171	
Present value of future profits		33		30		3		32		29		3	
Indefinite-lived intangible assets		222		_		222		218		_		218	
Other		82		71		11		84		75		9	
Intangible assets (excluding MSRs)	\$	12,271	\$	7,753	\$	4,518	\$	12,181	\$	7,545	\$	4,636	
Mortgage servicing rights (MSRs) <sup>(2)</sup>		508		_		508		584		_		584	
Total intangible assets	\$	12,779	\$	7,753	\$	5,026	\$	12,765	\$	7,545	\$	5,220	

<sup>(1)</sup> Primarily reflects contract-related intangibles associated with the American Airlines, The Home Depot, Costco, Sears and AT&T credit card program agreements, which represented 97% of the aggregate net carrying amount as of June 30, 2019 and December 31, 2018.

<sup>(2)</sup> 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, 2018	uisitions/ estitures An	mortization	FX translation and other	Net carrying amount at June 30, 2019
Purchased credit card relationships <sup>(1)</sup>	\$ 1,797	\$ <b>— \$</b>	(95) \$	_	\$ 1,702
Credit card contract-related intangibles <sup>(2)</sup>	2,434	_	(168)	150	2,416
Core deposit intangibles	4	_	(4)	1	1
Other customer relationships	171	_	(12)	4	163
Present value of future profits	3	_	_	_	3
Indefinite-lived intangible assets	218	_	_	4	222
Other	9	_	(5)	7	11
Intangible assets (excluding MSRs)	\$ 4,636	\$ <b>— \$</b>	(284) \$	166	\$ 4,518
Mortgage servicing rights (MSRs) <sup>(3)</sup>	584				508
Total intangible assets	\$ 5,220				\$ 5,026

<sup>(1)</sup> Reflects intangibles for the value of cardholder relationships, which are discrete from partner contract intangibles and include credit card accounts primarily in the Costco, Macy's and Sears portfolios.

<sup>(2)</sup> Primarily reflects contract-related intangibles associated with the American Airlines, The Home Depot, Costco, Sears and AT&T credit card program agreements, which represented 97% of the aggregate net carrying amount at June 30, 2019 and December 31, 2018.

<sup>(3)</sup> For additional information on Citi's MSRs, including the rollforward for the six months ended June 30, 2019, see 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 2018 Annual Report on Form 10-K.

## **Short-Term Borrowings**

In millions of dollars	June 30, 2019	December 31, 2018
Commercial paper		
Bank <sup>(1)</sup>	\$ 12,895	\$ 13,238
Broker-dealer and other <sup>(2)</sup>	4,231	_
Total commercial paper	\$ 17,126	\$ 13,238
Other borrowings <sup>(3)</sup>	25,316	19,108
Total	\$ 42,442	\$ 32,346

- (1) Represents Citibank entities as well as other bank entities.
- (2) Represents broker-dealer and other non-bank subsidiaries that are consolidated into Citigroup Inc., the parent holding company.
- (3) Includes borrowings from Federal Home Loan Banks and other market participants. At June 30, 2019 and December 31, 2018, collateralized short-term advances from the Federal Home Loan Banks were \$15.5 billion and \$9.5 billion, respectively.

## **Long-Term Debt**

In millions of dollars	June 30, 2019	December 31, 2018			
Citigroup Inc. (1)	\$ 152,141	\$	143,767		
Bank <sup>(2)</sup>	62,619		61,237		
Broker-dealer and other <sup>(3)</sup>	37,429		26,995		
Total	\$ 252,189	\$	231,999		

- (1) Represents the parent holding company.
- (2) Represents Citibank entities as well as other bank entities. At June 30, 2019 and December 31, 2018, collateralized long-term advances from the Federal Home Loan Banks were \$7.7 billion and \$10.5 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, 2019 and December 31, 2018.

The following table summarizes Citi's outstanding trust preferred securities at June 30, 2019:

						Junior subordinated debentures owned by tru			es owned by trust
Trust	Issuance date	Securities issued	idation lue <sup>(1)</sup>	Coupon rate <sup>(2)</sup>	Common shares issued to parent	Amo	unt	Maturity	Redeemable by issuer beginning
In millions of dollars, except	securities and s	hare 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
Citigroup Capital XVIII	Jun. 2007	99,901	127	3 mo LIBOR + 88.75 bps	50		127	Jun. 28, 2067	June 28, 2017
Total obligated			\$ 2,567			\$	2,573		

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 outside 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, 2019

In millions of dollars	Net nrealized gains (losses) on debt ecurities	Debt valuation adjustment (DVA) <sup>(1)</sup>	Cash flow hedges <sup>(2)</sup>	! !	Benefit	Foreign currency translation adjustment (CTA), net of hedges <sup>(4)</sup>	Excluded component of fair value hedges <sup>(5)</sup>	Accumulated other comprehensive income (loss)
Balance, March 31, 2019	\$ (1,115)	\$ (379)	\$ (442)	) \$	(6,321)	\$ (28,012)	\$ (39)	\$ (36,308)
Other comprehensive income before reclassifications	1,050	(14)	414		(305)	91	44	1,280
Increase (decrease) due to amounts reclassified from AOCI	(347)	17	103		52	_	_	(175)
Change, net of taxes	\$ 703	\$ 3	\$ 517	\$	(253) 3	\$ 91	\$ 44	\$ 1,105
Balance at June 30, 2019	\$ (412)	\$ (376)	\$ 75	\$	(6,574)	\$ (27,921)	\$ 5	\$ (35,203)

# Six Months Ended June 30, 2019

In millions of dollars	Net nrealized gains (losses) on debt ecurities	Debt valuation adjustment (DVA) <sup>(1)</sup>	Cash flow hedges <sup>(2)</sup>	Benefit plans <sup>(3)</sup>	Foreign currency translation adjustment (CTA), net of hedges <sup>(4)</sup>	Excluded component of fair value hedges <sup>(5)</sup>	Accumulated other comprehensive income (loss)
Balance, December 31, 2018	\$ (2,250)	\$ 192	\$ (728)	\$ (6,257)	\$ (28,070)	) \$ (57)	\$ (37,170)
Other comprehensive income before reclassifications	2,276	(589)	600	(415)	149	62	2,083
Increase (decrease) due to amounts reclassified from AOCI	(438)	21	203	98	_	_	(116)
Change, net of taxes	\$ 1,838	\$ (568)	\$ 803	\$ (317)	\$ 149	\$ 62	\$ 1,967
Balance, June 30, 2019	\$ (412)	\$ (376)	\$ 75	\$ (6,574)	\$ (27,921)	) \$ 5	\$ (35,203)

Note: Footnotes to the tables above appear on the following page.

#### Three Months Ended June 30, 2018

In millions of dollars	in	Net nrealized gains (losses) on vestment ecurities	Debt valuation adjustment (DVA) <sup>(1)</sup>	Cash flow hedges <sup>(2)</sup>	Benefit plans <sup>(3)</sup>	Foreign currency translation adjustment (CTA), net of hedges <sup>(4)</sup>	Excluded Component of fair value hedges (5)	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	( inv	Net realized gains losses) on restment curities	Debt valuation adjustment (DVA) <sup>(1)</sup>	Cash flow hedges <sup>(2)</sup>	Benefit plans <sup>(3)</sup>	Foreign currency translation adjustment (CTA), net of hedges <sup>(4)</sup>	Excluded Component of fair value hedges <sup>(5)</sup>	co	Accumulated other omprehensive ncome (loss)
Balance, December 31, 2017	\$	(1,158)	\$ (921)	\$ (698) \$	(6,183)	\$ (25,708)	-	\$	(34,668)
Adjustment to opening balance, net of taxes <sup>(6)</sup>		(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)

- (1) Changes in DVA are reflected as a component of AOCI, pursuant to the adoption of the provisions of ASU 2016-01 relating to the presentation of DVA on fair value options liabilities. See Note 1 to the Consolidated Financial Statements in Citi's 2018 Annual Report on Form 10-K.
- (2) Primarily driven by Citigroup's pay fixed/receive floating interest rate swap programs that hedge the floating rates on liabilities.
- (3) 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.
- (4) Primarily reflects the movements in (by order of impact) the Japanese Yen, Mexican Peso, Euro and Polish Zloty against the U.S. dollar and changes in related tax effects and hedges for the three months ended June 30, 2019. Primarily reflects the movements in (by order of impact) the Mexican Peso, Canadian Dollar, Chilean Peso, and Russian Ruble against the U.S. dollar and changes in related tax effects and hedges for the six months ended June 30, 2019. 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) 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. 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.
- (5) 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 2017-12, *Targeted Improvements to Accounting for Hedging Activities*. See Note 1 to the Consolidated Financial Statements in Citi's 2018 Annual Report on Form 10-K for further information regarding this change.
- (6) 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 in Citi's 2018 Annual Report on Form 10-K.

The pretax and after-tax changes in each component of Accumulated other comprehensive income (loss) were as follows:

## Three Months Ended June 30, 2019

In millions of dollars	Pretax	Tax effect	After-tax
Balance, March 31, 2019	\$ (42,904) \$	6,596	\$ (36,308)
Change in net unrealized gains (losses) on debt securities	936	(233)	703
Debt valuation adjustment (DVA)	3	_	3
Cash flow hedges	680	(163)	517
Benefit plans	(329)	76	(253)
Foreign currency translation adjustment	83	8	91
Excluded component of fair value hedges	59	(15)	44
Change	\$ 1,432 \$	(327)	\$ 1,105
Balance, June 30, 2019	\$ (41,472) \$	6,269	\$ (35,203)

## Six Months Ended June 30, 2019

In millions of dollars	Pretax	Tax effect	After-tax
Balance, December 31, 2018	\$ (44,082) \$	6,912	\$ (37,170)
Change in net unrealized gains (losses) on debt securities	2,436	(598)	1,838
Debt valuation adjustment (DVA)	(722)	154	(568)
Cash flow hedges	1,058	(255)	803
Benefit plans	(397)	80	(317)
Foreign currency translation adjustment	152	(3)	149
Excluded component of fair value hedges	83	(21)	62
Change	\$ 2,610 \$	(643)	\$ 1,967
Balance, June 30, 2019	\$ (41,472) \$	6,269	\$ (35,203)

## Three Months Ended June 30, 2018

In millions of dollars	Pretax	Tax effect <sup>(1)</sup>	After-tax
Balance, March 31, 2018	\$ (41,519) \$	6,900	\$ (34,619)
Change in net unrealized gains (losses) on 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 <sup>(1)</sup>	After-tax
Balance, December 31, 2017 <sup>(1)</sup>	\$ (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 debt 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)

<sup>(1)</sup> 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 2018 Annual Report on Form 10-K.

<sup>(2)</sup> 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 in Citi's 2018 Annual Report on Form 10-K.

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

		iisonuateu Staten	icht of filcome		
		onths Ended ne 30,	Six Months Ended June 30,		
In millions of dollars		2019	2019		
Realized (gains) losses on sales of investments	\$	(468) \$	(598)		
Gross impairment losses		2	5		
Subtotal, pretax	\$	(466) \$	(593)		
Tax effect		119	155		
Net realized (gains) losses on investments after-tax <sup>(1)</sup>	\$	(347) \$	(438)		
Realized DVA (gains) losses on fair value option liabilities	\$	22 \$	27		
Subtotal, pretax	\$	22 \$	27		
Tax effect		(5)	(6)		
Net realized debt valuation adjustment, after-tax	\$	17 \$	21		
Interest rate contracts	\$	134 \$	264		
Foreign exchange contracts		2	4		
Subtotal, pretax	\$	136 \$	268		
Tax effect		(33)	(65)		
Amortization of cash flow hedges, after-tax <sup>(2)</sup>	\$	103 \$	203		
Amortization of unrecognized	,				
Prior service cost (benefit)	\$	(2) \$	(6)		
Net actuarial loss		69	134		
Curtailment/settlement impact <sup>(3)</sup>		2	2		
Subtotal, pretax	\$	69 \$	130		
Tax effect		(17)	(32)		
Amortization of benefit plans, after-tax <sup>(3)</sup>	\$	52 \$	98		
Foreign currency translation adjustment	\$	<b>— \$</b>	_		
Tax effect		_	_		
Foreign currency translation adjustment	\$	<b>— \$</b>			
Total amounts reclassified out of AOCI, pretax	\$	(239) \$	(168)		
Total tax effect		64	52		
Total amounts reclassified out of AOCI, after-tax	\$	(175) \$	(116)		

<sup>(1)</sup> The pretax amount is reclassified to *Realized gains (losses) on sales of investments, net* and *Gross impairment losses* in the Consolidated Statement of Income. See Note 12 to the Consolidated Financial Statements for additional details.

<sup>(2)</sup> See Note 19 to the Consolidated Financial Statements for additional details.

<sup>(3)</sup> 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

		Consolidated Statement of Income						
	Three	e Months Ended June 30,	Six Months Ended June 30,					
In millions of dollars		2018	2018					
Realized (gains) losses on sales of investments	\$	(102) \$	(272)					
OTTI gross impairment losses		15	43					
Subtotal, pretax	\$	(87) \$	(229)					
Tax effect		22	56					
Net realized (gains) losses on investment securities, after-tax <sup>(1)</sup>	\$	(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 <sup>(2)</sup>	\$	(65) \$	(44)					
Amortization of unrecognized								
Prior service cost (benefit)	\$	(11) \$	(22)					
Net actuarial loss		64	133					
Curtailment/settlement impact <sup>(3)</sup>		2	6					
Subtotal, pretax	\$	55 \$	117					
Tax effect		(15)	(30)					
Amortization of benefit plans, after-tax <sup>(3)</sup>	\$	40 \$	87					
Foreign currency translation adjustment	\$	_ \$	_					
Tax effect			_					
Foreign currency translation adjustment	\$	<b>—</b> \$	_					
Total amounts reclassified out of AOCI, pretax	\$	(116) \$	(132)					
Total tax effect		28	31					
Total amounts reclassified out of AOCI, after-tax	\$	(88) \$	(101)					

<sup>(1)</sup> The pretax amount is reclassified to *Realized gains (losses) on sales of investments, net* and *Gross impairment losses* in the Consolidated Statement of Income. See Note 12 to the Consolidated Financial Statements for additional details.

<sup>(2)</sup> See Note 19 to the Consolidated Financial Statements for additional details.

<sup>(3)</sup> 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 2018 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, 2019											
	Maximum exposure to loss in significant unconsolidated V									d VIEs <sup>(1)</sup>		
								Funded ex	xposures <sup>(2)</sup>	Unfunded	exposures	
In millions of dollars		Total volvement vith SPE assets		onsolidated VIE/SPE assets	un	Significant consolidated TE assets <sup>(3)</sup>	inv	Debt vestments	Equity investments	Funding commitments	Guarantees and derivatives	Total
Credit card securitizations	\$	43,090	\$	43,090	\$	_	\$	_	\$ —	<b>\$</b> —	\$ —	<b>\$</b> —
Mortgage securitizations <sup>(4)</sup>												
U.S. agency-sponsored		114,735		_		114,735		2,920	_	_	71	2,991
Non-agency-sponsored		35,021		1,337		33,684		757	_	_	1	758
Citi-administered asset- backed commercial paper conduits		16,419		16,419		_		_	_	_	_	_
Collateralized loan obligations (CLOs)		19,062		_		19,062		4,945	_	_	8	4,953
Asset-based financing		144,436		660		143,776		24,532	842	9,873	_	35,247
Municipal securities tender option bond trusts (TOBs)		7,841		1,623		6,218		13	_	4,085	_	4,098
Municipal investments		18,479		_		18,479		2,620	4,081	2,809	_	9,510
Client intermediation		1,183		955		228		169	_	_	_	169
Investment funds		1,054		264		790		15	_	20	_	35
Other		369		2		367		213		15		228
Total	\$	401,689	\$	64,350	\$	337,339	\$	36,184	\$ 4,923	\$ 16,802	\$ 80	\$ 57,989

	As of December 31, 2018									
	Maximum exposure to loss in significant unconsolidated VIEs									
				Funded ex	kposures <sup>(2)</sup>	Unfunded e	Unfunded exposures			
In millions of dollars	Total involvement with SPE assets	Consolidated VIE/SPE assets	Significant unconsolidated VIE assets <sup>(3)</sup>	Debt investments	Equity investments	Funding commitments	Guarantees and derivatives	Total		
Credit card securitizations	\$ 46,232	\$ 46,232	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —		
Mortgage securitizations <sup>(4)</sup>										
U.S. agency-sponsored	116,563	_	116,563	3,038	_	_	60	3,098		
Non-agency-sponsored	30,886	1,498	29,388	431	_	_	1	432		
Citi-administered asset- backed commercial paper conduits	18,750	18,750	_	_	_	_	_	_		
Collateralized loan obligations (CLOs)	21,837	_	21,837	5,891	_	_	9	5,900		
Asset-based financing	99,433	628	98,805	21,640	715	9,757	_	32,112		
Municipal securities tender option bond trusts (TOBs)	7,998	1,776	6,222	9	_	4,262	_	4,271		
Municipal investments	18,044	3	18,041	2,813	3,922	2,738	_	9,473		
Client intermediation	858	614	244	172	_	_	2	174		
Investment funds	1,272	440	832	12	_	1	1	14		
Other	63	3	60	37		23		60		
Total	\$ 361,936	\$ 69,944	\$ 291,992	\$ 34,043	\$ 4,637	\$ 16,781	\$ 73	\$ 55,534		

<sup>(1)</sup> The definition of maximum exposure to loss is included in the text that follows this table.

<sup>(2)</sup> Included on Citigroup's June 30, 2019 and December 31, 2018 Consolidated Balance Sheet.

<sup>(3)</sup> 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.

<sup>(4)</sup> Citigroup mortgage securitizations also include agency and non-agency (private label) re-securitization activities. These SPEs are not consolidated. See "Resecuritizations" 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- 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- 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 \$7 billion at June 30, 2019 and December 31, 2018;
- certain representations and warranties exposures in Citigroup residential mortgage securitizations, in which 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, crosscurrency 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:

	June 30	2019	December 31, 2018		
In millions of dollars	Liquidity facilities	Loan/equity commitments	Liquidity facilities	Loan/equity commitments	
Asset-based financing	\$ 	9,873	\$	\$ 9,757	
Municipal securities tender option bond trusts (TOBs)	4,085	_	4,262	_	
Municipal investments	_	2,809	_	2,738	
Investment funds	_	20	_	1	
Other	_	15	_	23	
Total funding commitments	\$ 4,085	12,717	\$ 4,262	\$ 12,519	

## 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	J	une 30, 2019	December 31, 2018
Cash	\$	<u> </u>	_
Trading account assets		3.1	3.0
Investments		10.0	10.7
Total loans, net of allowance		27.5	24.5
Other		0.6	0.5
Total assets	\$	41.2 \$	38.7

## **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	<b>30, 2019</b> Decemb	per 31, 2018
Ownership interests in principal amount of trust credit card receivables			
Sold to investors via trust-issued securities	\$	24.8 \$	27.3
Retained by Citigroup as trust-issued securities		7.2	7.6
Retained by Citigroup via non-certificated interests		11.2	11.3
Total	\$	43.2 \$	46.2

The following table summarizes selected cash flow information related to Citigroup's credit card securitizations:

	Three Months Ended June 30,			
In billions of dollars	201	9	2018	
Proceeds from new securitizations	\$	<del></del>	1.1	
Pay down of maturing notes			(2.6)	
	Six I	Six Months Ended June 30,		
In billions of dollars	201	9	2018	

## **Master Trust Liabilities (at Par Value)**

Proceeds from new securitizations

Pay down of maturing notes

The weighted average maturity of the third-party term notes issued by the Master Trust was 2.8 years as of June 30, 2019 and 3.0 years as of December 31, 2018.

In billions of dollars	ın. 30,	Dec. 31, 2018
Term notes issued to third parties	\$ 23.3 \$	25.8
Term notes retained by Citigroup affiliates	5.3	5.7
<b>Total Master Trust liabilities</b>	\$ 28.6 \$	31.5

## **Omni Trust Liabilities (at Par Value)**

The weighted average maturity of the third-party term notes issued by the Omni Trust was 2.2 years as of June 30, 2019 and 2.7 years as of December 31, 2018.

In billions of dollars		c. 31, 018
Term notes issued to third parties	\$ 1.5 \$	1.5
Term notes retained by Citigroup affiliates	1.9	1.9
<b>Total Omni Trust liabilities</b>	\$ 3.4 \$	3.4

3.9

(5.4)

(2.5)

#### Mortgage Securitizations

The following tables summarize selected cash flow information and retained interests related to Citigroup mortgage securitizations:

	Three Months Ended June 30,				
		20	19	2018	
In billions of dollars	spon	U.S. agency- sponsored sponsor mortgages mortgag		U.S. agency- sponsored mortgages	Non-agency- sponsored mortgages
Principal securitized	\$	1.1	\$ 6.1	\$ 1.0	\$ 1.0
Proceeds from new securitizations		1.2	6.1	1.1	1.0
Purchases of previously transferred financial assets		0.1	_	0.1	_

		Six Months Ended June 30,					
		20	19	20	18		
In billions of dollars	spon	U.S. agency- sponsored mortgages mortgage		U.S. agency- sponsored mortgages	Non-agency- sponsored mortgages		
Principal securitized	\$	2.1	\$ 8.8	\$ 2.2	\$ 1.0		
Proceeds from new securitizations		2.2	8.8	2.3	2.6		
Purchases of previously transferred financial assets		0.1	_	0.2	_		

Note: Excludes re-securitization transactions.

(1) The principal securitized and proceeds from new securitizations in 2019 include \$0.2 billion related to personal loan securitizations.

Gains recognized on the securitization of U.S. agency-sponsored mortgages were \$5 million for the three and six months ended June 30, 2019. For the three and six months ended June 30, 2019, gains recognized on the securitization of non-agency sponsored mortgages were \$26 million and \$43 million, respectively.

Gains recognized on the securitization of U.S. agencysponsored mortgages were \$6 million and \$11 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 \$7 million and \$18 million, respectively.

		June 30, 2019		Dec	cember 31, 2018
	Non-agency-sponsored mortgages <sup>(1)</sup>				Non-agency-sponsored mortgages <sup>(1)</sup>
In millions of dollars	U.S. agency- sponsored mortgages	Senior interests <sup>(3)</sup>	Subordinated interests	U.S. agency- sponsored mortgages	Senior Subordinated interests interests
Carrying value of retained interests <sup>(2)</sup>	\$ 487	\$ 804	\$ 63	\$ 564 \$	300 \$ 51

- (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) Retained interests consist of Level 2 or Level 3 assets depending on the observability of significant inputs. See Note 20 to the Consolidated Financial Statements for more information about fair value measurements.
- (3) Senior interests in non-agency-sponsored mortgages include \$168 million related to personal loan securitizations at June 30, 2019.

Key assumptions used in measuring the fair value of retained interests at the date of sale or securitization of mortgage receivables were as follows:

	Three Months Ended June 30, 2019				
		Non-agency-sponsored mortgages <sup>(1)</sup>			
	U.S. agency- sponsored mortgages	Senior interests	Subordinated interests		
Weighted average discount rate	7.4%	3.2%	5.3%		
Weighted average constant prepayment rate	15.7%	5.7%	5.9%		
Weighted average anticipated net credit losses <sup>(2)</sup>	NM	3.0%	3.7%		
Weighted average life	5.9 years	3.2 years	15.6 years		

Three M	Ionths	Ended	June	30.	. 2018
---------	--------	-------	------	-----	--------

		Non-agency-sponsored mortgages <sup>(1)</sup>					
	U.S. agency- sponsored mortgages	Senior interests	Subordinated interests				
Weighted average discount rate	9.4%	3.8%	3.5%				
Weighted average constant prepayment rate	5.7%	8.0%	8.0%				
Weighted average anticipated net credit losses <sup>(2)</sup>	NM	4.6%	4.6%				
Weighted average life	7.7 years	6.7 years	3.4 years				

Civ	Mo	nthe	Fnc	hal	Inna	30	2019
OIA	IVIU	пшъ	LIIC	ıeu	June	JU.	2017

		Non-agency-sponsored mortgages <sup>(1)</sup>					
	U.S. agency- sponsored mortgages	Senior interests	Subordinated interests				
Weighted average discount rate	7.0%	3.5%	5.5%				
Weighted average constant prepayment rate	14.8%	5.8%	5.9%				
Weighted average anticipated net credit losses <sup>(2)</sup>	NM	4.4%	3.7%				
Weighted average life	6.0 years	6.6 years	16.1 years				

Six Months	Ended Inn	e 30	2018
SIA MIUITIIIS	Lilucu Juli	C DU,	2010

	Six Months Ended valle 30, 2010					
		red mortgages <sup>(1)</sup>				
	U.S. agency- sponsored mortgages	Senior interests	Subordinated interests			
Weighted average discount rate	9.9%	3.6%	3.2%			
Weighted average constant prepayment rate	5.1%	9.8%	9.9%			
Weighted average anticipated net credit losses <sup>(2)</sup>	NM	4.9%	3.3%			
Weighted average life	7.7 years	6.8 years	3.0 years			

- 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 presented 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.

June 30, 2019

		Non-agency-sponsored mortgages <sup>(1)</sup>					
	U.S. agency- sponsored mortgages	Senior interests	Subordinated interests				
Weighted average discount rate	8.0%	7.5%	4.9%				
Weighted average constant prepayment rate	13.1%	3.1%	4.2%				
Weighted average anticipated net credit losses <sup>(2)</sup>	NM	9.0%	_				
Weighted average life	5.8 years	7.9 years	24.3 years				

	Ι	December 31, 2018					
		Non-agency-sponso	red mortgages <sup>(1)</sup>				
	U.S. agency- sponsored mortgages	Senior interests	Subordinated interests				
Weighted average discount rate	7.8%	9.3%	_				
Weighted average constant prepayment rate	9.1%	8.0%	_				

NM

6.4 years

40.0%

6.6 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.

Weighted average anticipated net credit losses<sup>(2)</sup>

Weighted average life

	June 30, 2019						
		Non-agency-sponsored mortgages					
In millions of dollars	U.S. agency- sponsored mortgages	Senior interests	Subordinated interests				
Discount rate							
Adverse change of 10%	\$ (14) \$	_	\$ (1)				
Adverse change of 20%	(27)	(1)	(1)				
Constant prepayment rate							
Adverse change of 10%	(23)	_	_				
Adverse change of 20%	(45)	_	_				
Anticipated net credit losses							
Adverse change of 10%	NM						
Adverse change of 20%	NM	_					

		December 31, 2018						
			Non-agency-sponsored mortga					
In millions of dollars	5	.S. agency- sponsored mortgages	Senior interests	Subordinated interests				
Discount rate								
Adverse change of 10%	\$	(16) \$	— \$	_				
Adverse change of 20%		(32)	_	_				
Constant prepayment rate								
Adverse change of 10%		(21)	_	_				
Adverse change of 20%		(41)	_	_				
Anticipated net credit losses								
Adverse change of 10%		NM		_				
Adverse change of 20%		NM		_				

NM Anticipated net credit losses are not meaningful due to U.S. agency guarantees.

The following table includes information about loan delinquencies and liquidation losses for assets held in non-consolidated, non-agency-sponsored securitization entities:

									Liquidation losses							
	S	ecuritiz	zed a	assets		90 days	pas	st due	T	hree Mor Jun			\$	Six Mont June		
In billions of dollars, except liquidation losses in millions		n. 30, 2019		ec. 31, 2018	J	Jun. 30, 2019	]	Dec. 31, 2018		2019		2018		2019		2018
Securitized assets																
Residential mortgage	\$	11.4	\$	5.2	\$	0.3	\$	0.4	\$	9	\$	18	\$	20	\$	32
Commercial and other		14.4		13.1		_		_		_		_	İ	_		_
Total	\$	25.8	\$	18.3	\$	0.3	\$	0.4	\$	9	\$	18	\$	20	\$	32

#### Mortgage Servicing Rights (MSRs)

The fair value of Citi's capitalized MSRs was \$508 million and \$596 million at June 30, 2019 and 2018, respectively. The MSRs correspond to principal loan balances of \$60 billion and \$63 billion as of June 30, 2019 and 2018, respectively. The following table summarizes the changes in capitalized MSRs:

Three Months Ended June 30.

		,
In millions of dollars	2019	2018
Balance, as of March 31	\$ 551 \$	587
Originations	16	15
Changes in fair value of MSRs due to changes in inputs and assumptions	(37)	11
Other changes <sup>(1)</sup>	(22)	(16)
Sale of MSRs	_	(1)
Balance, as of June 30	\$ 508 \$	596

Six Months Ended June 30,

	- )
2019	2018
\$ 584 \$	558
28	32
(64)	57
(40)	(33)
_	(18)
\$ 508 \$	596
\$	\$ 584 \$ 28 (64) (40) —

(1) Represents changes due to customer payments and passage of time.

The fair value of the MSRs is primarily affected by changes in prepayments of mortgages that result from shifts in mortgage interest rates. Specifically, higher interest rates tend to lead to declining prepayments, which causes the fair value of the MSRs to increase. In managing this risk, Citigroup economically hedges a significant portion of the value of its MSRs through the use of interest rate derivative contracts, forward purchase and sale commitments of mortgage-backed securities and purchased securities, all classified as *Trading account assets*.

The Company receives fees during the course of servicing previously securitized mortgages. The amounts of these fees were as follows:

	Th	ree Mon June		S	Ended 0,		
In millions of dollars		2019	2018		2019		2018
Servicing fees	\$	35	\$ 43	\$	76	\$	89
Late fees		2	1		4		2
Ancillary fees		_	3		1		6
Total MSR fees	\$	37	\$ 47	\$	81	\$	97

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, 2019 and 2018. These securities are backed by either residential or commercial mortgages and are often structured on behalf of clients.

As of June 30, 2019, Citi held no retained interests in private label re-securitization transactions structured by Citi. As of December 31, 2018, the fair value of Citi-retained interests in private label re-securitization transactions structured by Citi totaled approximately \$16 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 held a retained interest as of December 31, 2018 was approximately \$271 million.

The Company also re-securitizes U.S. government-agency guaranteed mortgage-backed (agency) securities. During the three and six months ended June 30, 2019, Citi transferred agency securities with a fair value of approximately \$6.9 billion and \$14.5 billion, respectively, to re-securitization entities compared to approximately \$6.6 billion and \$13.6 billion for the three and six months ended June 30, 2018.

As of June 30, 2019, the fair value of Citi-retained interests in agency re-securitization transactions structured by Citi totaled approximately \$2.5 billion (including \$1.1 billion related to re-securitization transactions executed in 2019) compared to \$2.5 billion as of December 31, 2018 (including \$1.4 billion related to re-securitization transactions executed in 2018), 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, 2019 and December 31, 2018 was approximately \$69.9 billion and \$70.9 billion, respectively.

As of June 30, 2019 and December 31, 2018, the Company did not consolidate any private label or agency resecuritization entities.

# Citi-Administered Asset-Backed Commercial Paper Conduits

At June 30, 2019 and December 31, 2018, the commercial paper conduits administered by Citi had approximately \$16.4 billion and \$18.8 billion of purchased assets outstanding, respectively, and had incremental funding commitments with clients of approximately \$16.3 billion and \$14.0 billion, respectively.

Substantially all of the funding of the conduits is in the form of short-term commercial paper. At June 30, 2019 and December 31, 2018, the weighted average remaining lives of the commercial paper issued by the conduits were approximately 43 and 53 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 \$1.5 billion and \$1.7 billion as of June 30, 2019 and December 31, 2018, respectively. The net result across multi-seller conduits administered by the Company is that, in the event that defaulted assets exceed the transaction-specific credit enhancements described above, any losses in each conduit are allocated first to the Company and then to the commercial paper investors.

At June 30, 2019 and December 31, 2018, the Company owned \$3.5 billion and \$5.5 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 (CLOs)

There were no new securitizations during the three or six months ended June 30, 2019 and 2018. The following table summarizes selected retained interests related to Citigroup CLOs:

In millions of dollars	un. 30, 2019	]	Dec. 31, 2018
Carrying value of retained interests	\$ 1,765	\$	3,142

All of Citi's retained interests were held-to-maturity securities as of June 30, 2019 and December 31, 2018.

#### 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.

	June 30, 2019							
In millions of dollars	uı	Total nconsolidated VIE assets		Maximum exposure to econsolidated VIEs				
Туре								
Commercial and other real estate	\$	28,770	\$	6,803				
Corporate loans		8,701		7,254				
Hedge funds and equities		485		53				
Airplanes, ships and other assets		105,820		21,137				
Total	\$	143,776	\$	35,247				

	December 31, 2018							
In millions of dollars	Total unconsolida VIE asse		Maximum exposure to unconsolidated VIEs					
Туре								
Commercial and other real estate	\$ 23	,918	\$ 6,928					
Corporate loans	6	,973	5,744					
Hedge funds and equities		388	53					
Airplanes, ships and other assets	67	,526	19,387					
Total	\$ 98	,805	\$ 32,112					

# *Municipal Securities Tender Option Bond (TOB) Trusts* At June 30, 2019 and December 31, 2018, none of the municipal bonds owned by non-customer TOB trusts were subject to a credit guarantee provided by the Company.

At June 30, 2019 and December 31, 2018, liquidity agreements provided with respect to customer TOB trusts totaled \$4.1 billion and \$4.3 billion, respectively, of which \$2.0 billion and \$2.3 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 \$7.0 billion and \$6.1 billion as of June 30, 2019 and December 31, 2018, respectively. These liquidity agreements and letters of credit are offset by reimbursement agreements with various term-out provisions.

#### 19. DERIVATIVES

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 2018 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**

	Hedging instr ASC	Trading derivative instruments				
In millions of dollars	 June 30, 2019	December 31, 2018	June 30, 2019	December 31, 2018		
Interest rate contracts						
Swaps	\$ 301,560	\$ 273,636	\$ 21,499,304 \$	18,138,686		
Futures and forwards	_	_	6,717,597	4,632,257		
Written options	_	_	2,924,051	3,018,469		
Purchased options	_	_	2,645,790	2,532,479		
Total interest rate contracts	\$ 301,560	\$ 273,636	\$ 33,786,742 \$	28,321,891		
Foreign exchange contracts						
Swaps	\$ 59,644	\$ 57,153	\$ 6,894,570 \$	6,738,158		
Futures, forwards and spot	41,395	41,410	5,769,581	5,115,504		
Written options	494	1,726	1,498,054	1,566,717		
Purchased options	517	2,104	1,519,070	1,543,516		
Total foreign exchange contracts	\$ 102,050	\$ 102,393	\$ 15,681,275 \$	14,963,895		
<b>Equity contracts</b>						
Swaps	\$ _	\$ _	\$ 237,294 \$	217,580		
Futures and forwards	_	_	58,086	52,053		
Written options	_	_	490,146	454,675		
Purchased options	_	_	361,189	341,018		
<b>Total equity contracts</b>	\$ _	\$ _	\$ 1,146,715 \$	1,065,326		
Commodity and other contracts						
Swaps	\$ _	\$ _	\$ 80,780 \$	79,133		
Futures and forwards	910	802	161,555	146,647		
Written options	_	_	84,958	62,629		
Purchased options	_	_	81,833	61,298		
Total commodity and other contracts	\$ 910	\$ 802	\$ 409,126 \$	349,707		
Credit derivatives <sup>(1)</sup>						
Protection sold	\$ _	\$ _	\$ 666,733 \$	724,939		
Protection purchased	_		747,129	795,649		
<b>Total credit derivatives</b>	\$ _	\$ 	\$ 1,413,862 \$	1,520,588		
Total derivative notionals	\$ 404,520	\$ 376,831	\$ 52,437,720 \$	46,221,407		

<sup>(1)</sup> Credit derivatives are arrangements designed to allow one party (protection purchaser) to transfer the credit risk of a "reference asset" to another party (protection seller). These arrangements allow a protection seller to assume the 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, 2019 and December 31, 2018. 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 also record a related collateral payable or receivable. As a result, the tables reflect a reduction of approximately \$160 billion and \$100 billion as of June 30, 2019 and December 31, 2018, respectively, of derivative assets and derivative liabilities that previously would have been reported on a gross basis, but are now legally 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.

In millions of dollars at June 30, 2019

# Derivatives classified in Trading account assets/liabilities $^{(1)(2)}$

Derivatives instruments designated as ASC 815 hedges		Assets	Liabilities
Over-the-counter	\$	523	\$ 138
Cleared		1,262	95
Interest rate contracts	\$	1,785	\$ 233
Over-the-counter	\$	3,372	\$ 684
Cleared		_	5
Foreign exchange contracts	\$	3,372	\$ 689
Total derivatives instruments designated as ASC 815 hedges	\$	5,157	\$ 922
Derivatives instruments not designated as ASC 815 hedges			
Over-the-counter	\$	205,779	\$ 183,048
Cleared		5,860	7,317
Exchange traded		220	163
Interest rate contracts	\$	211,859	\$ 190,528
Over-the-counter	\$	126,634	\$ 130,424
Cleared		1,931	1,661
Exchange traded		37	56
Foreign exchange contracts	\$	128,602	\$ 132,141
Over-the-counter	\$	16,911	\$ 21,437
Cleared		83	53
Exchange traded		10,194	10,304
Equity contracts	\$	27,188	\$ 31,794
Over-the-counter	\$	14,042	\$ 17,212
Exchange traded		698	571
Commodity and other contracts	\$	14,740	\$ 17,783
Over-the-counter	\$	9,886	\$ 10,721
Cleared		1,101	1,199
Credit derivatives	\$	10,987	\$ 11,920
Total derivatives instruments not designated as ASC 815 hedges	\$	393,376	\$ 384,166
Total derivatives	\$	398,533	\$ 385,088
Cash collateral paid/received <sup>(3)</sup>	\$	14,134	\$ 14,041
Less: Netting agreements <sup>(4)</sup>		(311,423)	(311,423)
Less: Netting cash collateral received/paid <sup>(5)</sup>		(47,136)	(37,933)
Net receivables/payables included on the Consolidated Balance Sheet <sup>(6)</sup>	\$	54,108	\$ 49,773
Additional amounts subject to an enforceable master netting agreement, but not offset on the Consolidated Balance Sheet	t		
Less: Cash collateral received/paid	\$	(752)	\$ (110)
Less: Non-cash collateral received/paid		(13,600)	(14,185)
Total net receivables/payables <sup>(6)</sup>	\$	39,756	\$ 35,478

- (1) The derivatives fair values are also presented in Note 20 to the Consolidated Financial Statements.
- (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.
- (3) Reflects the net amount of the \$52,067 million and \$61,177 million of gross cash collateral paid and received, respectively. Of the gross cash collateral paid, \$37,933 million was used to offset trading derivative liabilities. Of the gross cash collateral received, \$47,136 million was used to offset trading derivative assets.
- (4) Represents the netting of balances with the same counterparty under enforceable netting agreements. Approximately \$297 billion, \$4 billion and \$10 billion of the netting against trading account asset/liability balances is attributable to each of the OTC, cleared and exchange-traded derivatives, respectively.
- (5) Represents the netting of cash collateral paid and received by counterparty under enforceable credit support agreements. Substantially all netting of cash collateral received and paid is against OTC derivative assets and liabilities, respectively.
- (6) The net receivables/payables include approximately \$5 billion of derivative asset and \$5 billion of derivative liability fair values not subject to enforceable master netting agreements, respectively.

In millions of dollars at December 31, 2016		Trading account a	15500571	
Derivatives instruments designated as ASC 815 hedges		Assets		Liabilities
Over-the-counter	\$	1,631	\$	172
Cleared		238		53
Interest rate contracts	\$	1,869	\$	225
Over-the-counter	\$	1,402	\$	736
Cleared		_		4
Foreign exchange contracts	\$	1,402	\$	740
Total derivatives instruments designated as ASC 815 hedges	\$	3,271	\$	965
Derivatives instruments not designated as ASC 815 hedges				
Over-the-counter	\$	161,183	\$	146,909
Cleared		8,489		7,594
Exchange traded		91		99
Interest rate contracts	\$	169,763	\$	154,602
Over-the-counter	\$	159,099	\$	156,904
Cleared		1,900		1,671
Exchange traded		53		40
Foreign exchange contracts	\$	161,052	\$	158,615
Over-the-counter	\$	18,253	\$	21,527
Cleared		17		32
Exchange traded		11,623		12,249
<b>Equity contracts</b>	\$	29,893	\$	33,808
Over-the-counter	\$	16,661	\$	19,894
Exchange traded		894		795
Commodity and other contracts	\$	17,555	\$	20,689
Over-the-counter	\$	6,967	\$	6,155
Cleared		3,798		4,196
Credit derivatives	\$	10,765	\$	10,351
Total derivatives instruments not designated as ASC 815 hedges	\$	389,028	\$	378,065
Total derivatives	\$	392,299	\$	379,030
Cash collateral paid/received <sup>(3)</sup>	\$	11,518	\$	13,906
Less: Netting agreements <sup>(4)</sup>		(311,089)		(311,089)
Less: Netting cash collateral received/paid <sup>(5)</sup>		(38,608)		(29,911)
Net receivables/payables included on the Consolidated Balance Sheet <sup>(6)</sup>	\$	54,120	\$	51,936
Additional amounts subject to an enforceable master netting agreement but not offset on the Consolidated Balance Sheet	•			
Less: Cash collateral received/paid	\$	(767)	\$	(164)
Less: Non-cash collateral received/paid		(13,509)		(13,354)
Total net receivables/payables <sup>(6)</sup>	\$	39,844	\$	38,418

- (1) The derivatives fair values are also presented in Note 20 to the Consolidated Financial Statements.
- (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.
- (3) Reflects the net amount of the \$41,429 million and \$52,514 million of gross cash collateral paid and received, respectively. Of the gross cash collateral paid, \$29,911 million was used to offset trading derivative liabilities. Of the gross cash collateral received, \$38,608 million was used to offset trading derivative assets.
- (4) Represents the netting of balances with the same counterparty under enforceable netting agreements. Approximately \$296 billion, \$4 billion and \$11 billion of the netting against trading account asset/liability balances is attributable to each of the OTC, cleared and exchange-traded derivatives, respectively.
- (5) Represents the netting of cash collateral paid and received by counterparty under enforceable credit support agreements. Substantially all netting of cash collateral received and paid is against OTC derivative assets and liabilities, respectively.
- (6) The net receivables/payables include approximately \$5 billion of derivative asset and \$7 billion of derivative liability fair values not subject to enforceable master netting agreements, respectively.

For the three and six months ended June 30, 2019 and 2018, amounts recognized in *Principal transactions* in the Consolidated Statement of Income include certain derivatives not designated in a qualifying hedging relationship. 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. See Note 6 to the Consolidated Financial Statements for further information.

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 that such amounts are also recorded in *Other revenue*.

Gains (losses) included	in
Other revenue	

	other revenue								
	Three Ended				Six M nded .				
In millions of dollars	2019		2018	2	019	2	018		
Interest rate contracts	\$ 35	\$	(15)	\$	62	\$	(43)		
Foreign exchange	71		(517)		13		13		
Total	\$ 106	\$	(532)	\$	75	\$	(30)		

# Fair Value Hedges

#### Hedging of Benchmark Interest Rate Risk

Citigroup's fair value hedges are primarily hedges of fixedrate 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 are presented within *Interest revenue* or *Interest expense* based on whether the hedged item is an asset or a liability.

In the first quarter of 2019, Citigroup executed a last-of-layer hedge, which permits an entity to hedge the interest rate risk of a stated portion of a closed portfolio of pre-payable financial assets that are expected to remain outstanding for the designated tenor of the hedge. In accordance with ASC 815, an entity may exclude prepayment risk when measuring the change in fair value of the hedged item attributable to interest rate risk under the last-of-layer approach. Similar to other fair value hedges, where the hedged item is an asset, the fair value of the hedged item attributable to interest rate risk will be presented in *Interest revenue* along with the change in the fair value of the hedging instrument.

#### 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. The hedging instrument is generally 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 is generally reflected directly in earnings over the life of the hedge. Citi also 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 reflects it directly in earnings over the life of the hedge.

The following table summarizes the gains (losses) on the Company's fair value hedges:

Gains (losses) on fair value hedges<sup>(1)</sup>

	Three Months Ended June 30,							Six Months Ended June 30,								
	<b>2019</b> 2018					2019				2018						
In millions of dollars	_	ther enue		t interest evenue	_	Other venue			Other revenue		Net interest revenue		Other revenue		Net interest revenue	
Gain (loss) on the hedging derivatives included in assessment of the effectiveness of fair value hedges																
Interest rate hedges	\$	_	\$	1,853	\$	_	\$	(518)	\$	_	\$	2,816	\$	_	\$	360
Foreign exchange hedges		(180)	)	_		320		_		(12)		_		499		_
Commodity hedges		(172)	)	_		2		_		(102)		_		_		_
Total gain (loss) on the hedging derivatives included in assessment of the effectiveness of fair value hedges	\$	(352)	\$	1,853	\$	322	\$	(518)	\$	(114)	\$	2,816	\$	499	\$	360
Gain (loss) on the hedged item in designated and qualifying fair value hedges																
Interest rate hedges	\$	_	\$	(1,783)	\$	_	\$	520	\$	_	\$	(2,662)	\$	_	\$	(346)
Foreign exchange hedges		180		_		(347)		_		12		_		(596)		_
Commodity hedges		172		_		_		_		102		_		1		_
Total gain (loss) on the hedged item in designated and qualifying fair value hedges	\$	352	\$	(1,783)	\$	(347)	\$	520	\$	114	\$	(2,662)	\$	(595)	\$	(346)
Net gain (loss), on the hedging derivatives, excluded from assessment of the effectiveness of fair value hedges																
Interest rate hedges	\$	_	\$	(4)	\$	_	\$	(5)	\$	_	\$	(4)	\$	_	\$	(5)
Foreign exchange hedges <sup>(2)</sup>		(118)	)	_		33		_		(121)		_		56		_
Commodity hedges		5		_		1		_		23		_		2		_
Total net gain (loss), on the hedging derivatives, excluded from assessment of the effectiveness of fair value hedges	\$	(113)	\$	(4)	\$	34	\$	(5)	\$	(98)	\$	(4)	\$	58	\$	(5)

<sup>(1)</sup> Gain (loss) amounts for hedges of interest rate risk are included in *Interest income/Interest expense*. The accrued interest income on fair value hedges is recorded in *Net interest revenue* and is excluded from this table.

<sup>(2)</sup> Amounts relate to the premium associated with forward contracts (differential between spot and contractual forward rates) that are excluded from the assessment of hedge effectiveness and are generally reflected directly in earnings. Amounts related to cross-currency basis, which are recognized in AOCI, are not reflected in the table above. The amount of cross-currency basis that was included in AOCI was \$59 million and \$83 million for the three and six months ended June 30, 2019 and \$(37) million and \$(42) million for the three and six months ended June 30, 2018, respectively.

## **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 changes in the hedged risk. The hedge basis adjustment, whether from an active or de-designated hedge relationship, remains with the hedged item until the hedged item is derecognized 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, 2019 and December 31, 2018, along with the cumulative hedge basis adjustments included in the carrying value of those hedged assets and liabilities.

In millions of dollars

Balance sheet line item in which hedged item is	8	Carrying mount of dged asset/	Cumulative fair value hedg adjustment increasing (decreasing) the carrying amount					
recorded	iic	liability		Active	De-designated			
As of June 30, 2	2019							
Debt securities AFS <sup>(1)</sup>	\$	110,515	\$	360	\$	628		
Long-term debt		162,894		4,548		1,407		
As of December	31,	2018						
Debt securities AFS	\$	81,632	\$	(196)	\$	295		
Long-term debt		149,054		1,211		869		

<sup>(1)</sup> These amounts include a cumulative basis adjustment of \$172 million as of June 30, 2019 related to certain prepayable financial assets designated as the hedged item in a fair value hedge using the last-of-layer approach. The Company designated \$2 billion as the hedged amount (from a closed portfolio of prepayable financial assets with a carrying value of \$26.4 billion as of June 30, 2019) in a last-of-layer hedging relationship, which commenced in the first quarter of 2019.

# **Cash Flow Hedges**

Citigroup hedges the variability of forecasted cash flows due to changes in contractually specified interest rates associated with floating-rate assets/liabilities and other forecasted transactions. 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.

For cash flow hedges, the entire change in the fair value of the hedging derivative is recognized in AOCI and then reclassified to earnings in the same period that the forecasted hedged cash flows impact earnings. The net gain (loss) associated with cash flow hedges expected to be reclassified from AOCI within 12 months of June 30, 2019 is approximately \$91 million. The maximum length of time over which forecasted cash flows are hedged is 10 years.

The pretax change in AOCI from cash flow hedges is presented below. The after-tax impact of cash flow hedges on AOCI is shown in Note 17 to the Consolidated Financial Statements.

	T	hree Months	Ended June 3	30,	\$	Six Months E	nded June 3	0,
In millions of dollars	2	019	20	18	20	19	20	018
Amount of gain (loss) recognized in AOCI on derivative								
Interest rate contracts <sup>(1)</sup>	\$	545	\$	(222)	\$	799	\$	(544)
Foreign exchange contracts		(1)		5		(9)		(1)
Total gain (loss) recognized in AOCI	\$	544	\$	(217)	\$	790	\$	(545)
Amount of gain (loss) reclassified from AOCI to earnings	Other revenue	Net interest revenue	Other revenue	Net interest revenue	Other revenue	Net interest revenue	Other revenue	Net interest revenue
Interest rate contracts <sup>(1)</sup>	<b>\$</b>	- \$ (134)	\$ —	\$ (88)	s —	\$ (264)	\$ —	\$ (119)
Foreign exchange contracts	(2	2) —	(6)	_	(4)	_	(4	) —
Total gain (loss) reclassified from AOCI into earnings	\$ (2	2) \$ (134)	\$ (6)	\$ (88)	\$ (4)	\$ (264)	\$ (4	) \$ (119)
Net pretax change in cash flow hedges included within AOCI		\$ 680		\$ (123)		\$ 1,058		\$ (422)

<sup>(1)</sup> All amounts reclassified into earnings for interest rate contracts are included in *Interest income/Interest expense (Net interest revenue)*. For all other hedges, the amounts reclassified to earnings are included primarily in *Other revenue* and *Net interest revenue* in the Consolidated Statement of Income.

# **Net Investment Hedges**

The pretax gain (loss) recorded in the foreign currency translation adjustment account within AOCI, related to net investment hedges, is \$(134) million and \$(298) million for the three and six months ended June 30, 2019 and \$1,633 million and \$1,143 million for the three and six months ended June 30, 2018, respectively.

#### **Credit Derivatives**

The following tables summarize the key characteristics of Citi's credit derivatives portfolio by counterparty and derivative form:

	Fair v	valu	ies	Notio	ona	ls
In millions of dollars at June 30, 2019	Receivable <sup>(1)</sup>		Payable <sup>(2)</sup>	Protection purchased		Protection sold
By industry of counterparty						
Banks	\$ 4,748	\$	4,551	\$ 206,498	\$	204,392
Broker-dealers	1,535		1,470	59,717		61,717
Non-financial	77		119	2,323		1,567
Insurance and other financial institutions	4,627		5,780	478,591		399,057
Total by industry of counterparty	\$ 10,987	\$	11,920	\$ 747,129	\$	666,733
By instrument						
Credit default swaps and options	\$ 10,384	\$	10,526	\$ 720,153	\$	655,896
Total return swaps and other	603		1,394	26,976		10,837
Total by instrument	\$ 10,987	\$	11,920	\$ 747,129	\$	666,733
By rating of reference entity						
Investment grade	\$ 5,027	\$	5,281	\$ 590,084	\$	515,070
Non-investment grade	5,960		6,639	157,045		151,663
Total by rating of reference entity	\$ 10,987	\$	11,920	\$ 747,129	\$	666,733
By maturity						
Within 1 year	\$ 1,733	\$	2,493	\$ 240,625	\$	206,633
From 1 to 5 years	7,542		7,760	452,460		417,738
After 5 years	1,712		1,667	54,044		42,362
Total by maturity	\$ 10,987	\$	11,920	\$ 747,129	\$	666,733

<sup>(1)</sup> The fair value amount receivable is composed of \$3,931 million under protection purchased and \$7,056 million under protection sold.

<sup>(2)</sup> The fair value amount payable is composed of \$8,377 million under protection purchased and \$3,543 million under protection sold.

	 Fair v	alı	ies	Notic	na	ls
In millions of dollars at December 31, 2018	Receivable <sup>(1)</sup>		Payable <sup>(2)</sup>	Protection purchased		Protection sold
By industry of counterparty						
Banks	\$ 4,785	\$	4,432	\$ 214,842	\$	218,273
Broker-dealers	1,706		1,612	62,904		63,014
Non-financial	64		87	2,687		1,192
Insurance and other financial institutions	4,210		4,220	515,216		442,460
Total by industry of counterparty	\$ 10,765	\$	10,351	\$ 795,649	\$	724,939
By instrument						
Credit default swaps and options	\$ 10,030	\$	9,755	\$ 771,865	\$	712,623
Total return swaps and other	735		596	23,784		12,316
<b>Total by instrument</b>	\$ 10,765	\$	10,351	\$ 795,649	\$	724,939
By rating of reference entity						
Investment grade	\$ 4,725	\$	4,544	\$ 637,790	\$	568,849
Non-investment grade	6,040		5,807	157,859		156,090
<b>Total by rating of reference entity</b>	\$ 10,765	\$	10,351	\$ 795,649	\$	724,939
By maturity						
Within 1 year	\$ 2,037	\$	2,063	\$ 251,994	\$	225,597
From 1 to 5 years	6,720		6,414	493,096		456,409
After 5 years	2,008		1,874	50,559		42,933
Total by maturity	\$ 10,765	\$	10,351	\$ 795,649	\$	724,939

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- (1) The fair value amount receivable is composed of \$5,126 million under protection purchased and \$5,639 under protection sold.
- (2) The fair value amount payable is composed of \$5,882 million under protection purchased and \$4,469 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, 2019 and December 31, 2018 was \$30 billion and \$33 billion, respectively. The Company posted \$29 billion and \$33 billion as collateral for this exposure in the normal course of business as of June 30, 2019 and December 31, 2018, 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, 2019, the Company could be required to post an additional \$0.7 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 \$0.1 billion upon the single notch downgrade, resulting in aggregate cash obligations and collateral requirements of approximately \$0.8 billion.

# **Derivatives Accompanied by Financial Asset Transfers**

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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 \$6.0 billion and \$4.1 billion as of June 30, 2019 and December 31, 2018, respectively.

At June 30, 2019, the fair value of these previously derecognized assets was \$6.1 billion. The fair value of the total return swaps as of June 30, 2019 was \$90 million recorded as gross derivative assets and \$57 million recorded as gross derivative liabilities. At December 31, 2018, the fair value of these previously derecognized assets was \$4.1 billion, and the fair value of the total return swaps was \$55 million recorded as gross derivative assets and \$9 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 2018 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, 2019 and December 31, 2018:

a	d funding va djustments bility_(contra	
June 30 2019		nber 31,
	(866) \$	(1.085)

In millions of dollars	June 30, 2019	December 31, 2018
Counterparty CVA	\$ (866)	\$ (1,085)
Asset FVA	(563)	(544)
Citigroup (own-credit) CVA	375	482
Liability FVA	105	135
Total CVA—derivative instruments <sup>(1)</sup>	\$ (949)	\$ (1,012)

(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)

	Th	ree Month June 3		S	Six Months June 3	
In millions of dollars	- 2	2019	2018		2019	2018
Counterparty CVA	\$	28 \$		\$	102 \$	23
Asset FVA		(39)	40		(19)	49
Own-credit CVA		(13)	24		(105)	99
Liability FVA		18	22		(30)	15
Total CVA— derivative instruments	\$	(6) \$	86	\$	(52) \$	186
DVA related to own FVO liabilities <sup>(1)</sup>	\$	3 \$	418	\$	(722) \$	585
Total CVA and DVA <sup>(2)</sup>	\$	(3) \$	504	\$	(774) \$	771

- See Notes 1 and 17 to the Consolidated Financial Statements in Citi's 2018 Annual Report on Form 10-K.
- (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, 2019 and December 31, 2018. 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, 2019	]	Level 1		Level 2	L	evel 3	Gross ventory	N	etting <sup>(1)</sup>	b	Net alance
Assets											
Securities borrowed and purchased under agreements to resell	\$	_	\$	263,499	\$	122	\$ 263,621	\$	(85,513)	\$	178,108
Trading non-derivative assets											
Trading mortgage-backed securities											
U.S. government-sponsored agency guaranteed		_		27,036		187	27,223		-		27,223
Residential		_		540		131	671		_ <u>-</u>		671
Commercial		_		1,482		53	1,535		_ <u> </u>		1,535
Total trading mortgage-backed securities	\$		\$	29,058	\$	371	\$ 29,429	\$		\$	29,429
U.S. Treasury and federal agency securities	\$	38,082	\$	5,231	\$	_	\$ 43,313	\$	<u></u>	\$	43,313
State and municipal		_		2,671		177	2,848		_ !		2,848
Foreign government		59,912		24,133		20	84,065		_ <u>-</u>		84,065
Corporate		2,288		14,809		454	17,551		_ !		17,551
Equity securities		51,566		9,176		123	60,865		_ :		60,865
Asset-backed securities		_		1,735		1,411	3,146		_ :		3,146
Other trading assets <sup>(2)</sup>		10		10,756		740	11,506				11,506
Total trading non-derivative assets	\$	151,858	\$	97,569	\$	3,296	\$ 252,723	\$		\$ :	252,723
Trading derivatives				<u> </u>							
Interest rate contracts	\$	332	\$	211,668	\$	1,644	\$ 213,644				
Foreign exchange contracts		_		131,595		379	131,974		İ		
Equity contracts		364		26,355		469	27,188		į		
Commodity contracts		_		13,717		1,023	14,740				
Credit derivatives		_		10,291		696	10,987				
Total trading derivatives	\$	696	\$	393,626	\$	4,211	\$ 398,533				
Cash collateral paid <sup>(3)</sup>			_	,	_	-,	\$ 14,134				
Netting agreements							, -	\$ (	311,423)		
Netting of cash collateral received								•	(47,136)		
Total trading derivatives	\$	696	\$	393,626	\$	4,211	\$ 412,667	\$ (	358,559)		54,108
Investments				,-	_		 ,	- '		_	
Mortgage-backed securities									į		
U.S. government-sponsored agency guaranteed	\$	_	\$	37,829	\$	31	\$ 37,860	\$	_ !	\$	37,860
Residential		_		910		_	910		_		910
Commercial		_		115		_	115		!		115
Total investment mortgage-backed securities	\$		\$	38,854	\$	31	\$ 38,885	\$	_	\$	38,885
U.S. Treasury and federal agency securities	\$	101,889				_	109,509				109,509
State and municipal	-	_		5,144		1,026	6,170		_ !		6,170
Foreign government		64,001		37,662		77	101,740		_ !		101,740
Corporate		5,115		7,152		56	12,323		_		12,323
Marketable equity securities		57		476		_	533		_ !		533
Asset-backed securities				559		59	618		!		618
Other debt securities		_		4,190		_	4,190		_ !		4,190
Non-marketable equity securities <sup>(4)</sup>		_		96		448	544		!		544
Total investments		171,062	_	101,753		1,697	274,512				274,512

Table continues on the next page.

In millions of dollars at June 30, 2019	Level 1		Level 2	I	evel 3	i	Gross nventory	Netti	ng <sup>(1)</sup>	Net balance
Loans	\$ _	\$	3,405	\$	419	\$	3,824	\$	_: <b>\$</b>	3,824
Mortgage servicing rights	_		_		508		508		-	508
Non-trading derivatives and other financial assets measured on a recurring basis	\$ 16,669	\$	5,928	\$	_	\$	22,597	\$	<b>-</b>  \$	22,597
Total assets	\$ 340,285	\$	865,780	\$ 1	10,253	\$1	,230,452	\$ (444	,072) \$	786,380
Total as a percentage of gross assets <sup>(5)</sup>	28.0%	6	71.2%	6	0.8%	6				
Liabilities										
Interest-bearing deposits	\$ _	\$	1,457	\$	1,182	\$	2,639	\$	— <b>:</b> \$	2,639
Securities loaned and sold under agreements to repurchase	_		129,565		1,085		130,650	(85	,513)	45,137
Trading account liabilities										
Securities sold, not yet purchased	73,084		13,372		28		86,484			86,484
Other trading liabilities	_		37		_		37		-	37
Total trading liabilities	\$ 73,084	\$	13,409	\$	28	\$	86,521	\$	<b>-:</b> \$	86,521
Trading derivatives										
Interest rate contracts	\$ 211	\$	188,797	\$	1,753	\$	190,761			
Foreign exchange contracts	_		132,354		476		132,830			
Equity contracts	296		29,835		1,663		31,794			
Commodity contracts	_		16,907		876		17,783			
Credit derivatives	_		11,310		610		11,920			
Total trading derivatives	\$ 507	\$	379,203	\$	5,378	\$	385,088			
Cash collateral received <sup>(6)</sup>						\$	14,041			
Netting agreements								\$ (311	,423)	
Netting of cash collateral paid								(37	,933)	
Total trading derivatives	\$ 507	\$	379,203	\$	5,378	\$	399,129	\$ (349	,356) \$	49,773
Short-term borrowings	\$ _	\$	5,137	\$	154	\$	5,291	\$	-:\$	5,291
Long-term debt	_		34,550	1	14,938		49,488		-	49,488
Total non-trading derivatives and other financial liabilities measured on a recurring basis	\$ 16,669	\$	129	\$	1	\$	16,799	\$		16,799
Total liabilities	\$ 90,260	\$	563,450	\$ 2	22,766	\$	690,517	\$ (434	,869);\$	255,648
Total as a percentage of gross liabilities <sup>(5)</sup>	13.3%	6	83.3%	<b>6</b>	3.4%	6				

<sup>(1)</sup> 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.

<sup>(2)</sup> 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.

<sup>(3)</sup> Reflects the net amount of \$52,067 million gross cash collateral paid, of which \$37,933 million was used to offset trading derivative liabilities.

<sup>(4)</sup> Amounts exclude \$0.2 billion of investments measured at net asset value (NAV) in accordance with ASU 2015-07, Fair Value Measurement (Topic 820): Disclosures for Investments in Certain Entities That Calculate Net Asset Value per Share (or Its Equivalent).

<sup>(5)</sup> Because the amount of the cash collateral paid/received has not been allocated to the Level 1, 2 and 3 subtotals, 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.

<sup>(6)</sup> Reflects the net amount \$61,177 million of gross cash collateral received, of which \$47,136 million was used to offset trading derivative assets.

**Fair Value Levels** 

In millions of dollars at December 31, 2018	]	Level 1	]	Level 2	L	evel 3	in	Gross eventory	N	letting <sup>(1)</sup>	Net balance
Assets											
Securities borrowed and purchased under agreements to resell	\$	_	\$	214,570	\$	115	\$	214,685	\$	(66,984)	\$147,701
Trading non-derivative assets											
Trading mortgage-backed securities											
U.S. government-sponsored agency guaranteed		_		24,090		156		24,246		_	24,246
Residential		_		709		268		977		_	977
Commercial		_		1,323		77		1,400		_	1,400
Total trading mortgage-backed securities	\$	_	\$	26,122	\$	501	\$	26,623	\$	_	\$ 26,623
U.S. Treasury and federal agency securities	\$	26,439	\$	4,802	\$	1	\$	31,242	\$	_	\$ 31,242
State and municipal		_		3,782		200		3,982		_	3,982
Foreign government		43,309		21,179		31		64,519		_	64,519
Corporate		1,026		14,510		360		15,896		_	15,896
Equity securities		36,342		7,308		153		43,803		_	43,803
Asset-backed securities		_		1,429		1,484		2,913		_	2,913
Other trading assets <sup>(2)</sup>		3		12,198		818		13,019		_	13,019
Total trading non-derivative assets	\$	107,119	\$	91,330	\$	3,548	\$	201,997	\$	_	\$201,997
Trading derivatives	'										
Interest rate contracts	\$	101	\$	169,860	\$	1,671	\$	171,632			
Foreign exchange contracts		_		162,108		346		162,454			
Equity contracts		647		28,903		343		29,893			
Commodity contracts		_		16,788		767		17,555			
Credit derivatives		_		9,839		926		10,765			
Total trading derivatives	\$	748	\$	387,498	\$	4,053	\$	392,299			
Cash collateral paid <sup>(3)</sup>							\$	11,518			
Netting agreements									\$	(311,089)	
Netting of cash collateral received										(38,608)	
Total trading derivatives	\$	748	\$	387,498	\$	4,053	\$	403,817	\$	(349,697)	\$ 54,120
Investments											
Mortgage-backed securities											
U.S. government-sponsored agency guaranteed	\$	_	\$	42,988	\$	32	\$	43,020	\$	_	\$ 43,020
Residential		_		1,313		_		1,313		_	1,313
Commercial		_		172		_		172		_	172
Total investment mortgage-backed securities	\$	_	\$	44,473	\$	32	\$	44,505	\$	_	\$ 44,505
U.S. Treasury and federal agency securities	\$	107,577	\$	9,645	\$	_	\$	117,222	\$	_	\$117,222
State and municipal		_		8,498		708		9,206		_	9,206
Foreign government		58,252		42,371		68		100,691		_	100,691
Corporate		4,410		7,033		156		11,599		_	11,599
Marketable equity securities		206		14		_		220		_	220
Asset-backed securities		_		656		187		843		_	843
Other debt securities		_		3,972		_		3,972		_	3,972
Non-marketable equity securities <sup>(4)</sup>		_		96		586		682		_	682
Total investments	\$	170,445	\$	116,758	\$	1,737	\$	288,940	\$	_	\$288,940

Table continues on the next page.

In millions of dollars at December 31, 2018	Level 1		Level 2	I	Level 3	i	Gross nventory	N	etting <sup>(2)</sup>	Net balance
Loans	\$ _	\$	2,946	\$	277	\$	3,223	\$	_	\$ 3,223
Mortgage servicing rights	_		_		584		584		—	584
Non-trading derivatives and other financial assets measured on a recurring basis	\$ 15,839	\$	4,949	\$	_	\$	20,788	\$	_	\$ 20,788
Total assets	\$ 294,151	\$	818,051	\$	10,314	\$1	,134,034	\$	(416,681)	\$717,353
Total as a percentage of gross assets <sup>(5)</sup>	26.2%	o	72.9%	6	0.9%	ó				
Liabilities										
Interest-bearing deposits	\$ _	\$	980	\$	495	\$	1,475	\$	_	\$ 1,475
Securities loaned and sold under agreements to repurchase	_		110,511		983		111,494		(66,984)	44,510
Trading account liabilities										
Securities sold, not yet purchased	78,872		11,364		586		90,822		_	90,822
Other trading liabilities	_		1,547		_		1,547		_	1,547
Total trading liabilities	\$ 78,872	\$	12,911	\$	586	\$	92,369	\$	_	\$ 92,369
Trading account derivatives										
Interest rate contracts	\$ 71	\$	152,931	\$	1,825	\$	154,827		ı	
Foreign exchange contracts	_		159,003		352		159,355			
Equity contracts	351		32,330		1,127		33,808			
Commodity contracts	_		19,904		785		20,689			
Credit derivatives			9,486		865		10,351			
Total trading derivatives	\$ 422	\$	373,654	\$	4,954	\$	379,030			
Cash collateral received <sup>(6)</sup>						\$	13,906			
Netting agreements								\$	(311,089)	
Netting of cash collateral paid									(29,911)	
Total trading derivatives	\$ 422		373,654		4,954		392,936		` ' '	\$ 51,936
Short-term borrowings	\$ 	\$	4,446	\$	37	\$	4,483	\$	—	\$ 4,483
Long-term debt			25,659		12,570		38,229		_	38,229
Non-trading derivatives and other financial liabilities measured on a recurring basis	\$ 15,839	\$	67	\$	_	\$	15,906	\$	_	\$ 15,906
Total liabilities	\$ 95,133	\$	528,228	\$	19,625	\$	656,892	\$	(407,984)	\$248,908
Total as a percentage of gross liabilities <sup>(5)</sup>	14.8%	о́	82.1%	6	3.1%	o				

- (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.
- (2) 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.
- (3) Reflects the net amount of \$41,429 million of gross cash collateral paid, of which \$29,911 million was used to offset trading derivative liabilities.
- (4) Amounts exclude \$0.2 billion of investments measured at net asset value (NAV) in accordance with ASU 2015-07, Fair Value Measurement (Topic 820): Disclosures for Investments in Certain Entities That Calculate Net Asset Value per Share (or Its Equivalent).
- (5) Because the amount of the cash collateral paid/received has not been allocated to the Level 1, 2 and 3 subtotals, 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.
- (6) Reflects the net amount of \$52,514 million of gross cash collateral received, of which \$38,608 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, 2019 and 2018. 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

		_ N	Net realized/u gains (losses			Tra	nsfe	ers									Unrealize gains	ed
In millions of dollars	ar. 31, 2019		Principal ansactions	Othe	r <sup>(1)(2)</sup>	into Level 3		out of evel 3	Pu	rchases	Iss	uances	Sales	Settlements		un. 30, 2019	(losses) still held	(3)
Assets															-			
Securities borrowed and purchased under agreements to resell	\$ 66	\$	5	\$	_	\$ 2	2 \$	_	\$	49	\$	<b>— \$</b>	_	\$ -	-   \$	122	\$	_
Trading non-derivative assets																		
Trading mortgage- backed securities															-			
U.S. government- sponsored agency guaranteed	154		6		_	1		(2)		42		(1)	(13)	_	-	187		4
Residential	128		10		_	17	,	(9)		61		_	(76)	_	- :	131		15
Commercial	69		2		_	3	;	(34)		38		_	(25)	_	- :	53		(6)
Total trading mortgage- backed securities	\$ 351	\$	18	\$	_	\$ 21	\$	(45)	\$	141	\$	(1) \$	(114)	\$ -	-   \$	371	s	13
U.S. Treasury and federal agency securities	\$ _	\$	_	\$	_	<b>s</b> –	- \$	_	\$		\$	<b>— \$</b>	_	s –	- : \$	_	\$	_
State and municipal	178		_		_	_	-	_		_		_	(1)	_	- :	177		_
Foreign government	39		2		_	_	-	_		_		_	(21)	_	-	20		1
Corporate	378		255		_	41		(5)		109		_	(322)	(2	2)	454		55
Marketable equity securities	127		13		_	(2	2)	_		48		_	(63)	_	-	123	(	(28)
Asset-backed securities	1,429		20		_	(	•	(15)		242		_	(271)	_	- [	1,411		10
Other trading assets	1,042		45			2	2	(135)		97		6	(312)	(5	5);	740		6
Total trading non- derivative assets	\$ 3,544	\$	353	\$	_	\$ 68	8 \$	(200)	\$	637	\$	5 \$	(1,104)	\$ (	7); \$	3,296	\$	57
Trading derivatives, net <sup>(4)</sup>																		
Interest rate contracts	\$ (116)	\$	(68)	\$	_	\$ (59	) \$	137	\$	(21)	\$	19 \$	8	\$ (9	9); \$	(109)	\$ (1	01)
Foreign exchange contracts	46		(109)		_	15	;	9		_		_	(2)	(50	6); 6);	(97)	(1	24)
Equity contracts	(1,345)	)	183		_	(38	3)	100		2		(88)	(2)	(0	6)	(1,194)	1	93
Commodity contracts	304		(243)		_	9	)	(4)		66		_	(12)	27	7	147	(1	35)
Credit derivatives	34		59			(1	)	(38)				_	14	18	8	86		10
Total trading derivatives, net <sup>(4)</sup>	\$ (1,077)	\$	(178)	\$	_	\$ (74	l) \$	204	\$	47	\$	(69) \$	6	\$ (20	6); \$	(1,167)	\$ (1	57)

Table continues on the next page.

		et realized/ı gains (losses			Tran	sfers							ι	nrealized gains
In millions of dollars	ar. 31, 2019	Principal ansactions	Othe	r <sup>(1)(2)</sup>	into Level 3	out of Level 3	Purchase	s Is	ssuances	Sales	Settlements	Jun. 30 2019	, s	(losses) till held <sup>(3)</sup>
Investments														
Mortgage-backed securities														
U.S. government- sponsored agency guaranteed	\$ 32	\$ _	\$	(1) 5	s —	s —	<b>s</b> –	- \$	<b>—</b> \$	s —	<b>s</b> —	\$ 3	1 \$	(1)
Residential	_	_		_	_	_	_	_	_	_	_	-	_	_
Commercial	_	_		_	_	_	_	_	_	_	_	-	_	_
Total investment mortgage-backed securities	\$ 32	\$ _	\$	(1) 5	s –	s —	<b>s</b> –	- \$	<b>–</b> \$	s —	<b>s</b> –	\$ 3	1 \$	(1)
U.S. Treasury and federal agency securities	\$ _	\$ _	\$	_ 5	s –	<b>s</b> —	s –	- \$	<b>–</b> \$	S —	s –	\$ -	- \$	_
State and municipal	910	_		42	11	_	23	6	_	(173)	_	1,02	6	48
Foreign government	71	_		5	_	_	1	7	_	(16)	_	7	7	1
Corporate	60	_		_	_	_	_	_	_	(4)	_	5	6	_
Marketable equity securities	_	_		_	_	_	_	_	_	_	_	-	_	_
Asset-backed securities	806	_		10	1	(585	) –	_	_	(173)	_	5	9	9
Other debt securities	_	_		_	_	_	_	_	_	_	_	-	_	_
Non-marketable equity securities	505			(2)	6		,	3		(64)		44	8	(12)
Total investments	\$ 2,384	\$ 	\$	54 5	18	\$ (585	\$ 25	6 \$	<u> </u>	(430)	<b>s</b> —	\$ 1,69	7 \$	45
Loans	\$ 373	\$ _	\$	63 5	3	<b>\$</b> —	\$	5 \$	— \$	(25)	<b>\$</b>	\$ 41	9 \$	174
Mortgage servicing rights	551	_		(37)	_	_	_	-	16	_	(22)	50	8	(34)
Other financial assets measured on a recurring basis	_	_		9	_	4	_	_	(3)	(4)	(6)	-	_	
Liabilities														
Interest-bearing deposits	\$ 1,047	\$ _	\$	(39) 5	5 2	\$ (18	) \$ _	- \$	129 \$	S —	\$ (17)	\$ 1,18	2 \$	(211)
Securities loaned and sold under agreements to repurchase	1,041	(42)		_	2	_	_	_	_	_	_	1,08	5	(13)
Trading account liabilities														
Securities sold, not yet purchased	15	(6)		_	15	(6	) –	_	_	_	(2)	2	8	(1)
Other trading liabilities	_	_		_	_	_	_	_	_	_	_	-	_	_
Short-term borrowings	170	2		_	_	(25	) –	_	12	_	(1)	15	4	(2)
Long-term debt	13,734	(819)		_	747	(1,360	) 2	0	900	(1)	79	14,93	8	(1,023)
Other financial liabilities measured on a recurring basis	_	_		4	5	_	_	_	_	_	_		1	_

<sup>(1)</sup> Changes in fair value of available-for-sale debt securities are recorded in AOCI, unless related to other-than-temporary impairment, while gains and losses from sales are recorded in *Realized gains (losses) from sales of investments* in the Consolidated Statement of Income.

<sup>(2)</sup> Unrealized gains (losses) on MSRs are recorded in *Other revenue* in the Consolidated Statement of Income.

<sup>(3)</sup> 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, 2019.

<sup>(4)</sup> Total Level 3 trading derivative assets and liabilities have been netted in these tables for presentation purposes only.

			et realized/u gains (losses)			Trans	sfers										ealized
Y .11. C.I. II	ec. 31,		Princinal			into	out of	ъ.				G 1	0.40		ın. 30,	(lo	ains sses)
In millions of dollars	 2018	tra	ansactions	Other	L	evel 3	Level 3	Purch	ases	Issu	ances	Sales	Settlements	: - 2	2019	still	held <sup>(3)</sup>
Assets  Securities borrowed and purchased under agreements to resell	\$ 115	\$	1 :	s –	s	5	\$ (4)	\$	94	\$	— <b>s</b>	s _	\$ (89)	\$	122	\$	3
Trading non-derivative assets													, ,	-			
Trading mortgage- backed securities																	
U.S. government- sponsored agency guaranteed	156		6			1	(27)		90		(1)	(38)			187		7
Residential	268		11			22	(40)		130		(1) —	(260)			131		15
Commercial	77		4	_		5	(35)		62		_	(60)	_		53		(5)
Total trading mortgage- backed securities	\$ 501	<b>\$</b>	21	<b>s</b> —	\$	28		\$	282	<u> </u>	(1) \$		s –	\$	371	\$	17
U.S. Treasury and federal agency securities	1		_ :	·					_		_ <u>\$</u>				_	•	
State and municipal	200		(1)	_		_	(19)		1		_	(4)	_		177		_
Foreign government	31		1	_		9	_		3		_	(24)	_		20		1
Corporate	360		345	_		62	(31)		178		(33)	(425)	(2)		454		34
Marketable equity securities	153		3	_		(1)	(11)		57		_	(78)	_		123		(25)
Asset-backed securities	1,484		(6)	_		13	(47)		463		_	(496)	_		1,411		57
Other trading assets	818		50	_		15	(167)		437		10	(414)	(9)	<u>.                                    </u>	740		(15)
Total trading non- derivative assets	\$ 3,548	\$	413	<b>s</b> —	\$	126	\$ (377)	<b>\$</b>	1,421	\$	(24) \$	5 (1,799)	<b>\$</b> (12)	\$	3,296	\$	69
Trading derivatives, net <sup>(4)</sup>																	
Interest rate contracts	\$ (154)	\$	(119)	s —	\$	(74)	\$ 164	\$	(15)	\$	31 \$	8	\$ 50	\$	(109)	\$	(85)
Foreign exchange contracts	(6)		(49)	_		_	24		3		_	(6)	(63)		(97)		(165)
Equity contracts	(784)		(111)			(192)	109		1		(147)	_	(70)	i .	(1,194)		(338)
Commodity contracts	(18)		37	_		6	6		120		_	(46)	42		147		153
Credit derivatives	 61		(260)			(19)	194					14	96	_	86		(335)
Total trading derivatives, net <sup>(4)</sup>	\$ (901)	\$	(502)	s —	\$	(279)	\$ 497	\$	109	\$	(116) \$	(30)	55	\$	(1,167)	\$	(770)
Investments																	
Mortgage-backed securities																	
U.S. government- sponsored agency guaranteed	\$ 32	\$	_ :	<b>\$</b> (1)	<b>\$</b>	_	s —	\$	_	\$	_ \$	s –	<b>s</b> —	\$	31	\$	(3)
Residential	_		_	_		_	_		_		_	_	_		_		_
Commercial									_		_						
Total investment mortgage-backed securities	\$ 32	\$	— :	<b>\$</b> (1)	) \$	_	s —	\$	_	\$	_ \$	s –	s —	\$	31	\$	(3)
U.S. Treasury and federal agency securities	\$ _	\$	_ :	<b>s</b> —	\$	_	s —	\$	_	\$	_ \$	s —	s –	\$	_	\$	
State and municipal	708		_	94		14	_		421		_	(211)			1,026		84
Foreign government	68		_	1		_	_		56		_	(48)	_		77		1
Corporate	156		_	_		_	(94)		_		_	(6)	_		56		_
Marketable equity securities	_		_	_		_	_		_		_	_	_		_		_
Asset-backed securities	187		_	8		95	(585)		550		_	(196)	_		59		9
Other debt securities	_					_	_		_		_	_			_		_
Non-marketable equity securities	586		_	20		6	_		7		_	(150)	(21)		448		(15)
<b>Total investments</b>	\$ 1,737	\$	_ :	\$ 122	\$	115	\$ (679)	\$	1,034	\$	— \$	6 (611)	\$ (21)	\$	1,697	\$	76

			et realized/u gains (losses		I	Tra	nsfers										Unreal gair	
In millions of dollars		2. 31, 018	Principal Insactions	Other <sup>(1)(</sup>	2)	into Level 3	out of Level 3		Purchases	Iss	uances	Sales	,	Settlements		n. 30, 019	(losse still he	es)
Loans	\$	277	\$ _	\$ 10	)8	\$ 128	\$ (7	0)	\$ 11	\$	_	\$ (3:	5) \$	· –	\$	419	\$	294
Mortgage servicing rights		584	_	(6	<b>54</b> )	_	_	_	_		28	_	-	(40)	:	508		(60)
Other financial assets measured on a recurring basis		_	_	2	25	_		4	_		(5)	(3	8)	(16)		_		_
Liabilities																		
Interest-bearing deposits	\$	495	\$ _	\$ (4	19)	\$ 3	\$ (2	2)	s —	\$	803	<b>\$</b> -	- \$	(146)	\$	1,182	\$	(182)
Securities loaned and sold under agreements to repurchase		983	(38)	-	_	1		4	_		_		1	58		1,085		(24)
Trading account liabilities															:			
Securities sold, not yet purchased		586	118	_	_	16	(44	7)	_		_	_	_	(9)		28		_
Other trading liabilities		_	_	-	_	_	_	_	_		_	_	-	_		_		_
Short-term borrowings		37	25	-	_	9	(3	1)	_		165	_	-	(1)		154		(2)
Long-term debt	13	2,570	(1,226)	-	_	1,624	(2,96	1)	20		6,850	(4	4)	(4,387)	1	4,938		(769)
Other financial liabilities measured on a recurring basis		_	_		4	5	_	_	_		_	_		_		1		_

<sup>(1)</sup> Changes in fair value of available-for-sale debt securities are recorded in AOCI, unless related to other-than-temporary impairment, while gains and losses from sales are recorded in *Realized gains (losses) from sales of investments* in the Consolidated Statement of Income.

<sup>(2)</sup> Unrealized gains (losses) on MSRs are recorded in Other revenue in the Consolidated Statement of Income.

<sup>(3)</sup> 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, 2018.

<sup>(4)</sup> Total Level 3 trading derivative assets and liabilities have been netted in these tables for presentation purposes only.

		Net realized/ gains (losse		Tran	sfers						Unrealized
In millions of dollars	Mar. 31, 2018	Principal transactions		into	out of Level 3	Purchases	Issuances	Sales	Settlements	Jun. 30, 2018	gains (losses) still held <sup>(3)</sup>
Assets		- transactions		201013	20,013	T di cinases	1004411000	Sures	Settlements	2010	Still Hold
Securities borrowed and purchased under agreements to resell	\$ 16	\$ 1	s —	\$ 49	s —	s —	· \$ —	s —	s —	\$ 66	s —
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	\$ —	\$ —	s –	\$ 7	s –
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
Marketable 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	s —	\$ 121	\$ (147)	\$ 888	\$ —	\$ (691)	\$ (4)	\$ 3,594	\$ 238
Trading derivatives, net <sup>(4)</sup>											
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)
Credit derivatives	(859)	(36)	_	(10)	14	_	_	_	43	(848)	(29)
Total trading derivatives, net <sup>(4)</sup>	\$ (4,427)	\$ 230	s —	\$ (34)	\$ 269	\$ 18	s —	\$ (9)	\$ 78	\$ (3,875)	\$ 738
Investments											
Mortgage-backed securities											
U.S. government- sponsored agency guaranteed	\$ 23	s —	\$ 11	s —	s —	s —	· \$ —	s —	\$ —	\$ 34	\$ 12
Residential	_	_	_	_	_	_	_	_	_	_	_
Commercial	5	_	_	1	_	_	_	_	_	6	_
Total investment mortgage-backed securities	\$ 28	s —	\$ 11	\$ 1	\$ —	\$ —	· \$ —	\$ —	s –	\$ 40	\$ 12
U.S. Treasury and federal agency securities	\$ —	\$ —	s –	s —	\$ —	\$	· \$ —	s —	s —	\$ —	s –
State and municipal	682		3	_	(9)	111	_	(25)	_	762	3
Foreign government	70	_	(3)	1	_	5	_	(19)	_	54	(3)
Corporate	76		_	_	(2)	_	_	(6)	_	68	_
Marketable equity securities	1	_	_	_	_	_	_	_	_	1	_
Asset-backed securities	497	_	(25)	1	(2)	11	_	(26)	_	456	(25)
Other debt securities	_	_	_	_	_	_	_	_	_	_	_

		Net realized/ugains (losses			Trai	sfers									U	nrealized gains
In millions of dollars	ar. 31, 2018	Principal ransactions	Other <sup>(</sup>	1)(2)	into Level 3		t of rel 3	Purchases	Is	ssuances	Sales	Se	ettlements	Jun. 30, 2018	st	(losses) till held <sup>(3)</sup>
Non-marketable equity securities	734	_		(54)	_		_	_	-	_	(33	3)	(36)	611		(23)
<b>Total investments</b>	\$ 2,088	\$ _	\$	(68)	\$ 3	\$	(13)	\$ 127	\$	_	\$ (109	9) \$	(36)	\$ 1,992	\$	(36)
Loans	\$ 554	\$ _	\$ (	(274)	\$ —	\$	60	\$ 47	\$	_	\$ (6	5) \$	-	\$ 381	\$	40
Mortgage servicing rights	587	_		11	_		_	_	-	15	(1	)	(16)	596		11
Other financial assets measured on a recurring basis	13	_		14	_		(11)	_	-	_	(4	<b>l</b> )	(12)	_		14
Liabilities																
Interest-bearing deposits	\$ 292	\$ _	\$	(3)	\$ —	\$	_	\$	- \$	25	\$ —	- \$	-	\$ 320	\$	(6)
Securities loaned and sold under agreements to repurchase	857	25		_	_		_	_	-	96	_	-	38	966		16
Trading account liabilities																
Securities sold, not yet purchased	48	(142)		_	4		(12)	_	-	_	6	5	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)	_		_

<sup>(1)</sup> Changes in fair value of available-for-sale debt securities are recorded in AOCI, unless related to other-than-temporary impairment, while gains and losses from sales are recorded in *Realized gains (losses) from sales of investments* in the Consolidated Statement of Income.

<sup>(2)</sup> Unrealized gains (losses) on MSRs are recorded in Other revenue in the Consolidated Statement of Income.

<sup>(3)</sup> 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.

<sup>(4)</sup> Total Level 3 trading derivative assets and liabilities have been netted in these tables for presentation purposes only.

		Net realized/ gains (losse		Trans							Unrealized gains
In millions of dollars	Dec. 31, 2017	Principal transactions	Other <sup>(1)(2)</sup>	into Level 3	out of Level 3	Purchases	Issuances	Sales	Settlements	Jun. 30, 2018	(losses) still held <sup>(3)</sup>
Assets											
Securities borrowed and purchased under agreements to resell	\$ 16	<b>\$</b> 19	\$ — S	\$ 49	s —	\$ —	s —	\$ —	\$ (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	s — :	\$ 158	\$ (215)	\$ 282	s —	\$ (333)	s —	\$ 282	s –
U.S. Treasury and federal agency securities	\$ —	s —	\$ — :	\$ 6	s —	\$ 1	s —	\$ —	\$ —	\$ 7	s –
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
Marketable equity securities	120	82	_	17	(20)	242	_	(148)	_	293	26
Asset-backed securities	1,590	75	_	45	(47)	689	_	(664)	_	-,	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 <sup>(4)</sup>											
Interest rate contracts	\$ (422)	\$ 587	s — :	\$ 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 <sup>(4)</sup>	\$ (4,979)	\$ 318	s — :	\$ (133)	\$ 792	\$ 61	s —	\$ (31)	\$ 97	\$ (3,875)	\$ 508
Investments											
Mortgage-backed securities										! ! ! !	
U.S. government- sponsored agency guaranteed	\$ 24	s —	\$ 10 3	\$ —	s —	s —	s —	s —	s —	\$ 34	\$ (12)
Residential	_		_	_	_	_	_	_	_	<u> </u>	_
Commercial	3	_	2	1	_	_	_	_	_	6	_
Total investment mortgage-backed securities	\$ 27	\$ —	\$ 12 :	\$ 1	s —	\$ —	s —	\$ —	s –	\$ 40	\$ (12)
U.S. Treasury and federal agency securities							s —			<del> </del> 	
State and municipal	737	_	(13)	<b>—</b>	(18)	140		(84)		762	(22)
Foreign government	92	_	(4)	1	(2)	62		(95)		54	(3)
Corporate	71	_	(1)	3	(2)	3		(6)		68	
Marketable equity securities	2	_	_	_	_	_		(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 \$	— <b>\$</b>	(51) \$	38 \$ (366) \$	§ 231 \$	— \$	(245) \$	(52) \$ 1,992 \$	(69)

			Net realized/u gains (losses		l	Tran	sfers												alized ins
In millions of dollars		c. 31, 017	Principal ansactions	Other <sup>(1)(</sup>	2)	into Level 3	out o		Purchases	Iss	suances	Sales	3	Settlem	ents		. 30, 018	(los	sses) neld <sup>(3)</sup>
Loans	\$	550	\$ _	\$ (25	55)	\$ —	\$	59	\$ 51	\$		\$ (2	2) :	\$	(2)	\$	381	\$	175
Mortgage servicing rights		558	_		57	_		_	_		32	(1	8)		(33)		596		57
Other financial assets measured on a recurring basis		16	_	2	22	_	(	(11)	4		12	(	4)		(39)		_		33
Liabilities																			
Interest-bearing deposits	\$	286	\$ _	\$ 2	23	\$ 12	\$	—	\$ —	\$	45	\$ -	- :	\$	_	\$	320	\$	(60)
Securities loaned and 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	1	3,082	(243)	-	_	1,755	(1,3	(04)	36		7	(4	4)		6	13	3,781		(735)
Other financial liabilities measured on a recurring basis		8	_		(2)	1	(	(10)	_		2	_			(3)		_		(4)

- (1) Changes in fair value of available-for-sale debt securities are recorded in AOCI, unless related to other-than-temporary impairment, while gains and losses from sales are recorded in *Realized gains (losses) from sales of investments* in the Consolidated Statement of Income.
- (2) Unrealized gains (losses) on MSRs are recorded in *Other revenue* in the Consolidated Statement of Income.
- (3) 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.

#### Level 3 Fair Value Rollforward

The following were the significant Level 3 transfers for the period December 31, 2018 to June 30, 2019:

• During the three and six months ended June 30, 2019, transfers of *Long-term debt* of \$0.7 billion and \$1.6 billion from Level 2 to Level 3, and of \$1.4 billion and \$3.0 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.

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.

# 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, 2019	value <sup>(1)</sup> nillions)	Methodology	Input	Low <sup>(2)(3)</sup>		High <sup>(2)(3)</sup>	Weighted average <sup>(4)</sup>
Assets							
Securities borrowed and purchased under agreements to							
resell	\$	Model-based	Interest rate	1.77 %		3.67%	2.90 %
Mortgage-backed securities	\$	Yield analysis	Yield	1.94 %		7.72%	3.23 %
	162	Price-based	Price	\$ 15.00	\$	125.81	\$ 86.87
State and municipal, foreign government, corporate and other debt securities	\$ 1,261	Price-based	Price	\$ _	\$	1,127.39	\$ 77.56
	1,093	Model-based	Credit spread	35bps		470bps	214 bps
Marketable equity securities <sup>(5)</sup>	\$ 81	Price-based	Price	\$ 0.01	\$	41,284.00	\$ 5,730.26
	41	Model-based	WAL	1 year		1 year	1 year
Asset-backed securities	\$ 1,429	Price-based	Price	\$ 2.75	\$	100.00	\$ 78.27
Non-marketable equities	\$ 262	Comparables analysis	EBITDA multiples	8.10x		19.40x	11.72x
	152	Price-based	Price	\$ 8.18	\$	1,540.00	\$ 773.53
			Appraised value	\$ 381,810	\$	33,710,000	\$ 14,639,552
			Discount to price	<u> </u>	ó	10.00%	2.30 %
			Revenue multiple	3.15x		26.12x	11.76x
Derivatives—gross <sup>(6)</sup>							
Interest rate contracts (gross)	\$ 3,307	Model-based	Inflation volatility	0.22 %	ó	2.67%	0.79 %
			Mean reversion	1.00 %	o O	20.00%	10.50 %
			IR Normal volatility	0.15 %	ó	80.37%	49.53 %
Foreign exchange contracts							
(gross)	\$ 796	Model-based	FX volatility	3.09 %		15.04%	9.83 %
			IR-IR correlation	(51.00)%		40.00%	33.10 %
			IR-FX correlation	40.00 %		60.00%	50.00 %
			Interest rate	4.50 %		11.33%	9.24 %
			IR Normal volatility	_ %		80%	24 %
7	 		Credit Spread	32bps		535bps	381bps
Equity contracts (gross) <sup>(7)</sup>	\$ 2,130	Model-based	Equity volatility	2.87 %		88.26%	48.13 %
			Forward price	59.57 %	ó	129.82%	119.02 %
			Equity-Equity correlation	(48.61)%	ó	98.11%	72.94 %
			Equity-FX correlation	(75.00)%	ó	37.27%	(20.58)%
Commodity and other contracts (gross)	\$ 1,900	Model-based	Forward price	26.15 %	o O	343.40%	111.96 %
			Commodity volatility	10.08 %	ó	93.16%	24.97 %
			Commodity correlation	(40.55)%		89.50%	45.81 %
Credit derivatives (gross)	\$ 708	Model-based	Upfront points	4.99 %	ó	99.77%	58.34 %
	597	Price-based	Credit correlation	25.00 %	o O	85.00%	43.66 %
			Credit spread	4bps		334bps	70bps
			Price	\$ 12.00	\$	98.00	\$ 69.20

As of June 30, 2019		r value <sup>(1)</sup> millions)	Methodology	Input	Low <sup>(2)(3)</sup>	High <sup>(2)(3)</sup>	Weighted average <sup>(4)</sup>
				Recovery rate	20.00 %	60.00%	41.00 %
Loans and leases	\$	379	Model-based	Equity volatility	27 %	37%	32 %
				Credit spread	110bps	110bps	110bps
				Yield	%	%	<u> </u>
Mortgage servicing rights	\$	424	Cash flow	Yield	4.77 %	16.26%	8.00 %
		83	Model-based	WAL	3.4 years	7.1 years	5.8 years
Liabilities							
Interest-bearing deposits	\$	1,182	Model-based	Mean reversion	1.00 %	20.00%	10.50 %
Securities loaned and sold under agreement to repurchase	\$	1,085	Model-based	Interest rate	1.77 %	2.53%	2.01 %
Trading account liabilities							
Securities sold, not yet purchased	\$	27	Price-based	Price	\$ <u> </u>	2,164.17 \$	86.14
Short-term borrowings and long- term debt	\$	15,232	Model-based	Mean reversion	1.00 %	20.00%	10.50 %
				Forward price	26.15 %	343.40%	118.53 %
				IR Normal volatility	0.15 %	80.37%	44.02 %
As of December 31, 2018		r value <sup>(1)</sup> millions)	Methodology	Input	Low <sup>(2)(3)</sup>	High <sup>(2)(3)</sup>	Weighted average <sup>(4)</sup>
Assets							
Securities borrowed and purchased under agreements to resell	\$		Model-based	Interest rate	2.52 %	7.43%	5.08 %
Mortgage-backed securities	\$	313	Price-based	Price	\$ 11.25 \$	110.35 \$	90.07
		198	Yield analysis	Yield	2.27 %	8.70%	3.74 %
State and municipal, foreign government, corporate and other debt securities	\$	1,212	Price-based	Price	\$ _ \$	103.75 \$	91.39
		938	Model-based	Credit spread	35 bps	446 bps	238 bps
Marketable equity securities <sup>(5)</sup>	\$	108	Price-based	Price	\$ — \$	20,255.00 \$	1,247.85
		45	Model-based	WAL	1.47years	1.47years	1.47years
Asset-backed securities	\$	1,608	Price-based	Price	\$ 2.75 \$	101.03 \$	66.18
Non-marketable equity	\$	293	Comparables analysis	Discount to price	<b>—</b> %	100.00%	0.66 %
		255	Price-based	EBITDA multiples	5.00x	34.00x	9.73x
				Net operating income multiple	24.70x	24.70x	24.70x
				Price	\$ 2.38 \$	1,073.80 \$	420.24
				Revenue multiple	2.25x	16.50x	7.06x
Derivatives—gross <sup>(6)</sup>							
Interest rate contracts (gross)	\$	3 467	Model-based	Mean reversion	1.00 %	20.00%	10.50 %
increst take contracts (gross)	Ψ	J, <del>1</del> 0/	Model-based	Inflation volatility	0.22 %	2.65%	0.77 %
				illiation volatility	0.22 /0	2.0370	0.77 70
				IR Normal volatility	0.16 %	86.31%	56.24 %
Foreign exchange contracts (gross)	\$	626	Model-based	Foreign exchange (FX) volatility	3.15 %	17.35%	11.37 %
		73	Cash flow	IR-IR correlation	(51.00)%	40.00%	32.69 %
				IR-FX correlation	40.00 %	60.00%	50.00 %
				Credit spread	39bps	676bps	423bps
				IR basis	(0.65)%	0.11%	(0.17)%
				Yield	6.98 %	7.48%	7.23 %
Equity contracts (gross) <sup>(7)</sup>	\$	1,467	Model-based	Equity volatility	3.00 %	78.39%	37.53 %

As of December 31, 2018	value <sup>(1)</sup> nillions)	Methodology	Input	Low	,(2)(3)	High <sup>(2)(3)</sup>	Weighted average <sup>(4)</sup>
			Forward price	64.6	66 %	144.45%	98.55 %
			Equity-Equity correlation	(81.3	39)%	100.00%	35.49 %
			Equity-FX correlation	(86.2	27)%	70.00%	(1.20)%
			WAL	1.47 y	ears	1.47 years	1.47 years
Commodity contracts (gross)	\$ 1,552	Model-based	Forward price	15.3	30 %	585.07%	145.08 %
			Commodity volatility	8.9	92 %	59.86%	20.34 %
			Commodity correlation	(51.9	90)%	92.11%	40.71 %
Credit derivatives (gross)	\$ 1,089	Model-based	Credit correlation	5.0	00 %	85.00%	41.06 %
	701	Price-based	Upfront points	7.4	41 %	99.04%	58.95 %
			Credit spread	2	bps	1,127 bps	87 bps
			Recovery rate	5.0	00 %	65.00%	46.40 %
			Price	\$ 16.5	59 \$	98.00	\$ 81.19
Loans and leases	\$ 248	Model-based	Credit spread	138	bps	255 bps	147 bps
	29	Price-based	Yield	0.3	30 %	0.47%	0.32 %
			Price	\$ 55.8	33 \$	110.00	\$ 92.40
Mortgage servicing rights	\$ 500	Cash flow	Yield	4.0	50 %	12.00%	7.79 %
	84	Model-based	WAL	3.55 y	ears	7.45 years	6.39 years
Liabilities							
Interest-bearing deposits	\$ 495	Model-based	Mean reversion	1.0	00 %	20.00%	10.50 %
			Forward price	64.6	66 %	144.45%	98.55 %
			Equity volatility	3.0	00 %	78.39%	43.49 %
Securities loaned and sold under agreements to repurchase	\$ 983	Model-based	Interest rate	2.5	52 %	3.21%	2.87 %
Trading account liabilities							
Securities sold, not yet purchased	\$ 509	Model-based	Forward price	15.3	30 %	585.07%	105.69 %
	77	Price-based	Equity volatility	3.0	00 %	78.39%	43.49 %
			Equity-Equity correlation	(81.3	39)%	100.00%	34.04 %
			Equity-FX correlation	(86.2	27)%	70.00%	(1.20)%
			Commodity volatility	8.9	92 %	59.86%	20.34 %
			Commodity correlation	(51.9	90)%	92.11%	40.71 %
			Equity-IR correlation	(40.0	00)%	70.37%	30.80 %
Short-term borrowings and long- term debt	\$ 12,289	Model-based	Mean reversion		00 %	20.00%	
			IR normal volatility	0.1	16 %	86.31%	56.61 %
			Forward price	64.6	66 %	144.45%	98.58 %
			Equity volatility	3.0	00 %	78.39%	43.24 %

<sup>(1)</sup> The fair value amounts presented in these tables represent the primary valuation technique or techniques for each class of assets or liabilities.

<sup>(2)</sup> Some inputs are shown as zero due to rounding.

<sup>(3)</sup> 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.

<sup>(4)</sup> Weighted averages are calculated based on the fair values of the instruments.

<sup>(5)</sup> For equity securities, the price inputs are expressed on an absolute basis, not as a percentage of the notional amount.

<sup>(6)</sup> Both trading and nontrading account derivatives—assets and liabilities—are presented on a gross absolute value basis.

<sup>(7)</sup> Includes hybrid products.

#### 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 securities 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-forsale and other real estate owned that are measured at the lower of cost or market value.

The following tables present the carrying amounts of all assets that were still held for which a nonrecurring fair value measurement was recorded:

In millions of dollars	Fa	ir value	Level 2	Level 3
June 30, 2019				
Loans HFS <sup>(1)</sup>	\$	3,634	\$ 2,391	\$ 1,243
Other real estate owned		50	37	13
Loans <sup>(2)</sup>		482	172	310
Non-marketable equity securities measured using the measurement alternative		125	108	17
Total assets at fair value on a nonrecurring basis	\$	4,291	\$ 2,708	\$ 1,583

In millions of dollars	Fa	ir value		Level 2		Level 3
December 31, 2018						
Loans HFS <sup>(1)</sup>	\$	5,055	\$	3,261	\$	1,794
Other real estate owned		78		62		16
Loans <sup>(2)</sup>		390		139		251
Non-marketable equity securities measured using the measurement alternative		261		192		69
Total assets at fair value on a nonrecurring basis	\$	5,784	\$	3,654	s	2,130
on a nonrecurring busis	Ψ	3,701	}	5,051	Ψ	2,130

Net of fair value amounts on the unfunded portion of loans HFS recognized as Other liabilities on the Consolidated Balance Sheet.

<sup>(2)</sup> 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 tables present 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, 2019	Fair va		Methodology	Input		Low <sup>(2)</sup>		High		Weighted average <sup>(3)</sup>
Loans held-for-sale	\$	839	Price-based	Price	\$	82.90	\$	100.00	\$	96.67
Other real estate owned	\$	9	Price-based	Appraised value <sup>(4)</sup>	\$	2,953,240	\$	8,394,102	\$	6,978,072
Loans <sup>(5)</sup>		62	Price-based	Price		2.65		63.00		30.48
		59	Recovery analysis	Recovery rate		85.25%	ó	99.50%	6	95.60%
Non-marketable equity securities measured using the measurement	S	17	Price-based	Price	S	13.78	s	13.78	s	13.78
alternative	<b>3</b>	1/	rrice-dased	rrice	3	13./8	<u> </u>	13./8	3	13./8

As of December 31, 2018	Fair value <sup>(1)</sup> (in millions)		Methodology Input			Low <sup>(2)</sup>		High		Weighted average <sup>(3)</sup>		
Loans held-for-sale	\$	1,729	Price-based	Price	\$	0.79	\$	100.00	\$	69.52		
Other real estate owned	\$	15	Price-based	Appraised value <sup>(4)</sup>	\$	8,394,102	\$	8,394,102	\$	8,394,102		
		2	Recovery analysis	Discount to price <sup>(6)</sup>		13.00%	.00% 13.00%			13.00%		
				Price	\$	56.30	\$	83.08	\$	58.27		
Loans <sup>(6)</sup>	\$	251	Recovery analysis	Recovery rate		30.60%	ó	100.00%	)	50.51%		
				Price	\$	2.60	\$	85.04	\$	28.21		
Non-marketable equity securities measured using the measurement alternative	\$	66	Price-based	Price	\$	45.80	\$	1,514.00	\$	570.26		

- (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 tables present 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,								
In millions of dollars		2019	2018						
Loans HFS	\$	(14) \$	(7)						
Other real estate owned		(1)	(1)						
Loans <sup>(1)</sup>		(44)	(33)						
Non-marketable equity securities measured using the measurement alternative		4	(1)						
Total nonrecurring fair value gains (losses)	\$	(55) \$	(42)						

<sup>(1)</sup> 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		2019	2018					
Loans HFS	\$	(1) \$	(8)					
Other real estate owned		_	(1)					
Loans <sup>(1)</sup>		(62)	(33)					
Non-marketable equity securities measured using the measurement alternative		65	104					
Total nonrecurring fair value gains (losses)	\$	2 \$	62					

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.

	June 30, 2019 Estimated fair value								
In billions of dollars		arrying value	Estimat fair val		Level 1	Level 2	Level 3		
Assets									
Investments	\$	74.4	\$ 7	5.3	\$ 1.9	<b>\$</b> 71.0	\$ 2.4		
Securities borrowed and purchased under agreements to resell		81.7	8	1.7	_	81.5	0.2		
Loans <sup>(1)(2)</sup>		670.9	67	5.6	_	9.6	666.0		
Other financial assets <sup>(2)(3)</sup>		281.0	28	1.4	187.6	15.6	78.2		
Liabilities									
Deposits	\$	1,043.0	\$ 1,03	9.8	<b>\$</b> —	\$ 837.5	\$ 202.3		
Securities loaned and sold under agreements to repurchase		136.0	13	6.0	_	136.0	_		
Long-term debt <sup>(4)</sup>		202.6	21	2.2	_	197.8	14.4		
Other financial liabilities <sup>(5)</sup>		121.8	12	1.8	_	20.2	101.6		

		December	31, 2018	Estimated fair value				
In billions of dollars	C	Carrying value	Estimated fair value	Level 1	Level 2	Level 3		
Assets								
Investments	\$	68.9	\$ 68.5	\$ 1.0	\$ 65.4	\$ 2.1		
Securities borrowed and purchased under agreements to resell		123.0	123.0	_	121.6	1.4		
Loans <sup>(1)(2)</sup>		667.1	666.9	_	5.6	661.3		
Other financial assets <sup>(2)(3)</sup>		249.7	250.1	172.3	15.8	62.0		
Liabilities								
Deposits	\$	1,011.7	\$ 1,009.5	\$	\$ 847.1	\$ 162.4		
Securities loaned and sold under agreements to repurchase		133.3	133.3		133.3	_		
Long-term debt <sup>(4)</sup>		193.8	193.7	_	178.4	15.3		
Other financial liabilities <sup>(5)</sup>		103.8	103.8	_	17.2	86.6		

<sup>(1)</sup> The carrying value of loans is net of the *Allowance for loan losses* of \$12.5 billion for June 30, 2019 and \$12.3 billion for December 31, 2018. In addition, the carrying values exclude \$1.5 billion and \$1.6 billion of lease finance receivables at June 30, 2019 and December 31, 2018, respectively.

The estimated fair values of the Company's corporate unfunded lending commitments at June 30, 2019 and December 31, 2018 were liabilities of \$8.0 billion and \$7.8 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.

<sup>(2)</sup> Includes items measured at fair value on a nonrecurring basis.

<sup>(3)</sup> 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.

<sup>(4)</sup> The carrying value includes long-term debt balances under qualifying fair value hedges.

<sup>(5)</sup> Includes brokerage payables, separate and variable accounts, short-term borrowings (carried at cost) and other 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.

#### 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	Six Months End	led June 30,						
In millions of dollars		2019	2018	2019	2018					
Assets										
Securities borrowed and purchased under agreements to resell	\$	6 \$	19	\$ 35 \$	3					
Trading account assets		45	(85)	212	(101)					
Investments		_	_	_	_					
Loans										
Certain corporate loans		(80)	(3)	(213)	(126)					
Certain consumer loans		_	_	_	_					
Total loans	\$	(80) \$	(3)	\$ (213) \$	(126)					
Other assets										
MSRs	\$	(37) \$	11	\$ (64) \$	57					
Certain mortgage loans HFS <sup>(1)</sup>		21	10	37	12					
Total other assets	\$	(16) \$	21	\$ (27) \$	69					
Total assets	\$	(45) \$	(48)	\$ 7 \$	(155)					
Liabilities										
Interest-bearing deposits	\$	(43) \$	10	\$ (134) \$	38					
Securities loaned and sold under agreements to repurchase		51	(15)	86	(126)					
Trading account liabilities		2	(15)	13	(21)					
Short-term borrowings <sup>(2)</sup>		94	(59)	(81)	118					
Long-term debt <sup>(2)</sup>		(1,113)	921	(3,794)	1,539					
Total liabilities	\$	(1,009) \$	842	\$ (3,910) \$	1,548					

<sup>(1)</sup> Includes gains (losses) associated with interest rate lock commitments for those loans that have been originated and elected under the fair value option.

<sup>(2)</sup> Includes DVA that is included in AOCI. See Notes 17 and 20 to the Consolidated Financial Statements.

#### 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. 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 changes in the fair value of these liabilities due to such changes in the Company's own credit spread (or instrument-specific credit risk) were gains of \$3 million and \$418 million for the three months ended June 30, 2019 and 2018, and a loss of \$722 million and gain of \$585 million for the six months ended June 30, 2019 and 2018, 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:

	June 30, 2019			December 3	1, 2018		
In millions of dollars	Trading as	ssets	]	Loans	Trading assets	Loa	ans
Carrying amount reported on the Consolidated Balance Sheet	\$ 8	3,448	\$	3,824	\$ 10,108	\$ .	3,224
Aggregate unpaid principal balance in excess of (less than) fair value		410		779	435		741
Balance of non-accrual loans or loans more than 90 days past due		_		1	_		1
Aggregate unpaid principal balance in excess of (less than) fair value for non-accrual loans or loans more than 90 days past due		_		_	_		_

In addition to the amounts reported above, \$1,057 million and \$1,137 million of unfunded commitments related to certain credit products selected for fair value accounting were outstanding as of June 30, 2019 and December 31, 2018, 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, 2019 and 2018 due to instrument-specific credit risk totaled to a gain of \$53 million and a loss of \$20 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 \$0.8 billion and \$0.4 billion at June 30, 2019 and December 31, 2018, 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, 2019, there were approximately \$9.6 billion and \$7.2 billion of notional amounts of such forward purchase and forward sale derivative contracts outstanding, respectively.

# Certain Investments in Private Equity and Real Estate Ventures

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.

### 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.

The following table provides information about certain mortgage loans HFS carried at fair value:

In millions of dollars	June 30, 2019	De	ecember 31, 2018
Carrying amount reported on the Consolidated Balance Sheet	\$ 648	\$	556
Aggregate fair value in excess of (less than) unpaid principal balance	21		21
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	_		_

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, 2019 and 2018 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	J	June 30, 2019	December 31, 2018
Interest rate linked	\$	21.5	\$ 17.3
Foreign exchange linked		1.0	0.5
Equity linked		19.5	14.8
Commodity linked		1.2	1.2
Credit linked		1.9	1.9
Total	\$	45.1	\$ 35.7

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. 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	Jı	ine 30, 2019	Dece	ember 31, 2018
Carrying amount reported on the Consolidated Balance Sheet	\$	49,488	\$	38,229
Aggregate unpaid principal balance in excess of (less than) fair value		1,357		3,814

The following table provides information about short-term borrowings carried at fair value:

In millions of dollars	June 30, 2019	Decem	ber 31, 2018
Carrying amount reported on the Consolidated Balance Sheet	\$ 5,291	\$	4,483
Aggregate unpaid principal balance in excess of (less than) fair value	729		861

### 22. GUARANTEES, LEASES 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 2018 Annual Report on Form 10-K.

The following tables present information about Citi's guarantees at June 30, 2019 and December 31, 2018:

# Maximum potential amount of future payments

	* *					
In billions of dollars at June 30, 2019		ire within 1 year	Expire after 1 year	Total amount outstanding	Carrying value (in millions of dollars)	
Financial standby letters of credit	\$	32.9	\$ 66.2	\$ 99.1	\$ 132	
Performance guarantees		7.7	4.3	12.0	27	
Derivative instruments considered to be guarantees		39.3	63.6	102.9	413	
Loans sold with recourse		_	1.3	1.3	8	
Securities lending indemnifications <sup>(1)</sup>		105.3	_	105.3	_	
Credit card merchant processing <sup>(1)(2)</sup>		90.0	_	90.0	_	
Credit card arrangements with partners		0.1	0.8	0.9	136	
Custody indemnifications and other		_	31.7	31.7	41	
Total	\$	275.3	\$ 167.9	\$ 443.2	\$ 757	

# Maximum potential amount of future

In billions of dollars at December 31, 2018	Expire within 1 year		Expire after 1 year	Total amount outstanding	Carrying value (in millions of dollars)
Financial standby letters of credit	\$	32.1	\$ 67.5	\$ 99.6	\$ 131
Performance guarantees		7.7	4.2	11.9	29
Derivative instruments considered to be guarantees		23.5	87.4	110.9	567
Loans sold with recourse		_	1.2	1.2	9
Securities lending indemnifications <sup>(1)</sup>		98.3	_	98.3	_
Credit card merchant processing <sup>(1)(2)</sup>		94.7	_	94.7	_
Credit card arrangements with partners		0.3	0.8	1.1	162
Custody indemnifications and other		_	35.4	35.4	41
Total	\$	256.6	\$ 196.5	\$ 453.1	\$ 939

<sup>(1)</sup> 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.

<sup>(2)</sup> At June 30, 2019 and December 31, 2018, this maximum potential exposure was estimated to be \$90 billion and \$95 billion, respectively. However, Citi believes that the maximum exposure is not representative of the actual 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 \$43 million and \$49 million at June 30, 2019 and December 31, 2018, 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 that 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, 2019 and December 31, 2018, 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, 2019 or December 31, 2018 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 \$8.3 billion as of June 30, 2019, compared to approximately \$7.5 billion at December 31, 2018. 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, 2019 and December 31, 2018 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 \$14.1 billion and \$13.8 billion as of June 30, 2019 and December 31, 2018, 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 nonperformance 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, 2019 and December 31, 2018, the total carrying amounts of the liabilities related to the guarantees and indemnifications included in the tables above amounted to approximately \$0.8 billion and \$0.9 billion, respectively. 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 \$71 billion and \$55 billion at June 30, 2019 and December 31, 2018, respectively. Securities and other marketable assets held as collateral amounted to \$55 billion at both June 30, 2019 and December 31, 2018. 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 \$4.0 billion and \$4.1 billion at June 30, 2019 and December 31, 2018, 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.

	ım potential amo	l amount of future payments					
In billions of dollars at June 30, 2019	Investment i grade		Non- investment grade	Not rated	Total		
Financial standby letters of credit	\$	71.6	\$ 11.7	\$ 15.8	\$ 99.1		
Performance guarantees		9.7	2.0	0.3	12.0		
Derivative instruments deemed to be guarantees		_	_	102.9	102.9		
Loans sold with recourse		_	_	1.3	1.3		
Securities lending indemnifications		_	_	105.3	105.3		
Credit card merchant processing		_	_	90.0	90.0		
Credit card arrangements with partners		_	_	0.9	0.9		
Custody indemnifications and other		19.1	12.6	_	31.7		
Total	\$	100.4	\$ 26.3	\$ 316.5	\$ 443.2		

	Maximum potential amount of future payments									
In billions of dollars at December 31, 2018		estment in grade	Non- vestment grade	Not rated	Total					
Financial standby letters of credit	\$	71.3 \$	11.9 \$	16.4	\$ 99.6					
Performance guarantees		9.2	2.1	0.6	11.9					
Derivative instruments deemed to be guarantees		_	_	110.9	110.9					
Loans sold with recourse		_	_	1.2	1.2					
Securities lending indemnifications		_	_	98.3	98.3					
Credit card merchant processing		_	_	94.7	94.7					
Credit card arrangements with partners		_	_	1.1	1.1					
Custody indemnifications and other		22.2	13.2	_	35.4					
Total	\$	102.7 \$	27.2 \$	323.2	\$ 453.1					

#### Leases

The Company's operating leases, where Citi is a lessee, include real estate, such as office space and branches, and various types of equipment. These leases have a weightedaverage remaining lease term of approximately six years as of June 30, 2019. The operating lease ROU asset and lease liability were \$2.9 billion and \$3.1 billion, respectively, as of June 30, 2019. The Company recognizes fixed lease costs on a straight-line basis throughout the lease term in the Consolidated Statement of Income. Additionally, variable lease costs are recognized in the period in which the obligation for those payments is incurred. The total operating lease expense (principally for offices, branches and equipment), net of approximately \$14 million and \$35 million of sublease income, was approximately \$265 million and \$537 million for the three and six months ended June 30. 2019, respectively. The decrease in the lease liability and related financial information for operating leases from March 31, 2019 reflects the impact of a purchase of a previously leased property in London during the second quarter of 2019. The purchased property is included in Other assets on the Consolidated Balance Sheet at June 30, 2019.

While Citi has, as a lessee, certain finance leases, such leases are not material to the Company's Consolidated Financial Statements.

Citi's lease arrangements that have not yet commenced as of June 30, 2019 and the Company's short-term lease costs, variable lease costs and finance lease costs, for the three and six months ended June 30, 2019 are not material to the Consolidated Financial Statements. Citi's operating cash outflows related to operating leases were approximately \$252 million and \$486 million for the three and six months ended June 30, 2019, respectively, while the future lease payments are as follows:

In millions of dollars	Operating leases			
As of June 30, 2019				
Remaining 2019	\$	436		
2020		716		
2021		592		
2022		464		
2023		355		
Thereafter		930		
Total future lease payments	\$	3,493		
Less imputed interest (based on weighted-average discount rate of 3.7%)		(391)		
Lease liability	\$	3,102		

### **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, 2019	December 31, 2018
Commercial and similar letters of credit	\$	928 \$	4,485	\$ 5,413	\$ 5,461
One- to four-family residential mortgages		2,367	1,783	4,150	2,671
Revolving open-end loans secured by one- to four-family residential properties		9,769	1,283	11,052	11,374
Commercial real estate, construction and land development		12,054	1,505	13,559	11,293
Credit card lines		613,905	94,579	708,484	696,007
Commercial and other consumer loan commitments		198,479	106,442	304,921	300,115
Other commitments and contingencies		3,033	415	3,448	3,321
Total	\$	840,535	\$ 210,492	\$ 1,051,027	\$ 1,030,242

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 borrowing agreements and unsettled repurchase and securities lending 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, 2019 and December 31, 2018, Citigroup had approximately \$52.5 billion and \$36.1 billion of unsettled reverse repurchase and securities borrowing agreements, and approximately \$61.1 billion and \$30.7 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 United States Securities and Exchange Commission (SEC), 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	June 30, 2019	December 31, 2018			
Cash and due from banks	\$ 2,624	\$	4,000		
Deposits with banks	29,519		27,208		
Total	\$ 32,143	\$	31,208		

### 23. CONTINGENCIES

The following information supplements and amends, as applicable, the disclosure in Note 23 to the Consolidated Financial Statements of Citigroup's First Quarter of 2019 Form 10-Q and Note 27 to the Consolidated Financial Statements of Citigroup's 2018 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, regulatory, and tax 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, 2019, Citigroup's estimate of the reasonably possible unaccrued loss for these matters was approximately \$1.2 billion in the aggregate.

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, regulatory, tax or other matters 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, regulators, or tax authorities 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 the litigation, regulatory, and tax matters disclosed herein, see Note 27 to the Consolidated Financial Statements of Citigroup's 2018 Annual Report on Form 10-K.

### Credit Crisis-Related Litigation and Other Matters

### Mortgage-Related Litigation and Other Matters

Mortgage-Backed Securities Trustee Actions: On June 7, 2019, plaintiffs withdrew their appeal and the case was dismissed in the federal court litigation captioned FIXED INCOME SHARES: SERIES M ET. Al. v. CITIBANK N.A. Additional information concerning this action is publicly available in court filings under the docket numbers 14-cv-9373 (S.D.N.Y.) (Furman, J.) and 18-1196 (2d Cir.).

On June 7, 2019, plaintiffs filed an unopposed motion to discontinue the action in the state court litigation captioned FIXED INCOME SHARES: SERIES M, ET AL. v. CITIBANK N.A. Additional information concerning this action is publicly available in court filings under the docket number 653891/2015 (N.Y. Sup. Ct.) (Borrok, J.).

### **Foreign Exchange Matters**

Regulatory Actions: On May 16, 2019, the European Commission (EC) announced a settlement with Citigroup and Citibank resolving its foreign exchange spot investigation. Citi was among six banks settling the EC's investigation. As part of the settlement, Citi agreed to pay a fine of 310,776,000 Euro.

On June 6, 2019, the Swiss Competition Commission (COMCO) announced a settlement with Citigroup for the same conduct covered by the EC settlement. Citigroup was among six banks settling COMCO's investigation. As part of the settlement, Citigroup agreed to pay a fine of 28,500,000 CHF.

Antitrust and Other Litigation: On June 11, 2019, in ALLIANZ GLOBAL INVESTORS, ET AL. v. BANK OF AMERICA CORPORATION, ET AL., plaintiffs filed a second amended complaint. Plaintiffs allege that defendants manipulated, and colluded to manipulate, the foreign exchange market. Plaintiffs assert Sherman Act and unjust enrichment claims and seek consequential and punitive damages and other forms of relief. Additional information concerning this action is publicly available in court filings under the docket number 18 Civ. 10364 (S.D.N.Y.) (Schofield, J.).

On May 29, 2019, in CONTANT, ET AL. v. BANK OF AMERICA CORPORATION, ET AL., plaintiffs filed an amended motion for preliminary approval of their settlement with Citigroup, Citibank, Citicorp, and Citigroup Global Markets Inc. (CGMI). Additional information concerning this

action is publicly available in court filings under the docket number 17 Civ. 3139 (S.D.N.Y.) (Schofield, J.).

On May 27, 2019, a putative class action captioned J WISBEY & ASSOCIATES PTY LTD v. UBS AG & ORS was filed in the Federal Court of Australia against Citibank and other defendants. Plaintiffs allege manipulation of foreign exchange markets in violation of Australian antitrust laws and seek compensatory damages and declaratory and injunctive relief. Additional information concerning this action is publicly available in court filings under the docket number VID567/2019.

On July 29, 2019, an application was made to the U.K.'s Competition Appeal Tribunal, captioned MICHAEL O'HIGGINS FX CLASS REPRESENTATIVE LIMITED v. BARCLAYS BANK PLC AND OTHERS, requesting permission to commence collective proceedings against Citibank and other defendants. The application seeks compensatory damages for losses alleged to have arisen from the actions at issue in the EC settlement referenced above.

# Interbank Offered Rates-Related Litigation and Other Matters

Antitrust and Other Litigation: On April 30, 2019, in 7 WEST 57th STREET REALTY CO. v. CITIGROUP, INC., ET AL., the United States Court of Appeals for the Second Circuit issued a summary order affirming the district court's dismissal of the action. Additional information concerning this action is publicly available in court filings under the docket numbers 13 Civ. 981 (S.D.N.Y.) (Gardephe, J.) and 18-1102 (2d Cir.).

On May 17, 2019, in SULLIVAN, ET AL. v. BARCLAYS PLC, ET AL., the court granted final approval of the class settlement between plaintiffs and Citigroup, Citibank, and other settling defendants. Additional information concerning this action is publicly available in court filings under the docket number 13 Civ. 2811 (S.D.N.Y.) (Castel, J.).

Following the court's March 25, 2019 ruling in IN RE LIBOR-BASED FINANCIAL INSTRUMENTS ANTITRUST LITIGATION, on July 1, 2019, the court ordered the stipulations of the parties regarding the status of claims asserted by the Federal Deposit Insurance Corporation, Federal Home Loan Mortgage Corporation, and National Credit Union Administration Board. In the stipulations, the parties agreed on the claims that remain viable, the claims that were dismissed, and the claims whose viability remains in dispute. Additional information concerning these actions is publicly available in court filings under the docket numbers 11 MD 2262 (S.D.N.Y.) (Buchwald, J.) and 17-1569 (2d Cir.).

On May 23, 2019, in SCS BANQUE DELUBAC & CIE v. CITIGROUP INC. ET AL., Banque Delubac filed an appeal before France's Court of Cassation challenging the Court of Appeal of Nîmes's ruling that neither the Commercial Court of Aubenas nor the Commercial Court of Marseille has jurisdiction over Banque Delubac's claims. Additional information concerning these actions is publicly available in court filings in the Court of Cassation under the docket number W1916931 (AROB), and the Commercial Court of Marseille under the docket number RG no. 2018F0750.

On July 1, 2019, in PUTNAM BANK v. INTERCONTINENTAL EXCHANGE, INC., ET AL., the

plaintiffs filed a consolidated amended complaint. Additional information relating to this action is publicly available in court filings under the docket number 19 Civ. 439 (S.D.N.Y.) (Daniels, J.).

### **Parmalat Litigation**

On May 23, 2019, the Milan Court of Appeal rejected Parmalat's appeal of the January 2018 decision of the Milan Commercial Court dismissing Parmalat's claim. On June 28, 2019, Parmalat filed its appeal with the Italian Supreme Court. Additional information concerning this action is publicly available in court filings under the docket number 20598/2019.

### **Sovereign Securities Matters**

Antitrust and Other Litigation: On May 23, 2019, in IN RE GSE BONDS ANTITRUST LITIGATION, plaintiffs filed a consolidated amended complaint against CGMI and numerous other defendants, on behalf of a purported class of persons or entities that transacted in bonds issued by United States government-sponsored entities with one or more of the defendants. Plaintiffs no longer assert any claims against Citigroup. Plaintiffs assert a claim under the Sherman Act based on defendants' alleged conspiracy to manipulate the market for such bonds, and seek treble damages and injunctive relief. On June 13, 2019, CGMI and other defendants moved to dismiss the consolidated amended complaint. Additional information relating to this action is publicly available in court filings under the docket number 19 Civ. 1704 (S.D.N.Y.) (Rakoff, J.).

### **Transaction Tax Matters**

Citigroup and Citibank are engaged in litigation or examinations with tax authorities in India and Germany concerning the payment of transaction taxes and other nonincome tax matters.

### Variable Rate Demand Obligation Litigation

On May 31, 2019, plaintiffs in the consolidated actions CITY OF PHILADELPHIA v. BANK OF AMERICA CORP., ET AL. and MAYOR AND CITY COUNCIL OF BALTIMORE v. BANK OF AMERICA CORP., ET AL. filed a consolidated complaint naming as defendants Citigroup, Citibank, CGMI, Citigroup Global Markets Limited, and numerous other industry participants. The consolidated complaint asserts violations of the Sherman Act, as well as claims for breach of contract, breach of fiduciary duty, and unjust enrichment, and seeks damages and injunctive relief based on allegations that defendants served as remarketing agents for municipal bonds called variable rate demand obligations (VRDOs) and colluded to set artificially high VRDO interest rates. Additional information concerning these actions is publicly available in court filings under the docket numbers 19-CV-1608 (S.D.N.Y.) (Furman, J.) and 19-CV-2667 (S.D.N.Y.) (Furman, J.).

### **Settlement Payments**

Payments required in settlement agreements described above have been made or are covered by existing litigation or other 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, 2019 and 2018, Condensed Consolidating Balance Sheet as of June 30, 2019 and December 31, 2018 and Condensed Consolidating Statement of Cash Flows for the six months ended June 30, 2019 and 2018 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.

	Three Months Ended June 30, 2019									
In millions of dollars	1	tigroup parent ompany		ССМНІ	Other Citigroup subsidiaries and eliminations		Consolidating adjustments			Citigroup nsolidated
Revenues									Π	
Dividends from subsidiaries	\$	5,049	\$	_	\$	_	\$	(5,049)	\$	_
Interest revenue				3,184		16,528		_		19,712
Interest revenue—intercompany		1,327		518		(1,845)		_		_
Interest expense		1,278		1,911		4,573		<u>—</u>		7,762
Interest expense—intercompany		202		1,152		(1,354)		_		_
Net interest revenue	\$	(153)	\$	639	\$	11,464	\$		\$	11,950
Commissions and fees	\$		\$	1,309	\$	1,572	\$	_	\$	2,881
Commissions and fees—intercompany		_		94		(94)		_		_
Principal transactions		(565)		1,142		1,297		_		1,874
Principal transactions—intercompany		791		(675)		(116)		_		_
Other income		(368)		498		1,923		_		2,053
Other income—intercompany		9		14		(23)		_		_
Total non-interest revenues	\$	(133)	\$	2,382	\$	4,559	\$	_	\$	6,808
Total revenues, net of interest expense	\$	4,763	\$	3,021	\$	16,023	\$	(5,049)	\$	18,758
Provisions for credit losses and for benefits and claims	\$	_	\$	_	\$	2,093	\$	_	\$	2,093
Operating expenses									Г	
Compensation and benefits	\$	4	\$	1,166	\$	4,211	\$	_	\$	5,381
Compensation and benefits—intercompany		17		_		(17)		_		_
Other operating		9		540		4,570		_		5,119
Other operating—intercompany		5		582		(587)		_		_
Total operating expenses	\$	35	\$	2,288	\$	8,177	\$	_	\$	10,500
Equity in undistributed income of subsidiaries	\$	(146)	\$	_	\$	_	\$	146	\$	
Income (loss) from continuing operations before income										
taxes	\$	4,582	\$	733	\$	•	\$	(4,903)	\$	6,165
Provision (benefit) for income taxes		(217)		8		1,582				1,373
Income (loss) from continuing operations	\$	4,799	\$	725	\$		\$	(4,903)	\$	4,792
Income from discontinued operations, net of taxes				_		17				17
Net income before attribution of noncontrolling interests	\$	4,799	\$	725	\$	4,188	\$	(4,903)	\$	4,809
Noncontrolling interests						10				10
Net income (loss)	\$	4,799	\$	725	\$	4,178	\$	(4,903)	\$	4,799
Comprehensive income				_						
Add: Other comprehensive income (loss)	\$	1,105	\$	(12)	\$	734	\$	(722)	\$	1,105
Total Citigroup comprehensive income (loss)	\$	5,904	\$	713	\$	4,912	\$	(5,625)	\$	5,904
Add: Other comprehensive income attributable to noncontrolling interests	\$	_	\$	_	\$	20	\$		\$	20
Add: Net income attributable to noncontrolling interests		_		_		10				10
Total comprehensive income (loss)	\$	5,904	\$	713	\$	4,942	\$	(5,625)	\$	5,934

Three Months Ended June 30, 2018										
In millions of dollars	Citigroup parent company CO		ССМНІ	ther Citigroup bsidiaries and eliminations	es and Consolidating			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		813		1,314		3,758		_		5,885
Interest expense—intercompany		716		896		(1,612)		_		_
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)		4,029		_		2,126
Principal transactions—intercompany		(472)		1,279		(807)		_		_
Other income		1,480		188		(101)		_		1,567
Other income—intercompany		(121)		(19)		140		_		_
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		(52)		578		4,734		_		5,260
Other operating—intercompany		13		693		(706)				
Total operating expenses	\$	(9)	\$	2,553	\$	8,168	\$	<u> </u>	\$	10,712
Equity in undistributed income of subsidiaries	\$	1,485	\$		\$		\$	(1,485)	\$	
Income (loss) from continuing operations before income taxes	\$	3,999	\$	247	\$	6,299	\$	(4,600)	\$	5,945
Provision (benefit) for income taxes		(491)		619		1,316		_		1,444
Income (loss) from continuing operations	\$	4,490	\$	(372)	\$	4,983	\$	(4,600)	\$	4,501
Income from discontinued operations, net of taxes		_		_		15		_		15
Net income (loss) before attribution of noncontrolling interests	\$	4,490	\$	(372)	\$	4,998	\$	(4,600)	\$	4,516
Noncontrolling interests		_		_		26				26
Net income (loss)	\$	4,490	\$	(372)	\$	4,972	\$	(4,600)	\$	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)	\$	10,373	\$	(9,929)	\$	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)	\$	10,342	\$	(9,929)	\$	1,584

Six Months Ended June 30, 2019										
In millions of dollars	parent su		ther Citigroup bsidiaries and eliminations	Consolidating adjustments			Citigroup nsolidated			
Revenues										
Dividends from subsidiaries	\$	14,216	\$	_	\$	_	\$	(14,216)	\$	_
Interest revenue		_		5,756		33,032		_		38,788
Interest revenue—intercompany		2,652		1,021		(3,673)		_		_
Interest expense		2,549		3,735		8,795		_		15,079
Interest expense—intercompany		514		2,227		(2,741)		_		_
Net interest revenue	\$	(411)	\$	815	\$	23,305	\$		\$	23,709
Commissions and fees	\$	_	\$	2,616	\$	3,191	\$	_	\$	5,807
Commissions and fees—intercompany		(1)		215		(214)		_		_
Principal transactions		(1,390)		108		5,960				4,678
Principal transactions—intercompany		1,238		1,361		(2,599)		_		_
Other income		(49)		597		2,592		_		3,140
Other income—intercompany		(25)		56		(31)		_		_
Total non-interest revenues	\$	(227)	\$	4,953	\$	8,899	\$	_	\$	13,625
Total revenues, net of interest expense	\$	13,578	\$	5,768	\$	32,204	\$	(14,216)	\$	37,334
Provisions for credit losses and for benefits and claims	\$	_	\$	_	\$	4,073	\$	_	\$	4,073
Operating expenses										
Compensation and benefits	\$	37	\$	2,450	\$	8,552	\$	_	\$	11,039
Compensation and benefits—intercompany		43		_		(43)		_		_
Other operating		14		1,093		8,938		_		10,045
Other operating—intercompany		10		1,164		(1,174)		_		_
Total operating expenses	\$	104	\$	4,707	\$	16,273	\$	_	\$	21,084
Equity in undistributed income of subsidiaries	\$	(4,349)	\$	_	\$	_	\$	4,349	\$	_
Income (loss) from continuing operations before income taxes	\$	9,125	\$	1,061	\$	11,858	\$	(9,867)	\$	12,177
Provision (benefit) for income taxes		(384)		148		2,884		_		2,648
Income (loss) from continuing operations	\$	9,509	\$	913	\$	8,974	\$	(9,867)	\$	9,529
Income from discontinued operations, net of taxes		_		_		15		_		15
Net income (loss) before attribution of noncontrolling interests	\$	9,509	\$	913	\$	8,989	\$	(9,867)	\$	9,544
Noncontrolling interests		_		_		35		_		35
Net income (loss)	\$	9,509	\$	913	\$	8,954	\$	(9,867)	\$	9,509
Comprehensive income										
Add: Other comprehensive income (loss)	\$	1,967	\$	(301)	\$	1,733	\$	(1,432)	\$	1,967
Total Citigroup comprehensive income (loss)	\$	11,476	\$	612	\$	10,687	\$	(11,299)	\$	11,476
Add: Other comprehensive income attributable to noncontrolling interests	\$	_	\$	_	\$	7	\$	_	\$	7
Add: Net income attributable to noncontrolling interests		_		_		35		_		35
Total comprehensive income (loss)	\$	11,476	\$	612	\$	10,729	\$	(11,299)	\$	11,518

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	Ci	tigroup		, , , , , , , , , , , , , , , , , , ,	ther Citigroup					
In millions of dollars	parent company		(	CGMHI	bsidiaries 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	5,319		_		5,368	
Principal transactions—intercompany		(858)		1,471	(613)		_		_	
Other income		552		341	2,102		_		2,995	
Other income—intercompany		(66)		31	35		_		_	
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	\$	1,039	\$		\$ 	\$	(1,039)	\$		
Income (loss) from continuing operations before income taxes	\$	8,372	\$	677	\$ 12,725	\$	(9,739)	\$	12,035	
Provision (benefit) for income taxes		(738)		684	2,939				2,885	
Income (loss) from continuing operations	\$	9,110	\$	(7)	\$ 9,786	\$	(9,739)	\$	9,150	
Income from discontinued operations, net of taxes		_		_	8				8	
Net income (loss) before attribution of noncontrolling interests	\$	9,110	\$	(7)	\$ 9,794	\$	(9,739)	\$	9,158	
Noncontrolling interests		_		_	48		_		48	
Net income (loss)	\$	9,110	\$	(7)	\$ 9,746	\$	(9,739)	\$	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	\$ 11,991	\$	(11,994)	\$	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	\$ 11,996	\$	(11,994)	\$	6,292	

### **Condensed Consolidating Balance Sheet**

June 30, 2019 Other Citigroup Citigroup subsidiaries Consolidating Citigroup parent and eliminations consolidated In millions of dollars company **CGMHI** adjustments Assets \$ \$ 689 24,308 24,997 Cash and due from banks Cash and due from banks—intercompany 15 3,790 (3,805)Deposits with banks 4,420 173,826 178,246 Deposits with banks—intercompany 3,000 5,701 (8,701)55,253 Securities borrowed and purchased under resale agreements 204,516 259,769 Securities borrowed and purchased under resale agreements— 18,767 (18,767)intercompany Trading account assets 323 175,750 130,758 306,831 Trading account assets—intercompany 1,682 2,034 (3,716)Investments 1 609 349,092 349,702 Loans, net of unearned income 1,955 688,670 686,715 Loans, net of unearned income—intercompany Allowance for loan losses (12,466)(12,466)Total loans, net \$ \$ 1,955 \$ 674,249 676,204 146,408 \$ Advances to subsidiaries \$ (146,408)202,418 (202,418)Investments in subsidiaries Other assets<sup>(1)</sup> 11,700 70,341 110,436 192,477 Other assets—intercompany 3,726 51,954 (55,680)Total assets \$ 369,273 540,526 1,280,845 (202,418)1,988,226 Liabilities and equity \$ \$ \$ 1,045,607 Deposits \$ 1,045,607 Deposits-intercompany Securities loaned and sold under repurchase agreements 155,278 25,855 181,133 Securities loaned and sold under repurchase agreements-42,564 (42,564)intercompany 93,842 136,294 Trading account liabilities 6 42,446 Trading account liabilities—intercompany 3,159 1,832 (4,991)244 8,633 33,565 42,442 Short-term borrowings Short-term borrowings—intercompany 20,190 (20,190)152,141 34,394 Long-term debt 65,654 252,189 72,039 Long-term debt—intercompany (72,039)Advances from subsidiaries 12,887 (12,887)Other liabilities 3,243 68,497 60,711 132,451 Other liabilities—intercompany 234 9,978 (10,212)197,359 33,279 169,890 (202,418)198,110 Stockholders' equity Total liabilities and equity 369,273 540,526 1,280,845 (202,418)1,988,226

<sup>(1)</sup> Other assets for Citigroup parent company at June 30, 2019 included \$51.9 billion of placements to Citibank and its branches, of which \$26.7 billion had a remaining term of less than 30 days.

# **Condensed Consolidating Balance Sheet**

					Dec	cember 31, 2	018	}		
In millions of dollars		Citigroup parent ompany	(	ССССССССССССССССССССССССССССССССССССССС	su	Other Citigroup Ibsidiaries and iminations		onsolidating	(	Citigroup nsolidated
Assets		ompany		JOMIN	CII			lujustinents	T	<u> </u>
Cash and due from banks	\$	1	\$	689	\$	22,955	\$	_	\$	23,645
Cash and due from banks—intercompany	Ψ	19	Ψ	3,545	Ψ	(3,564)	Ψ	<u></u>	Ψ	25,045
Deposits with banks				4,915		159,545		_		164,460
Deposits with banks—intercompany		3,000		6,528		(9,528)		<u></u>		101,100
Securities borrowed and purchased under resale agreements		5,000		212,720		57,964		_		270,684
Securities borrowed and purchased under resale agreements—intercompany		_		20,074		(20,074)		_		
Trading account assets		302		146,233		109,582		_		256,117
Trading account assets—intercompany		627		1,728		(2,355)		_		_
Investments		7		224		358,376		_		358,607
Loans, net of unearned income		_		1,292		682,904		_		684,196
Loans, net of unearned income—intercompany		_						_		
Allowance for loan losses		_		_		(12,315)		<u> </u>		(12,315)
Total loans, net	\$	_	\$	1,292	\$	670,589	\$	_	\$	671,881
Advances to subsidiaries	\$	143,119	\$	_	\$	(143,119)	\$		\$	_
Investments in subsidiaries		205,337		_		_		(205,337)		_
Other assets <sup>(1)</sup>		9,861		59,734		102,394		_		171,989
Other assets—intercompany		3,037		44,255		(47,292)		_		_
Total assets	\$	365,310	\$	501,937	\$	1,255,473	\$	(205,337)	\$	1,917,383
Liabilities and equity										
Deposits	\$	_	\$	_	\$	1,013,170	\$		\$	1,013,170
Deposits—intercompany		_		_		_		_		_
Securities loaned and sold under repurchase agreements		_		155,830		21,938		_		177,768
Securities loaned and sold under repurchase agreements—intercompany		_		21,109		(21,109)		_		_
Trading account liabilities		1		95,571		48,733		_		144,305
Trading account liabilities—intercompany		410		1,398		(1,808)		_		_
Short-term borrowings		207		3,656		28,483		_		32,346
Short-term borrowings—intercompany		_		11,343		(11,343)		_		_
Long-term debt		143,768		25,986		62,245		_		231,999
Long-term debt—intercompany		_		73,884		(73,884)		_		_
Advances from subsidiaries		21,471		_		(21,471)		_		_
Other liabilities		3,010		66,732		50,979		_		120,721
Other liabilities—intercompany		223		13,763		(13,986)		_		_
Stockholders' equity		196,220		32,665		173,526		(205,337)		197,074
Total liabilities and equity	\$	365,310	\$	501,937	\$	1,255,473	\$	(205,337)	\$	1,917,383

<sup>(1)</sup> Other assets for Citigroup parent company at December 31, 2018 included \$34.7 billion of placements to Citibank and its branches, of which \$22.4 billion had a remaining term of less than 30 days.

# **Condensed Consolidating Statement of Cash Flows**

	Six Months Ended June 30, 2019								
Le william of Jellens	Other Citigroup Subsidiaries parent company CGMHI Cother Citigroup subsidiaries and company			Consolidating adjustments	Citigroup consolidated				
In millions of dollars  Net cash provided by (used in) operating activities of		опірану —	_				aujustinents	1	<u>IIsoliuateu</u>
continuing operations	\$	17,500	\$	(39,793)	\$	(15,463)	<u> </u>	\$	(37,756)
Cash flows from investing activities of continuing operations									
Purchases of investments	\$	_	\$	_	\$	(118,132)	<b>s</b> —	\$	(118,132)
Proceeds from sales of investments		4		_		63,591	_		63,595
Proceeds from maturities of investments		_		_		57,684			57,684
Change in loans		_		_		(7,803)	_		(7,803)
Proceeds from sales and securitizations of loans		_				2,249			2,249
Change in securities borrowed and purchased under agreements to resell		_		9,511		1,404	_		10,915
Changes in investments and advances—intercompany		(3,336)		(10,607)		13,943			_
Other investing activities		_		(32)		(3,178)	_		(3,210)
Net cash provided by (used in) investing activities of continuing operations	\$	(3,332)	\$	(1,128)	\$	9,758	s —	\$	5,298
Cash flows from financing activities of continuing operations									
Dividends paid	\$	(2,650)	\$	_	\$	_	<b>s</b> —	\$	(2,650)
Redemption of preferred stock		(480)		_		_	_		(480)
Treasury stock acquired		(7,518)		_		_	_		(7,518)
Proceeds (repayments) from issuance of long-term debt, net		5,418		10,817		(2,814)	_		13,421
Proceeds (repayments) from issuance of long-term debt—intercompany, net		_		(3,941)		3,941	_		_
Change in deposits		_		_		32,437	_		32,437
Change in securities loaned and sold under agreements to repurchase		_		20,903		(17,538)	_		3,365
Change in short-term borrowings		_		4,977		5,119	_		10,096
Net change in short-term borrowings and other advances—intercompany		(8,584)		7,088		1,496	_		_
Other financing activities		(359)		_		_	_		(359)
Net cash provided by (used in) financing activities of continuing operations	\$	(14,173)	\$	39,844	\$	22,641	s —	\$	48,312
Effect of exchange rate changes on cash and due from banks	\$	_	\$	_	\$	(716)	s —	\$	(716)
Change in cash and due from banks and deposits with banks	\$	(5)	\$	(1,077)	\$	16,220	s —	\$	15,138
Cash and due from banks and deposits with banks at beginning of period		3,020		15,677		169,408	_		188,105
Cash and due from banks and deposits with banks at end of period	<b>\$</b>	3,015	\$	14,600	\$	185,628	s —	\$	203,243
Cash and due from banks	\$	15	\$	4,479	\$	20,503	s —	\$	24,997
Deposits with banks		3,000		10,121		165,125			178,246
Cash and due from banks and deposits with banks at end of period	\$	3,015	\$	14,600	\$	185,628	s –	\$	203,243
Supplemental disclosure of cash flow information for continuing operations									
Cash paid during the year for income taxes	\$	154	\$	119	\$	2,541	<b>s</b> —	\$	2,814
Cash paid during the year for interest		1,753		6,577		5,670	_		14,000
Non-cash investing activities									
Transfers to loans HFS from loans	\$	_	\$	_	\$	3,600	s —	\$	3,600

# **Condensed Consolidating Statement of Cash Flows**

	Six Months Ended June 30, 2018									
In millions of dollars	ŗ	tigroup parent mpany	(	ССССССССССССССССССССССССССССССССССССССС	su	Other litigroup bsidiaries and minations		olidating stments		itigroup isolidated
Net cash provided by (used in) 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)	\$	_	\$	(73,916)	\$	_	\$	(81,871)
Proceeds from sales of investments		7,634		_		34,174		_		41,808
Proceeds from maturities of investments		_				44,846		_		44,846
Change in loans		_		_		(10,132)		_		(10,132)
Proceeds from sales and securitizations of loans		_		_		3,217		_		3,217
Change in securities borrowed and purchased under agreements to resell		_		(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 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 securities loaned and sold under agreements to repurchase		_		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 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
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

### 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 common stock repurchases:

In millions, except per share amounts	Total shares purchased	Average price paid per share	Approximate dollar value of shares that may yet be purchased under the plan or programs
April 2019			
Open market repurchases <sup>(1)</sup>	14.4	\$ 67.51	\$ 2,606
Employee transactions <sup>(2)</sup>	_	_	N/A
May 2019			
Open market repurchases <sup>(1)</sup>	22.8	66.05	1,100
Employee transactions <sup>(2)</sup>	<del>_</del>	_	N/A
June 2019			
Open market repurchases <sup>(1)</sup>	16.4	67.03	_
Employee transactions <sup>(2)</sup>	_	_	N/A
Total for 2Q19 and remaining program balance as of June 30, 2019	53.6	\$ 66.74	s —

- (1) Represents repurchases under the \$17.6 billion 2018 common stock repurchase program (2018 Repurchase Program) that was approved by Citigroup's Board of Directors and announced on June 28, 2018. The 2018 Repurchase Program was part of the planned capital actions included by Citi as part of the 2018 Comprehensive Capital Analysis and Review (CCAR). Shares repurchased under the 2018 Repurchase Program were added to treasury stock. The 2018 Repurchase Program expired on June 30, 2019. On June 27, 2019, Citigroup announced a \$17.1 billion common stock repurchase program during the four quarters beginning in the third quarter of 2019 (2019 Repurchase Program), which was part of the planned capital actions included by Citi as part of the 2019 CCAR. The 2019 Repurchase Program expires on June 30, 2020. Shares repurchased under the 2019 Repurchase Program will be added to treasury stock.
- (2) Consisted of shares added to treasury stock related to (i) certain activity on employee stock option program 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—Stress Testing Component of Capital Planning" and "Capital Resources—Regulatory Capital Standards Developments" and "Risk Factors—Strategic Risks" in Citi's 2018 Annual Report on Form 10-K.

On June 27, 2019, Citi announced that the Federal Reserve Board did not object to its planned capital actions as part of the 2019 CCAR. In addition to the 2019 Repurchase Program discussed in the footnotes to the table above, the planned capital actions included an increase of Citi's quarterly common stock dividend from \$0.45 to \$0.51 per share over the four quarters beginning with the third quarter of 2019 (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 2018 Annual Report on Form 10-K.

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### **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 1st day of August, 2019.

### CITIGROUP INC.

(Registrant)

By /s/ Mark A. L. Mason Mark A. L. Mason 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
3.01	Restated Certificate of Incorporation of the Company, as in effect on the date hereof, incorporated by reference to Exhibit 3.01 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2019 filed on April 30, 2019 (File No. 1-9924).
10.01*	Citigroup 2019 Stock Incentive Plan (effective April 16, 2019), incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed on April 17, 2019 (File No. 1-09924).
<u>31.01+</u>	Certification of principal executive officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
<u>31.02+</u>	Certification of principal financial officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
<u>32.01+</u>	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
99.01+	Securities registered pursuant to Section 12(b) of the Securities Exchange Act of 1934 formatted in Inline XBRL.
101.01+	Financial statements from the Quarterly Report on Form 10-Q of the Company for the quarter ended June 30, 2019, filed on August 1, 2019, formatted in Inline XBRL: (i) the Consolidated Statement of Income, (ii) the Consolidated Balance Sheet, (iii) the Consolidated Statement of Changes in Shareholders' Equity, (iv) the Consolidated Statement of Cash Flows and (v) the Notes to the Consolidated Financial Statements.
104	Form 10-Q Cover Page Inline XBRL: The Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2019 Cover Page Inline XBRL data file does not appear in Exhibit 104 because its Inline XBRL tagging is embedded within the Form 10-Q Inline XBRL document.

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.

<sup>\*</sup> Denotes a management contract or compensatory plan or arrangement.

<sup>+</sup> Filed herewith.