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

FORM 10-Q

(Mark One)

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

For the quarterly period ended March 31, 2020

OR

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

For the transition period from to

Commission file number 1-9924

Citigroup Inc.
(Exact name of registrant as specified in its charter)

Delaware	**52-1568099**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
388 Greenwich Street, New York NY	**10013**
(Address of principal executive offices)	(Zip code)

(212) 559-1000
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Securities Exchange Act of 1934 formatted in Inline XBRL: See Exhibit 99.01

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

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

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

Large accelerated filer ☒	**Accelerated filer** ☐	**Non-accelerated filer** ☐	**Smaller reporting company** ☐
			Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. Yes ☐

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

Number of shares of Citigroup Inc. common stock outstanding on March 31, 2020: 2,081,808,009

Available on the web at www.citigroup.com

CITIGROUP'S FIRST QUARTER 2020—FORM 10-Q

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OVERVIEW

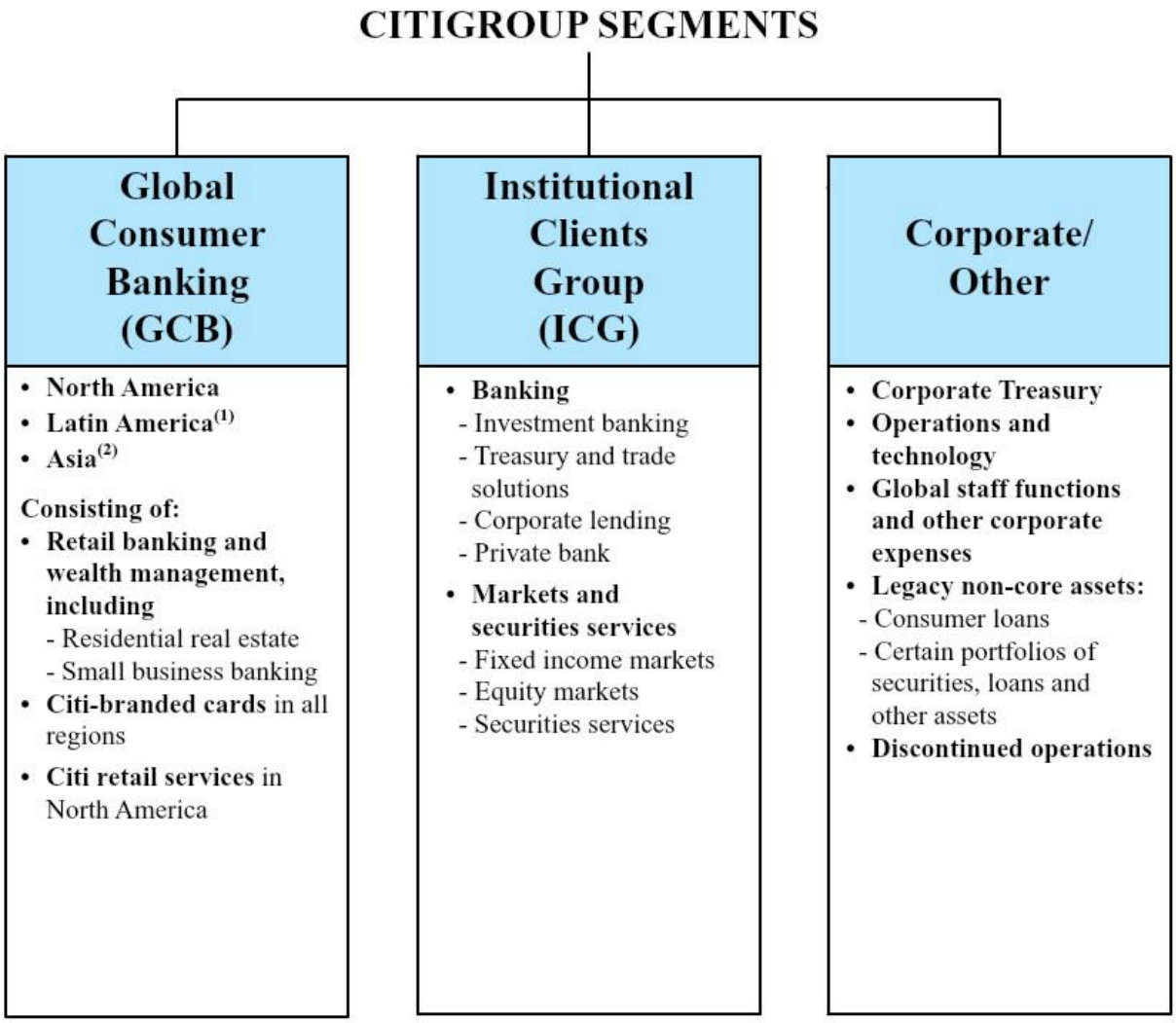
This Quarterly Report on Form 10-Q should be read in conjunction with Citigroup's Annual Report on Form 10-K for the year ended December 31, 2019 (2019 Annual Report on Form 10-K).

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

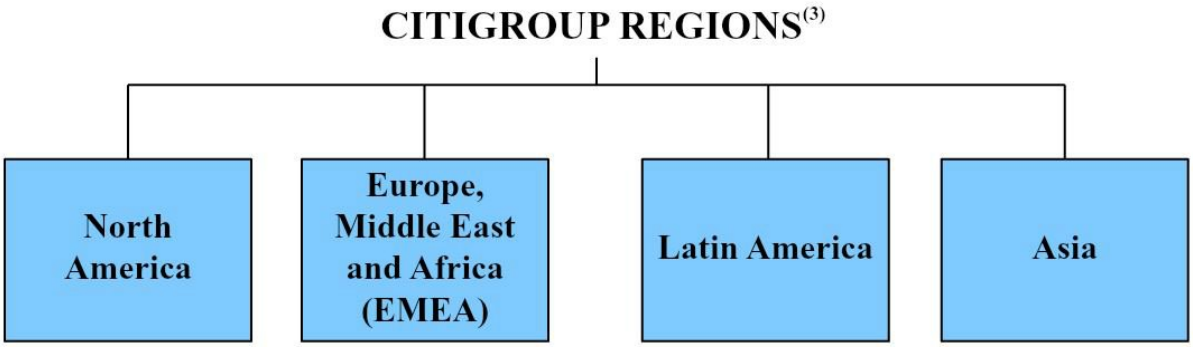
Certain reclassifications, including a realignment of certain businesses, have been made to the prior periods' financial statements and disclosures to conform to the current period's presentation. For additional information on certain recent reclassifications, see Note 1 to the Consolidated Financial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

First Quarter of 2020—Results Demonstrated Financial Strength and Operational Resilience in a Challenging Environment

As described further throughout this Executive Summary, during the first quarter of 2020, Citi demonstrated financial strength and operational resilience, despite a significant deterioration in economic conditions late in the quarter due to the rapidly evolving COVID-19 pandemic and while protecting the health, safety and welfare of its employees and supporting its customers and communities:

- Citi's earnings were significantly reduced by higher reserves taken during the quarter. Citi built approximately $4.9 billion of net loan loss reserves, reflecting the impact of changes in Citi's economic outlook on estimated lifetime losses on the March 31, 2020 portfolios under the new Current Expected Credit Losses (CECL) standard due to the COVID-19 pandemic. Despite the challenging environment, Citi had solid revenue growth in *Institutional Clients Group (ICG)*, reflecting strong performance in fixed income and equity markets, as well as mark-to-market gains on loan hedges, partially offset by a decline in treasury and trade solutions, due to the impact of lower interest rates and lower corporate lending revenues.
- Citi also had revenue growth in *Global Consumer Banking* (*GCB)*, as solid performance in Citi-branded cards in *North America GCB* was partially offset by lower revenues in *Asia GCB*, reflecting the initial impact of the COVID-19 pandemic on customer behavior.
- Citi demonstrated good expense discipline, resulting in expenses that were largely unchanged from the prior year, as well as positive operating leverage and 27% improvement in operating margin.
- Citi maintained credit discipline, while supporting clients.
- Citi had broad-based loan and deposit growth across *GCB* and *ICG*.
- Citi returned $4.0 billion of capital to its shareholders in the form of common stock repurchases and dividends; Citi repurchased approximately 41 million common shares, contributing to a 10% reduction in average outstanding common shares from the prior year. As previously announced, in March 2020, Citi along with other major U.S. banks took the proactive step to suspend share repurchases to further bolster capital and liquidity positions, in order to allow additional capacity to support clients during this time of uncertainty.
- Citi continues to support its customers and clients as well as the broader economy during this challenging time, even as roughly 80% of its workforce is working remotely, and maintained strong regulatory capital and liquidity metrics.

For further information on Citi's measures to support its employees, customers and clients in response to the COVID-19 pandemic, see "COVID-19 Overview" below.

As a result of the COVID-19 pandemic, the economic outlook for 2020 has been lowered substantially, and continued uncertainties around COVID-19, including, among others, the length and severity of the economic and public health impacts, have created a much more volatile operating environment that could negatively impact Citi's businesses and future results during the remainder of 2020. For a discussion of risks and uncertainties related to the pandemic, see "COVID-19 Overview," "Risk Factors" and each respective business's results of operations below. For a discussion of additional risks and uncertainties that could affect Citi, see "Forward-Looking Statements" below and each respective business's results of operations and "Managing Global Risk" and "Risk Factors" in Citi's 2019 Annual Report on Form 10-K.

First Quarter of 2020 Results Summary

Citigroup

Citigroup reported net income of $2.5 billion, or $1.05 per share, compared to net income of $4.7 billion, or $1.87 per share, in the prior-year period. Net income declined 46%, primarily driven by higher loan loss reserves, reflecting the impact of changes in Citi's economic outlook on estimated lifetime losses under CECL due to the COVID-19 pandemic. Earnings per share decreased 44%, as the decline in net income was partially offset by a 10% reduction in average diluted shares outstanding.

Citigroup revenues of $20.7 billion in the first quarter of 2020 increased 12% from the prior-year period, primarily reflecting higher revenues in *ICG*, including higher revenues in fixed income and equity markets as well as the benefit of mark-to-market gains on loan hedges.

Citigroup's end-of-period loans increased 6% to $721 billion. Excluding the impact of FX translation, Citigroup's end-of-period loans grew 8%, as 9% aggregate growth in *ICG* and *GCB* was partially offset by the continued wind-down of legacy assets in *Corporate/Other*. Citigroup's end-of-period deposits increased 15% to $1.2 trillion. Excluding the impact of FX translation, Citigroup's end-of-period deposits increased 17%, primarily driven by 21% growth in *ICG* and 8% growth in *GCB*. (Citi's results of operations excluding the impact of FX translation are non-GAAP financial measures.)

Expenses

Citigroup operating expenses of $10.6 billion were largely unchanged versus the prior-year period, as continued investments in the franchise, higher compensation and volume-related expenses were offset by efficiency savings and the wind-down of legacy assets. Year-over-year, *GCB* and *Corporate/Other* operating expenses declined 1% and 24%, respectively, while *ICG* expenses increased 3%.

Cost of Credit

Citi's total provisions for credit losses and for benefits and claims of $7.0 billion compared to $2.0 billion in the prior-year period. The increase reflected the loan loss reserve builds related to the impact of changes in Citi's economic outlook on estimated lifetime losses on the March 31, 2020 portfolios under the CECL standard due to the COVID-19 pandemic.

Net credit losses of $2.1 billion increased 8%. Consumer net credit losses of $2.0 billion increased 6%, primarily reflecting volume growth and seasoning in the *North America* cards portfolios. Corporate net credit losses increased to $127 million from $79 million in the prior-year period.

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 ratio was 11.2% as of March 31, 2020, based on the Basel III Advanced Approaches framework for determining risk-weighted assets, compared to 11.9% as of March 31, 2019, based on the Basel III Standardized Approach for determining risk-weighted assets. The decline in the ratio primarily reflected an increase in risk-weighted assets, as Citi further supported its clients during the quarter, as well as increased market volatility and the widening of credit spreads. Citigroup's Supplementary Leverage ratio as of March 31, 2020 was 6.0%, compared to 6.4% as of March 31, 2019. For additional information on Citi's capital ratios and related components, see "Capital Resources" below.

Global Consumer Banking

GCB net loss of $0.8 billion, compared to income of $1.3 billion in the prior-year period, reflected higher cost of credit, partially offset by higher revenues and lower expenses. *GCB* operating expenses of $4.4 billion decreased 1%. Excluding the impact of FX translation, expenses were largely unchanged, as efficiency savings were offset by continued investments in the franchise and volume-driven growth.

GCB revenues of $8.2 billion increased 1%. Excluding the impact of FX translation, revenues increased 2%, as growth in *North America GCB* was partially offset by lower revenues in *Asia GCB*, reflecting the early impact of the COVID-19 pandemic on customer behavior. *North America GCB* revenues of $5.2 billion increased 4%, primarily driven by growth in Citi-branded cards and Citi retail services, while retail banking revenues were largely unchanged. In *North America GCB*, Citi-branded cards revenues of $2.3 billion increased 7%, reflecting volume growth as well as spread expansion. Citi retail services revenues of $1.7 billion increased 4%, reflecting a reduction in partner payments and higher average loans. Retail banking revenues of $1.1 billion were largely unchanged versus the prior-year period, as deposit growth and higher mortgage revenues were offset by lower deposit spreads.

North America GCB average deposits of $161 billion increased 8% year-over-year, average retail banking loans of $51 billion increased 6% year-over-year and assets under management of $62 billion declined 6% (including the impact of market movements). Average Citi-branded card loans of $92 billion increased 5%, while Citi-branded card purchase sales of $86 billion increased 3%, including pressure during the latter part of March, driven by reduced client activity related to the COVID-19 pandemic. Average Citi retail services loans of $51 billion increased 1%, while Citi retail services purchase sales of $18 billion decreased 3%, including pressure during the latter part of March, driven by reduced client activity and store closures related to COVID-19. For additional information on the results of operations of *North America GCB* for the first quarter of 2020, 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 $3.0 billion declined 5% versus the prior-year period. Excluding the impact of FX translation, international *GCB* revenues declined 1%. On this basis, *Latin America GCB* revenues were largely unchanged. Excluding the impact of a residual gain in the prior-year period on the sale of an asset management business, revenues increased 3%, driven by deposit growth and improved spreads in cards. *Asia GCB* revenues decreased 1%, as growth in fees on investments and foreign currency transactions was more than offset by lower revenues in cards, reflecting lower sales volumes due to COVID-19. For additional information on the results of operations of *Latin America GCB* and *Asia GCB* for the first quarter of 2020, 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 $129 billion increased 8%, average retail banking loans of $73 billion increased 6%, assets under management of $83 billion decreased 6% (including the impact of market movements), average card loans of $24 billion increased 1% and card purchase sales of $24 billion decreased 4%, all excluding the impact of FX translation.

Institutional Clients Group

ICG net income of $3.6 billion increased 7%, primarily driven by higher revenues, partially offset by higher cost of credit and expenses. *ICG* operating expenses increased 3% to $5.8 billion, primarily driven by higher compensation costs, continued investments and volume-driven growth, partially offset by efficiency savings.

ICG revenues of $12.5 billion increased 25%, reflecting a 13% increase in *Banking* revenues and a 37% increase in *Markets and securities services* revenues. The increase in *Banking* revenues included the impact of $816 million of gains on loan hedges related to corporate lending and the private bank, compared to losses of $231 million related to corporate lending in the prior-year period.

Banking revenues of $5.2 billion (excluding the impact of gains (losses) on loan hedges) decreased 6%, as declines in both corporate lending and treasury and trade solutions were partially offset by higher revenues in the private bank. Investment banking revenues of $1.4 billion were largely unchanged, as growth in advisory and equity underwriting was offset by a decline in debt underwriting. Advisory revenues

increased 2% to $386 million, equity underwriting revenues increased 5% to $180 million and debt underwriting revenues declined 2% to $784 million.

Treasury and trade solutions revenues of $2.4 billion declined 5%, and 2% excluding the impact of FX translation, as strong client engagement and growth in deposits were more than offset by the impact of lower interest rates. Private bank revenues of $949 million increased 8% (excluding the impact of gains (losses) on loan hedges), driven by higher lending and deposit volumes as well as increased capital markets activity, partially offset by lower deposit spreads. Corporate lending revenues of $1.3 billion increased from $518 million in the prior-year period. Excluding the impact of gains (losses) on loan hedges, corporate lending revenues decreased 40%, primarily reflecting an adjustment to the residual value of a lease financing, as well as other marks on the portfolio.

Markets and securities services revenues of $6.5 billion increased 37%. Fixed income markets revenues of $4.8 billion increased 39%, reflecting strength in rates and currencies and commodities. Equity markets revenues of $1.2 billion increased 39%, with strong performance in derivatives, including an increase in client activity, due to higher volatility. Securities services revenues of $645 million increased 1%, and 5% excluding the impact of FX translation, reflecting higher client activity and deposit volumes, partially offset by lower spreads. For additional information on the results of operations of *ICG* for the first quarter of 2020, see "*Institutional Clients Group*" below.

Corporate/Other

Corporate/Other net loss was $351 million in the first quarter of 2020, compared to a net loss of $11 million in the prior-year period, driven by higher cost of credit, reflecting loan loss reserves on Citi's residual legacy portfolio under the CECL standard, and lower revenues, partially offset by a decrease in expenses. Operating expenses of $416 million declined 24%, reflecting the continued wind-down of legacy assets, partially offset by higher infrastructure costs as well as incremental costs associated with COVID-19, including special compensation awarded to 75,000 employees most directly impacted by the pandemic. *Corporate/Other* revenues of $73 million declined 84%, reflecting the wind-down of legacy assets, the impact of lower interest rates and marks on legacy securities. For additional information on the results of operations of *Corporate/Other* for the first quarter of 2020, see "*Corporate/Other*" below.

COVID-19 OVERVIEW

In addition to the widespread public health implications, the emergence of the COVID-19 pandemic has had an extraordinary impact on macroeconomic conditions in the U.S. and around the world. The health and safety of Citi's employees and their families, as well as Citi's customers, clients and communities it serves, are of the utmost importance. As this health crisis has unfolded, Citi has continued to take proactive measures to preserve their well-being while maintaining its ability to serve customers and clients.

During the pandemic, Citi remained well positioned from a capital and liquidity perspective, and has maintained strong business operations. At quarter end, Citi had a CET1 Capital ratio of 11.2%, a Supplementary Leverage Ratio of 6.0% and a Liquidity Coverage Ratio of 115%, with $840 billion of available liquidity (see "Managing Global Risk—Liquidity Risk" below). As discussed below and elsewhere throughout this Form 10-Q, Citi's businesses, results of operations and financial condition have been impacted by economic dislocations caused by the COVID-19 pandemic. Governments and central banks globally have taken a series of aggressive actions to support the economy and mitigate the systemic impacts of the pandemic, and Citi continues to proactively assess and utilize these measures where appropriate.

Citi's COVID-19 Response—Supporting Employees, Customers and Communities

Citi Employees

- Approximately 80% of Citi employees around the world are working remotely.
- Citi is providing more than 75,000 employees globally with a special compensation award to help ease the financial burden of the crisis. This includes a $1,000 special payment to eligible colleagues in the U.S. Outside the U.S., the amount of the award is based on local market compensation levels.
- Employees who cannot work due to COVID-19-related challenges continue to be compensated.
- Clinical staff have been working to support our employees.
- Extra cleaning protocols and protective supplies have been put in place at Citi sites, branches and ATMs, and staff have been educated on preventive measures.

Global Consumer Banking Customers

North America GCB: In the U.S., Citi was one of the first banks to announce assistance measures for impacted customers and has since expanded its support. These measures include:

- Credit Cards: Waivers on late fees and deferral of minimum payments for two payment cycles.
- Retail Banking / Small Businesses: Waivers on fees including non-Citi ATM fees and monthly service fees.

- Mortgages: In addition to extending existing treatment options, Citi is suspending foreclosures for 60 days.
- Small Businesses: Citi is participating in the Small Business Administration's (SBA) Paycheck Protection Program (see "Small Business Administration's Paycheck Protection Program" below).

Asia GCB: Citi`s assistance measures include a wide array of programs for different types of products, providing short- and medium-term relief to customers in various countries. In certain countries, the local regulators mandated relief programs to counter the economic stress as a result of the COVID-19 outbreak. Relief has been provided to credit card, mortgage, margin product and personal loan customers in the form of:

- Payment deferrals for revolving products and overdrafts of up to 3 months
- Payment deferrals for installment loans up to 12 months
- Interest and fee waivers
- Reduction in minimum due payments

Latin America GCB: In Mexico, assistance measures for impacted credit card, mortgage, personal loan, payroll loan and small business banking customers in the form of:

- Deferral of minimum payments for up to 6 months
- Temporary interest rate reductions
- Waivers on certain fees

Although some of Citi`s customer relief programs were introduced recently, programs in effect during the first quarter totaled approximately $1 billion of loan balances as of quarter end, excluding troubled debt restructurings (see "Troubled Debt Restructuring (TDR) Relief" below). These loan balances are expected to increase in the second quarter of 2020, as many programs were introduced toward the end of the first quarter of 2020 and have subsequently expanded. Loan balances for programs in effect during the first quarter were primarily concentrated in *Asia GCB*.

Corporate Clients

- Citi is prudently extending credit to corporate clients to support their liquidity objectives and business needs.
- Clients have drawn approximately $25 billion in financing on previously extended credit facilities.
- More than $21 billion of new credit facilities have been approved.
- Citi facilitated $292 billion of clients' new debt issuances in the investment-grade debt markets during the first quarter of 2020.
- Citi is leveraging digital capabilities to assist clients with supply chain management and liquidity optimization.

Communities

Citi, the Citi Foundation and Citi colleagues are supporting those immediately impacted by the crisis through a variety of efforts. Citi is donating its net profits earned through its participation in the Paycheck Protection Program to the Citi Foundation. The Citi Foundation will use the funds to expand its COVID-19 U.S. Small Business Relief Program to support efforts by Community Development Financial Institutions to serve small, diverse entrepreneurs who may not fully qualify for federal government stimulus funding. To date, Citi and the Citi Foundation have committed over $65 million in support of COVID-19 community relief efforts. Citi has also launched an employee matching campaign to further extend employee contributions in support of COVID-19 relief efforts. Citi has also organized donations of Personal Protective Equipment (PPE) to healthcare workers and is facilitating other assistance measures such as meals for food banks.

Citi's Management of COVID-19 Risks

Citi has responded on multiple fronts to the recent challenges of the COVID-19 pandemic to support the ongoing needs of its customers and clients, while concurrently maintaining safety and soundness standards throughout the crisis.

Citi's dedicated continuity of business and crisis management groups are managing Citi's protocols in response to the COVID-19 pandemic. These protocols provide for the safety and well-being of Citi's staff, while continuing to maintain high levels of client servicing across all of the markets in which Citi operates. These protocols address the prioritization of critical processing; ability of staff and third parties to support these processes from remote work locations; deployment of new hardware to support technology needs; and ongoing monitoring to assess controls and service levels. Planning for Citi's return-to-office strategy is ongoing.

Citi's organizational response to the COVID-19 pandemic was governed by Citi's Executive Management Team and driven through regional task forces that were deployed initially in *Asia* and subsequently in *EMEA*, *North America* and *Latin America* as the pandemic spread. Led by regional CEOs and their management teams, these groups focused on COVID-19 pandemic responses, the implementation of continuity of business plans, locational and staffing strategies and responses to customer and client needs.

Throughout the crisis, Citi has also worked closely with U.S. authorities and host governments on implementing immediate policy responses and financial assistance structures to mitigate the systemic impacts of the pandemic. Citi also continues to engage closely with customers and clients, regulators and other relevant stakeholders to assure alignment on all COVID-19 pandemic-related matters.

Citi expects that overall revenues in the near term, including *GCB* and *ICG* revenues, could be adversely impacted by the lower interest rate environment as well as the challenging macroeconomic and market conditions, including the effects related to the severity and duration of the COVID-19 pandemic as well as the responses of governments, customers and clients. In particular, *Asia GCB* experienced some initial impact of the COVID-19 pandemic on customer behavior in the first quarter of 2020, while *North America GCB* and *Latin America GCB* began to experience impacts, such as significant declines in cards purchase sales, only during the second half of March 2020. Citi expects that these impacts to its *GCB* businesses, including lower purchase sales and loan volumes, will continue at least through the second quarter of 2020.

In addition, Citi's operating expenses may be impacted by uncertainties related to the pandemic, including, among other things, the continued efforts to protect and support Citigroup's employees and to support Citi's customers and clients digitally.

Moreover, Citi, including *GCB* and *ICG*, expects to experience higher net credit losses given Citi's current economic forecasts, and a continued significant impact on its reserves for credit losses, especially if the economic environment continues to, or under the CECL standard is forecasted to, deteriorate. *ICG* expects net credit loss reserve builds due to further credit downgrades. For additional information about significant risks to Citi from the COVID-19 pandemic, see "Risk Factors" below.

Balance Sheet and Other Impacts Related to COVID-19

Balance Sheet Trends

As of March 31, 2020, Citi's end-of-period balance sheet grew 13% from the prior-year period (16% excluding the impact of FX translation) and 14% sequentially (16% excluding the impact of FX translation), as it supported both its consumer and institutional clients through the uncertainty caused by the COVID-19 pandemic, while maintaining a strong capital and liquidity profile. This included year-over-year loan growth of 6% (8% excluding the impact of FX translation) and deposit growth of 15% (17% excluding the impact of FX translation), both reflecting significant growth in *ICG*. For additional information, see "Liquidity Risk" below.

Impact of CECL on Citi's Allowance for Credit Losses

On January 1, 2020, Citi adopted the new CECL standard and recorded a $4.1 billion, or an approximate 29%, increase in the allowance for credit losses. As discussed above, during the quarter Citi also built approximately $4.9 billion of net loan loss reserves, reflecting the impact of changes in Citi's economic outlook on estimated lifetime losses under the CECL standard due to the COVID-19 pandemic.

The table below shows the impact of Citi's adoption of CECL and the credit reserve builds during the quarter. For additional information on Citi's updated accounting policy on accounting for credit losses under CECL, see Notes 1 and 14 to the Consolidated Financial Statements.

	Allowance for credit losses (ACL)						
In millions of dollars	Balance December 31, 2019	CECL transition impact	Balance January 1, 2020	Build in first quarter of 2020	FX/Other in first quarter of 2020	Balance March 31, 2020	ACLL/EOP loans March 31, 2020[1]
Cards[1]	$ 8,419	$ 4,456	$ 12,875	$ 2,420	$ (215)	$ 15,080	9.48%
All other *GCB*	1,200	566	1,766	413	(217)	1,962	
Global Consumer Banking	$ 9,619	$ 5,022	$ 14,641	$ 2,833	$ (432)	$ 17,042	6.10%
Institutional Clients Group	2,886	(717)	2,169	1,316	(34)	3,451	0.81
Corporate/Other	278	(104)	174	187	(13)	348	
Allowance for credit losses on loans (ACLL)	**$ 12,783**	**$ 4,201**	**$ 16,984**	**$ 4,336**	**$ (479)**	**$ 20,841**	**2.91%**
Allowance for credit losses on unfunded lending commitments	1,456	(194)	1,262	557	(6)	1,813	
Other	—	96	96	2	32	130	
Total allowance for credit losses (ACL)	**$ 14,239**	**$ 4,103**	**$ 18,342**	**$ 4,895**	**$ (453)**	**$ 22,784**	

(1) As of March 31, 2020, in *North America GCB*, Citi-branded cards ACLL/EOP loans was 8.2% and Citi retail services ACLL/EOP loans was 12.6%.

Accumulated Other Comprehensive Income (AOCI)

In the first quarter of 2020, Citi's *AOCI* was a net after-tax gain of $3.8 billion, driven primarily by COVID-19-related economic disruptions in financial markets. Citi's own credit spreads widened, resulting in a $3.1 billion (after-tax) DVA gain on Citi's debt accounted for under the fair value option. Currency fluctuations resulted in a $4.1 billion currency translation adjustment loss, which was driven by the strengthening of the U.S. dollar against most currencies. Other significant drivers were a net $3.1 billion increase in unrealized gains on AFS investment securities, which was driven by the reductions in interest rates, and a $1.9 billion gain on cash flow hedges. The DVA gain and cash flow hedge gain do not have an impact on regulatory capital. For additional information on the components of Citi's *AOCI*, see Note 17 to the Consolidated Financial Statements.

Common Stock Repurchases

As discussed above, on March 15, 2020, Citi joined other major U.S. banks in suspending stock repurchases to further bolster Citi's capital and liquidity positions, in order to allow additional capacity to support clients in light of the COVID-19 pandemic. There was no change to Citi's dividend policy. For additional information, see "Equity Security Repurchases" below.

Principal Transactions Revenues
Global trading markets experienced significant increases in volatility, trading volumes and movements. Citi's principal transactions revenues, recorded in *ICG*, were $5.4 billion in the first quarter of 2020, an increase of $2.7 billion from the prior-year period. For additional information on Citi's trading results, see "*Institutional Clients Group*" and Note 6 to the Consolidated Financial Statements.

Goodwill and Intangible Assets and Other Long-Lived Assets
Goodwill, intangible assets and other long-lived assets were evaluated for impairment triggers as of March 31, 2020 and it was determined that there was no indication of impairment. For additional information, see Note 15 to the Consolidated Financial Statements.

Certain Key Government Actions in Support of the Economy

U.S. Government-Sponsored Liquidity Programs
During the first quarter of 2020, the Federal Reserve Board (FRB) introduced several liquidity facilities in response to the funding market volatility caused by the COVID-19 pandemic. Citi has participated in several of the U.S. government-sponsored liquidity programs, including the Money Market Mutual Fund Liquidity Facility (MMLF), the Primary Dealer Credit Facility (PDCF) and Discount Window (DW) in order to facilitate client activity and support the FRB actions to provide additional liquidity into the market. Citi has also participated in the Paycheck Protection Program Lending Facility (PPPLF), which was established to facilitate lending under the SBA's Paycheck Protection Program (see "Small Business Administration's Paycheck Protection Program" below). The amounts Citi sourced from these facilities were not significant to Citi's overall liquidity profile, which remains strong and highly liquid. For additional information about Citi's liquidity resources, see "Managing Global Risk—Liquidity Risk" below.

U.S. Banking Agencies Regulatory Capital Relief
The U.S. banking agencies issued several interim final rules during March and April 2020 to revise the current regulatory capital standards applicable to Citi, in light of the COVID-19 pandemic. These interim final rules revised regulatory capital requirements to provide banking organizations with additional flexibility to support households and businesses. These include:

- Easing of capital distribution limits in the event of regulatory capital buffer breaches, which provides some flexibility to continue distributing capital under certain circumstances.
- Modification of the CECL transition provision to defer the January 1, 2020 capital impact to January 1, 2022 and to provide additional capital relief for ongoing increases in credit reserves. Citi's reported Common Equity Tier 1 Capital ratio at March 31, 2020, reflecting the modified CECL transition provision, was 33 bps higher than Citi's Common Equity Tier 1 Capital ratio reflecting the full impact of CECL on regulatory capital.
- Temporary Supplementary Leverage Ratio (SLR) relief for bank holding companies, commencing in the second quarter of 2020, allowing Citigroup to temporarily expand its balance sheet by excluding U.S. Treasury securities and deposits with the FRB from the SLR denominator. If the rule had been in effect at March 31, 2020, Citigroup's SLR would have increased by 69 bps. The SLR requirements for Citibank were unchanged by the FRB's interim final rule.

For additional information about regulatory capital relief provided by the U.S. banking agencies, see "Capital Resources" below.

Troubled Debt Restructuring (TDR) Relief
Under U.S. GAAP, banks are required to assess modifications to a loan's terms for potential classification as a TDR. A loan to a borrower experiencing financial difficulty is classified as a TDR when a lender grants a concession that it would otherwise not consider, such as a payment deferral or interest concession. In order to encourage banks to work with impacted borrowers, the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) and U.S. banking agencies have provided relief from TDR accounting. The main benefits of TDR relief include a capital benefit in the form of reduced risk-weighted assets, as TDRs are more heavily risk-weighted for capital purposes; aging of the loans is frozen, i.e., they will continue to be reported in the same delinquency bucket they were in at the time of modification; and the loans are generally not reported as non-accrual during the modification period.

Small Business Administration's Paycheck Protection Program
The Paycheck Protection Program (PPP) authorizes the origination of forgivable loans to small businesses to pay their employees during the COVID-19 pandemic. Loan terms are the same for all businesses. Citi is participating in the PPP and has approved applications representing more than $3.3 billion in loans as of May 1, 2020. Citi remains committed to supporting small businesses.

RISK FACTORS

Macroeconomic and Other Challenges and Uncertainties Related to the COVID-19 Pandemic Will Likely Continue to Have Negative Impacts on Citi's Businesses and Results of Operations and Financial Condition.

The COVID-19 pandemic has had, and will likely continue to have, negative impacts on Citi's businesses, revenues, expenses, credit costs and overall results of operations and financial condition, which could be material. The pandemic and responses to it have had, and will likely continue to have, a severe impact on global economic conditions, including:

- sharply reduced U.S. and global economic output and employment;
- disruption of global supply chains;
- significant disruption and volatility in financial markets;
- temporary closures, reduced activity and failures of many businesses, leading to loss of revenues and net losses; and
- the institution of social distancing and restrictions on movement in the United States and other countries.

The extent of the COVID-19 pandemic's impact on Citi's financial performance and operations, including its ability to execute its business initiatives and strategies, will depend on future developments in the U.S. and globally, which are uncertain and cannot be predicted, including the duration and further spread of the disease. The impact will in part be dependent on government and other actions taken to lessen the health and economic repercussions, such as restrictions on movement of people, transportation and businesses, and various fiscal, monetary and other governmental actions. Ongoing legislative and regulatory changes in the U.S. and globally to address the economic impact from the pandemic, such as consumer and corporate relief measures, could further affect Citi's businesses and results. Citi could also face challenges, including legal and reputational, and scrutiny in its implementation of and ongoing efforts to provide these relief measures. In addition, the different types of government actions could vary in scale and duration across jurisdictions and regions with varying degrees of effectiveness. The impact of the pandemic on Citi's consumer and corporate borrowers will also vary by region, sector or industry, with some borrowers experiencing greater stress levels, which could lead to increased pressure on the results of operations and financial condition of such borrowers, increased borrowings or ratings downgrades, thus likely leading to higher loan losses. In addition, stress levels ultimately experienced by Citi's borrowers may be different from and more intense than assumptions made in earlier estimates or models used by Citi during or prior to the emergence of the pandemic.

The pandemic may not be fully contained for an extended period of time, with the re-emergence of widespread infections possible. A prolonged health crisis could continue to reduce economic activity in the U.S. and other countries, resulting in a further decline in employment and business and consumer confidence. These factors could further negatively impact global economic activity and Citi's consumer customers and corporate clients; cause a continued decline in Citi's revenues and the use of its products and services; and further increase Citi's credit and other costs. These factors could also cause a continued increase in Citi's balance sheet and risk-weighted assets, resulting in a decline in regulatory capital ratios or liquidity measures. Moreover, any disruption or failure of Citi's performance of, or its ability to perform, key business functions, as a result of the continued spread of COVID-19 or otherwise, could adversely affect Citi's operations.

A substantial portion of Citi's employees have been affected by local COVID-19 restrictions and have been forced to work remotely. As a result, any disruption to Citi's information technology systems, including from cyber incidents, could have adverse effects on Citi's businesses. In addition, these systems interface with and depend on third-party systems, and Citi could experience service denials or disruptions if demand for such systems were to exceed capacity or if a third-party system fails or experiences any interruptions. Citi has also taken measures to maintain the health and safety of its employees; however, widespread illness could negatively affect staffing within certain functions, businesses or geographies. In addition, Citi's ability to recruit, hire and onboard employees in key areas could be negatively impacted by global COVID-19 restrictions.

Further, it is unclear how the macroeconomic business environment or societal norms may be impacted after the pandemic. The post-COVID-19 environment may undergo unexpected developments or changes in financial markets, the fiscal, tax and regulatory environments and consumer customer and corporate client behavior. These developments and changes could have an adverse impact on Citi's results of operations and financial condition. Ongoing business and regulatory uncertainties and changes may make Citi's longer-term business, balance sheet and budget planning more difficult or costly. Citi, its management and its businesses may also experience increased or different competitive and other challenges in this environment. To the extent that Citi is not able to adapt or compete effectively, the Company could experience loss of business and its results of operations and financial condition could suffer.

For additional information about trends, uncertainties and risks related to the COVID-19 pandemic, as well as Citi's management of COVID-19-related risks, see "COVID-19 Overview," above.

For information about the other most significant risks and uncertainties that could impact Citi's businesses, results of operations and financial condition, which could be exacerbated or realized by the COVID-19-related risks discussed above, see "Risk Factors" in Citi's 2019 Annual Report on Form 10-K.

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RESULTS OF OPERATIONS

SUMMARY OF SELECTED FINANCIAL DATA—PAGE 1

Citigroup Inc. and Consolidated Subsidiaries

In millions of dollars, except per share amounts	First Quarter 2020	First Quarter 2019	% Change
Net interest revenue	**$ 11,492**	$ 11,759	**(2)%**
Non-interest revenue	**9,239**	6,817	**36**
Revenues, net of interest expense	**$ 20,731**	$ 18,576	**12 %**
Operating expenses	**10,594**	10,584	**—**
Provisions for credit losses and for benefits and claims	**7,027**	1,980	**NM**
Income from continuing operations before income taxes	**$ 3,110**	$ 6,012	**(48)%**
Income taxes	**576**	1,275	**(55)**
Income from continuing operations	**$ 2,534**	$ 4,737	**(47)%**
Income (loss) from discontinued operations, net of taxes	**(18)**	(2)	**NM**
Net income before attribution of noncontrolling interests	**$ 2,516**	$ 4,735	**(47)%**
Net income attributable to noncontrolling interests	**(6)**	25	**NM**
Citigroup's net income	**$ 2,522**	$ 4,710	**(46)%**
Earnings per share			
Basic			
Income from continuing operations	**$ 1.06**	$ 1.88	**(44)%**
Net income	**1.05**	1.88	**(44)**
Diluted			
Income from continuing operations	**$ 1.06**	$ 1.87	**(43)%**
Net income	**1.05**	1.87	**(44)**
Dividends declared per common share	**0.51**	0.45	**13**
Common dividends	**$ 1,081**	$ 1,075	**1 %**
Preferred dividends[(1)]	**291**	262	**11**
Common share repurchases	**2,925**	4,055	**(28)**

Table continues on the next page, including footnotes.

SUMMARY OF SELECTED FINANCIAL DATA—PAGE 2

Citigroup Inc. and Consolidated Subsidiaries

In millions of dollars, except per share amounts, ratios and direct staff	First Quarter 2020	First Quarter 2019	% Change
At March 31:			
Total assets	**$2,219,770**	$1,958,413	**13%**
Total deposits	**1,184,911**	1,030,355	**15**
Long-term debt	**266,098**	243,566	**9**
Citigroup common stockholders' equity	**174,351**	178,272	**(2)**
Total Citigroup stockholders' equity	**192,331**	196,252	**(2)**
Average assets	**2,079,719**	1,939,414	**7**
Direct staff *(in thousands)*	**201**	203	**(1)**
Performance metrics			
Return on average assets	**0.49%**	0.98%	
Return on average common stockholders' equity[2]	**5.2**	10.2	
Return on average total stockholders' equity[2]	**5.3**	9.8	
Return on tangible common equity (RoTCE)[3]	**6.0**	11.9	
Efficiency ratio (total operating expenses/total revenues)	**51.1**	57.0	
Basel III ratios			
Common Equity Tier 1 Capital[4]	**11.17%**	11.91%	
Tier 1 Capital[4]	**12.61**	13.44	
Total Capital[4]	**15.11**	16.41	
Supplementary Leverage ratio	**5.97**	6.43	
Citigroup common stockholders' equity to assets	**7.85%**	9.10%	
Total Citigroup stockholders' equity to assets	**8.66**	10.02	
Dividend payout ratio[5]	**48.6**	24.1	
Total payout ratio[6]	**179.6**	115.3	
Book value per common share	**$ 83.75**	$ 77.09	**9%**
Tangible book value (TBV) per share[3]	**71.52**	65.55	**9**

(1) Certain series of preferred stock have semi-annual payment dates. See Note 9 to the Consolidated Financial Statements.
(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) For information on RoTCE and TBV, see "Capital Resources—Tangible Common Equity, Book Value Per Share, Tangible Book Value Per Share and Returns on Equity" below.
(4) Citi's reportable Common Equity Tier 1 Capital and Tier 1 Capital ratios were derived under the Basel III Advanced Approaches framework as of March 31, 2020, and the Basel III Standardized Approach as of March 31, 2019, whereas Citi's reportable Total Capital ratio was the lower derived under the Basel III Advanced Approaches framework for all periods presented. This reflects the U.S. Basel III requirement to report the lower of risk-based capital ratios under both the Standardized Approach and Advanced Approaches in accordance with the Collins Amendment of the Dodd-Frank Act.
(5) Dividends declared per common share as a percentage of net income per diluted share.
(6) Total common dividends declared plus common stock repurchases as a percentage of net income available to common shareholders (*Net income*, less preferred dividends). See "Consolidated Statement of Changes in Stockholders' Equity," Note 9 to the Consolidated Financial Statements and "Equity Security Repurchases" below for the component details.

NM Not Meaningful

SEGMENT AND BUSINESS—INCOME (LOSS) AND REVENUES

CITIGROUP INCOME

In millions of dollars	First Quarter 2020	2019	% Change
Income (loss) from continuing operations			
Global Consumer Banking			
North America	**$ (910)**	$ 707	**NM**
Latin America	**(36)**	216	**NM**
Asia[(1)]	**191**	397	**(52)**
Total	**$ (755)**	$ 1,320	**NM**
Institutional Clients Group			
North America	**$ 896**	$ 748	**20 %**
EMEA	**1,035**	1,125	**(8)**
Latin America	**526**	540	**(3)**
Asia	**1,169**	999	**17**
Total	**$ 3,626**	$ 3,412	**6 %**
Corporate/Other	**(337)**	5	**NM**
Income from continuing operations	**$ 2,534**	$ 4,737	**(47)%**
Discontinued operations	**$ (18)**	$ (2)	**NM**
Less: Net income attributable to noncontrolling interests	**(6)**	25	**NM**
Citigroup's net income	**$ 2,522**	$ 4,710	**(46)%**

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

CITIGROUP REVENUES

In millions of dollars	First Quarter 2020	2019	% Change
Global Consumer Banking			
North America	**$ 5,224**	$ 5,000	**4%**
Latin America	**1,199**	1,272	**(6)**
Asia[(1)]	**1,751**	1,818	**(4)**
Total	**$ 8,174**	$ 8,090	**1%**
Institutional Clients Group			
North America	**$ 4,947**	$ 3,269	**51%**
EMEA	**3,470**	3,170	**9**
Latin America	**1,418**	1,268	**12**
Asia	**2,649**	2,311	**15**
Total	**$ 12,484**	$ 10,018	**25%**
Corporate/Other	**73**	468	**(84)**
Total Citigroup net revenues	**$ 20,731**	$ 18,576	**12%**

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

SEGMENT BALANCE SHEET[1]—MARCH 31, 2020

In millions of dollars	Global Consumer Banking	Institutional Clients Group	Corporate/Other and consolidating eliminations[2]	Citigroup parent company-issued long-term debt and stockholders' equity[3]	Total Citigroup consolidated
Assets					
Cash and deposits with banks, net of allowance	**$ 6,432**	**$ 88,038**	**$ 191,450**	**$ —**	**$ 285,920**
Securities borrowed and purchased under agreements to resell, net of allowance	**93**	**262,157**	**286**	**—**	**262,536**
Trading account assets	**2,609**	**350,705**	**11,686**	**—**	**365,000**
Investments, net of allowance	**1,002**	**128,915**	**268,966**	**—**	**398,883**
Loans, net of unearned income and allowance for credit losses on loans	**262,277**	**429,128**	**8,774**	**—**	**700,179**
Other assets, net of allowance	**36,398**	**132,238**	**38,616**	**—**	**207,252**
Net inter-segment liquid assets[4]	**94,042**	**331,746**	**(425,788)**	**—**	**—**
Total assets	**$ 402,853**	**$ 1,722,927**	**$ 93,990**	**$ —**	**$ 2,219,770**
Liabilities and equity					
Total deposits	**$ 293,896**	**$ 878,252**	**$ 12,763**	**$ —**	**$ 1,184,911**
Securities loaned and sold under agreements to repurchase	**1,253**	**221,048**	**23**	**—**	**222,324**
Trading account liabilities	**1,929**	**161,608**	**458**	**—**	**163,995**
Short-term borrowings	**289**	**31,222**	**23,440**	**—**	**54,951**
Long-term debt[3]	**1,246**	**61,648**	**46,743**	**156,461**	**266,098**
Other liabilities, net of allowance	**17,077**	**98,262**	**19,170**	**—**	**134,509**
Net inter-segment funding (lending)[3]	**87,163**	**270,887**	**(9,258)**	**(348,792)**	**—**
Total liabilities	**$ 402,853**	**$ 1,722,927**	**$ 93,339**	**$ (192,331)**	**$ 2,026,788**
Total stockholders' equity[5]	**—**	**—**	**651**	**192,331**	**192,982**
Total liabilities and equity	**$ 402,853**	**$ 1,722,927**	**$ 93,990**	**$ —**	**$ 2,219,770**

(1) The supplemental information presented in the table above reflects Citigroup's consolidated GAAP balance sheet by reporting segment as of March 31, 2020. The respective segment information depicts the assets and liabilities managed by each segment as of such date.
(2) Consolidating eliminations for total Citigroup and Citigroup parent company assets and liabilities are recorded within *Corporate/Other*.
(3) The total stockholders' equity and the majority of long-term debt of Citigroup reside on the Citigroup parent company balance sheet. Citigroup allocates stockholders' equity and long-term debt to its businesses through inter-segment allocations as shown above.
(4) 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.
(5) *Corporate/Other* equity represents noncontrolling interests.

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GLOBAL CONSUMER BANKING

Global Consumer Banking (GCB) consists of consumer banking businesses in *North America*, *Latin America* (consisting of Citi's consumer banking business in Mexico) and *Asia*. *GCB* provides traditional banking services to retail customers through retail banking, 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 2,333 branches in 19 countries and jurisdictions as of March 31, 2020. At March 31, 2020, *GCB* had approximately $403 billion in assets and $294 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, Citi serves customers in a somewhat broader set of segments and geographies.

	First Quarter		
In millions of dollars, except as otherwise noted	**2020**	2019	**% Change**
Net interest revenue	**$ 7,072**	$ 6,940	**2 %**
Non-interest revenue	**1,102**	1,150	**(4)**
Total revenues, net of interest expense	**$ 8,174**	$ 8,090	**1 %**
Total operating expenses	**$ 4,368**	$ 4,416	**(1)%**
Net credit losses on loans	**$ 1,983**	$ 1,868	**6 %**
Credit reserve build (release) for loans	**2,829**	96	**NM**
Provision (release) for credit losses on unfunded lending commitments	**(1)**	(3)	**67**
Provisions for benefits and claims, HTM debt securities and other assets	**20**	12	**67**
Provisions for credit losses and for benefits and claims (PBC)	**$ 4,831**	$ 1,973	**NM**
Income (loss) from continuing operations before taxes	**$ (1,025)**	$ 1,701	**NM**
Income taxes (benefits)	**(270)**	381	**NM**
Income (loss) from continuing operations	**$ (755)**	$ 1,320	**NM**
Noncontrolling interests	**(1)**	—	**(100)**
Net income (loss)	**$ (754)**	$ 1,320	**NM**
Balance Sheet data and ratios *(in billions of dollars)*			
EOP assets	**$ 403**	$ 379	**6 %**
Average assets	**406**	380	**7**
Return on average assets	**(0.75)%**	1.41%	
Efficiency ratio	**53**	55	
Average deposits	**$ 290.1**	$ 271.7	**7**
Net credit losses as a percentage of average loans	**2.75 %**	2.70%	
Revenue by business			
Retail banking	**$ 3,046**	$ 3,106	**(2)%**
Cards[(1)]	**5,128**	4,984	**3**
Total	**$ 8,174**	$ 8,090	**1 %**
Income (loss) from continuing operations by business			
Retail banking	**$ 120**	$ 409	**(71)%**
Cards[(1)]	**(875)**	911	**NM**
Total	**$ (755)**	$ 1,320	**NM**

Table continues on the next page, including footnotes.

Foreign currency (FX) translation impact				
Total revenue—as reported	**$**	**8,174**	$ 8,090	**1 %**
Impact of FX translation[2]		—	(115)	
Total revenues—ex-FX[3]	**$**	**8,174**	$ 7,975	**2 %**
Total operating expenses—as reported	**$**	**4,368**	$ 4,416	**(1)%**
Impact of FX translation[2]		—	(66)	
Total operating expenses—ex-FX[3]	**$**	**4,368**	$ 4,350	**— %**
Total provisions for credit losses and PBC—as reported	**$**	**4,831**	$ 1,973	**NM**
Impact of FX translation[2]		—	(26)	
Total provisions for credit losses and PBC—ex-FX[3]	**$**	**4,831**	$ 1,947	**NM**
Net income—as reported	**$**	**(754)**	$ 1,320	**NM**
Impact of FX translation[2]		—	(15)	
Net income—ex-FX[3]	**$**	**(754)**	$ 1,305	**NM**

(1) Includes both Citi-branded cards and Citi retail services.
(2) Reflects the impact of FX translation into U.S. dollars at the first quarter of 2020 average exchange rates for all periods presented.
(3) Presentation of this metric excluding FX translation is a non-GAAP financial measure.
Note: For information on the impact of Citi's January 1, 2020 adoption of the new accounting standard on credit losses (CECL), see Note 1 to the Consolidated Financial Statements.
NM Not meaningful

NORTH AMERICA GCB

North America GCB provides traditional retail banking and Citi-branded and Citi retail services card products to retail and small business customers 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.

At March 31, 2020, *North America GCB* had 686 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 March 31, 2020, *North America GCB* had approximately $50.8 billion in retail banking loans and $166.4 billion in deposits. In addition, *North America GCB* had approximately $137.3 billion in outstanding card loan balances.

	First Quarter		
In millions of dollars, except as otherwise noted	**2020**	2019	**% Change**
Net interest revenue	**$ 5,036**	$ 4,897	**3 %**
Non-interest revenue	**188**	103	**83**
Total revenues, net of interest expense	**$ 5,224**	$ 5,000	**4 %**
Total operating expenses	**$ 2,536**	$ 2,572	**(1)%**
Net credit losses on loans	**$ 1,526**	$ 1,408	**8 %**
Credit reserve build for loans	**2,362**	118	**NM**
Provision (release) for credit losses on unfunded lending commitments	**(1)**	(3)	**67**
Provisions for benefits and claims, HTM debt securities and other assets	**5**	6	**(17)**
Provisions for credit losses and for benefits and claims	**$ 3,892**	$ 1,529	**NM**
Income (loss) from continuing operations before taxes	**$ (1,204)**	$ 899	**NM**
Income taxes (benefits)	**(294)**	192	**NM**
Income (loss) from continuing operations	**$ (910)**	$ 707	**NM**
Noncontrolling interests	**—**	—	**—**
Net income (loss)	**$ (910)**	$ 707	**NM**
Balance Sheet data and ratios *(in billions of dollars)*			
Average assets	**$ 246**	$ 226	**9 %**
Return on average assets	**(1.49)%**	1.27%	
Efficiency ratio	**49**	51	
Average deposits	**$ 161.3**	$ 149.6	**8**
Net credit losses as a percentage of average loans	**3.18 %**	3.08%	
Revenue by business			
Retail banking	**$ 1,130**	$ 1,131	**— %**
Citi-branded cards	**2,347**	2,195	**7**
Citi retail services	**1,747**	1,674	**4**
Total	**$ 5,224**	$ 5,000	**4 %**
Income (loss) from continuing operations by business			
Retail banking	**$ (73)**	$ 21	**NM**
Citi-branded cards	**(529)**	382	**NM**
Citi retail services	**(308)**	304	**NM**
Total	**$ (910)**	$ 707	**NM**

NM Not meaningful

1Q20 vs. 1Q19

Net loss was $910 million in the first quarter of 2020, compared to *net income* of $707 million in the prior-year period, reflecting significantly higher cost of credit, partially offset by higher revenues and lower expenses.

Revenues increased 4%, reflecting growth in both Citi-branded cards and Citi retail services.

Retail banking revenues were largely unchanged, as deposit growth and higher mortgage revenues were offset by lower deposit spreads, reflecting lower interest rates. Average deposits increased 8%, while assets under management decreased 6%, reflecting the impact of market movements.

Cards revenues increased 6%. In Citi-branded cards revenues increased 7%, reflecting volume growth, as well as spread expansion. Average loans increased 5% and purchase sales increased 3%, reflecting momentum in the first two months of the first quarter, partially offset by the impact of the COVID-19 pandemic on customer behavior during the second half of March.

Citi retail services revenues increased 4%, primarily reflecting a reduction in partner payments and higher average loans (up 1%), while purchase sales decreased 3%, including the impact of the COVID-19 pandemic on customer behavior and store closures during the second half of March.

Expenses decreased 1%, as efficiency savings more than offset ongoing investments and higher volume-related expenses.

Provisions of $3.9 billion increased $2.4 billion from the prior-year period, driven by a higher net credit loss reserve build and higher net credit losses. Net credit losses increased 8%, primarily driven by higher net credit losses in Citi-branded cards (up 13% to $795 million) and Citi retail services (up 5% to $694 million). The increase in net credit losses reflected volume growth and seasoning in both cards portfolios.

The net loan loss reserve build in the current quarter was $2.4 billion, reflecting the impact of changes in the economic outlook, primarily driven by the COVID-19 pandemic, on estimated lifetime credit losses under CECL (compared to a build of $115 million in the prior-year period under prior accounting standards).

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

For additional information on CECL, see "Significant Accounting Policies and Estimates" below, and Notes 1 and 14 to the Consolidated Financial Statements.

For additional information about trends, uncertainties and risks related to the COVID-19 pandemic, see the "COVID-19 Overview" and "Risk Factors" sections above.

LATIN AMERICA GCB

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

At March 31, 2020, *Latin America GCB* had 1,411 retail branches in Mexico, with approximately $9.2 billion in retail banking loans and $19.8 billion in deposits. In addition, the business had approximately $4.5 billion in outstanding card loan balances.

	First Quarter		
In millions of dollars, except as otherwise noted	**2020**	2019	**% Change**
Net interest revenue	**$ 887**	$ 877	**1 %**
Non-interest revenue	**312**	395	**(21)**
Total revenues, net of interest expense	**$ 1,199**	$ 1,272	**(6)%**
Total operating expenses	**$ 699**	$ 673	**4 %**
Net credit losses on loans	**$ 277**	$ 296	**(6)%**
Credit reserve build (release) for loans	**265**	(2)	**NM**
Provision for credit losses on unfunded lending commitments	**—**	—	**—**
Provisions for benefits and claims, HTM debt securities and other assets	**15**	6	**NM**
Provisions for credit losses and for benefits and claims (PBC)	**$ 557**	$ 300	**86 %**
Income (loss) from continuing operations before taxes	**$ (57)**	$ 299	**NM**
Income taxes (benefits)	**(21)**	83	**NM**
Income (loss) from continuing operations	**$ (36)**	$ 216	**NM**
Net income (loss)	**$ (36)**	$ 216	**NM**
Balance Sheet data and ratios *(in billions of dollars)*			
Average assets	**$ 35**	$ 33	**6 %**
Return on average assets	**(0.41)%**	2.65%	
Efficiency ratio	**58**	53	
Average deposits	**$ 22.9**	$ 22.7	**1**
Net credit losses as a percentage of average loans	**6.67 %**	6.98%	
Revenue by business			
Retail banking	**$ 783**	$ 899	**(13)%**
Citi-branded cards	**416**	373	**12**
Total	**$ 1,199**	$ 1,272	**(6)%**
Income (loss) from continuing operations by business			
Retail banking	**$ (23)**	$ 161	**NM**
Citi-branded cards	**(13)**	55	**NM**
Total	**$ (36)**	$ 216	**NM**
FX translation impact			
Total revenues—as reported	**$ 1,199**	$ 1,272	**(6)%**
Impact of FX translation[1]	**—**	(74)	
Total revenues—ex-FX[2]	**$ 1,199**	$ 1,198	**— %**
Total operating expenses—as reported	**$ 699**	$ 673	**4 %**
Impact of FX translation[1]	**—**	(36)	
Total operating expenses—ex-FX[2]	**$ 699**	$ 637	**10 %**
Provisions for credit losses and PBC—as reported	**$ 557**	$ 300	**86 %**
Impact of FX translation[1]	**—**	(19)	
Provisions for credit losses and PBC—ex-FX[2]	**$ 557**	$ 281	**98 %**
Net income (loss)—as reported	**$ (36)**	$ 216	**NM**
Impact of FX translation[1]	**—**	(12)	
Net income (loss)—ex-FX[2]	**$ (36)**	$ 204	**NM**

(1) Reflects the impact of FX translation into U.S. dollars at the first quarter of 2020 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.

1Q20 vs. 1Q19

Net loss was $36 million in the first quarter of 2020, compared to *net income* of $204 million in the prior-year period, reflecting significantly higher cost of credit and higher expenses.

Revenues were largely unchanged. Excluding the impact of a residual gain (approximately $30 million) in the prior-year period on the sale of an asset management business, revenues increased 3%, primarily driven by deposit growth and improved spreads in cards.

Retail banking revenues decreased 8%. Excluding the residual gain in the prior-year period, retail banking revenues decreased 4%, as improved deposit spreads were more than offset by lower retirement services and insurance-related revenues. Average deposits were up 4%, while average loans were largely unchanged.

Cards revenues increased 18%, primarily driven by improved spreads and volume growth. Average cards loans grew 2%, while purchase sales were down 3%, including the impact of the COVID-19 pandemic on customer behavior during the second half of March.

Expenses increased 10%, as ongoing investment spending and episodic items were partially offset by efficiency savings.

Provisions increased $276 million, primarily driven by a net credit loss reserve build of $265 million in the current quarter (versus a $2 million net credit loss release in the prior-year period) reflecting the impact of changes in the economic outlook due to the COVID-19 pandemic on estimated lifetime credit losses under the CECL standard.

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

For additional information on CECL, see "Significant Accounting Policies and Estimates" below, and Notes 1 and 14 to the Consolidated Financial Statements.

For additional information about trends, uncertainties and risks related to the COVID-19 pandemic, see the "COVID-19 Overview" and "Risk Factors" sections above.

ASIA GCB

Asia GCB provides traditional retail banking and Citi-branded card products to retail and small business customers. During the first quarter of 2020, *Asia GCB*'s most significant revenues in *Asia* were from Singapore, Hong Kong, South Korea, Taiwan, India, Australia, 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 the United Arab Emirates, Poland and Russia.

At March 31, 2020, on a combined basis, the businesses had 236 retail branches, approximately $60.2 billion in retail banking loans and $107.8 billion in deposits. In addition, the businesses had approximately $17.3 billion in outstanding card loan balances.

	First Quarter		
In millions of dollars, except as otherwise noted[1]	**2020**	2019	**% Change**
Net interest revenue	**$ 1,149**	$ 1,166	**(1)%**
Non-interest revenue	**602**	652	**(8)**
Total revenues, net of interest expense	**$ 1,751**	$ 1,818	**(4)%**
Total operating expenses	**$ 1,133**	$ 1,171	**(3)%**
Net credit losses on loans	**$ 180**	$ 164	**10 %**
Credit reserve build (release) for loans	**202**	(20)	**NM**
Provision for credit losses on unfunded lending commitments	**—**	—	**—**
Provisions for credit losses	**$ 382**	$ 144	**NM**
Income from continuing operations before taxes	**$ 236**	$ 503	**(53)%**
Income taxes	**45**	106	**(58)**
Income from continuing operations	**$ 191**	$ 397	**(52)%**
Noncontrolling interests	**(1)**	—	**—**
Net income	**$ 192**	$ 397	**(52)%**
Balance Sheet data and ratios *(in billions of dollars)*			
Average assets	**$ 125**	$ 121	**3 %**
Return on average assets	**0.62%**	1.33%	
Efficiency ratio	**65**	64	
Average deposits	**$ 105.9**	$ 99.4	**7**
Net credit losses as a percentage of average loans	**0.90%**	0.85%	
Revenue by business			
Retail banking	**$ 1,133**	$ 1,076	**5 %**
Citi-branded cards	**618**	742	**(17)**
Total	**$ 1,751**	$ 1,818	**(4)%**
Income from continuing operations by business			
Retail banking	**$ 216**	$ 227	**(5)%**
Citi-branded cards	**(25)**	170	**NM**
Total	**$ 191**	$ 397	**(52)%**
FX translation impact			
Total revenues—as reported	**$ 1,751**	$ 1,818	**(4)%**
Impact of FX translation[2]	**—**	(41)	
Total revenues—ex-FX[3]	**$ 1,751**	$ 1,777	**(1)%**
Total operating expenses—as reported	**$ 1,133**	$ 1,171	**(3)%**
Impact of FX translation[2]	**—**	(30)	
Total operating expenses—ex-FX[3]	**$ 1,133**	$ 1,141	**(1)%**
Provisions for credit losses—as reported	**$ 382**	$ 144	**NM**
Impact of FX translation[2]	**—**	(7)	
Provisions for credit losses—ex-FX[3]	**$ 382**	$ 137	**NM**
Net income—as reported	**$ 192**	$ 397	**(52)%**
Impact of FX translation[2]	**—**	(3)	
Net income—ex-FX[3]	**$ 192**	$ 394	**(51)%**

(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 first quarter of 2020 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.

1Q20 vs. 1Q19

Net income decreased 51%, reflecting significantly higher cost of credit and lower revenues, partially offset by lower expenses.

Revenues decreased 1%, as growth in fees on investments and foreign currency transactions was more than offset by lower revenues in cards and insurance, reflecting the initial impact of the COVID-19 pandemic on customer behavior.

Retail banking revenues increased 7%, primarily driven by higher fees on investments and foreign currency transactions due to higher volumes and volatility, partially offset by lower deposit spreads and insurance revenues. Average deposits increased 8% and average loans increased 7%. Assets under management declined 11%, reflecting the impact of market movements, while investment sales increased 53%. Retail lending revenues improved, reflecting growth in personal loans and mortgages.

Cards revenues decreased 14%, primarily driven by lower purchase sales (down 4%), reflecting the initial impact of the COVID-19 pandemic on customer behavior and a modest one-time gain in the prior-year quarter.

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

Provisions increased $245 million, primarily driven by a net credit loss reserve build in the current quarter (versus a $21 million net credit loss release in the prior-year period under prior accounting standards), reflecting the impact of changes in the economic outlook due to the COVID-19 pandemic on estimated lifetime credit losses under the CECL standard, as well as higher net credit losses (increase of 14%), primarily driven by volume growth.

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

For additional information on CECL, see "Significant Accounting Policies and Estimates" below, and Notes 1 and 14 to the Consolidated Financial Statements.

For additional information about trends, uncertainties and risks related to the COVID-19 pandemic, see the "COVID-19 Overview" and "Risk Factors" sections 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 2019 Annual Report on Form 10-K.

ICG's international presence is supported by trading floors in approximately 80 countries and a proprietary network in 97 countries and jurisdictions. At March 31, 2020, *ICG* had approximately $1.7 trillion in assets and $878 billion in deposits, while two of its businesses—securities services and issuer services—managed approximately $18.7 trillion in assets under custody compared to $20.3 trillion at December 31, 2019 and $18.4 trillion at March 31, 2019.

	First Quarter		
In millions of dollars, except as otherwise noted	**2020**	2019	**% Change**
Commissions and fees	**$ 1,222**	$ 1,154	**6%**
Administration and other fiduciary fees	**691**	683	**1**
Investment banking	**1,231**	1,113	**11**
Principal transactions	**5,359**	2,638	**NM**
Other	**(114)**	280	**NM**
Total non-interest revenue	**$ 8,389**	$ 5,868	**43%**
Net interest revenue (including dividends)	**4,095**	4,150	**(1)**
Total revenues, net of interest expense	**$ 12,484**	$ 10,018	**25%**
Total operating expenses	**$ 5,810**	$ 5,619	**3%**
Net credit losses on loans	**$ 127**	$ 78	**63%**
Credit reserve build (release) for loans	**1,316**	(74)	**NM**
Provision for credit losses on unfunded lending commitments	**553**	28	**NM**
Provisions for credit losses for HTM debt securities and other assets	**8**	—	**—%**
Provisions for credit losses	**$ 2,004**	$ 32	**NM**
Income from continuing operations before taxes	**$ 4,670**	$ 4,367	**7%**
Income taxes	**1,044**	955	**9**
Income from continuing operations	**$ 3,626**	$ 3,412	**6%**
Noncontrolling interests	**(1)**	11	**NM**
Net income	**$ 3,627**	$ 3,401	**7%**
Balance Sheet data and ratios *(in billions of dollars)*			
EOP assets *(in billions of dollars)*	**$ 1,723**	$ 1,472	**17%**
Average assets *(in billions of dollars)*	**1,580**	1,460	**8**
Return on average assets	**0.92%**	0.94%	
Efficiency ratio	**47**	56	
Revenues by region			
North America	**$ 4,947**	$ 3,269	**51%**
EMEA	**3,470**	3,170	**9**
Latin America	**1,418**	1,268	**12**
Asia	**2,649**	2,311	**15**
Total	**$ 12,484**	$ 10,018	**25%**
Income from continuing operations by region			
North America	**$ 896**	$ 748	**20%**
EMEA	**1,035**	1,125	**(8)**
Latin America	**526**	540	**(3)**
Asia	**1,169**	999	**17**
Total	**$ 3,626**	$ 3,412	**6%**

Average loans by region *(in billions of dollars)*				
North America	**$**	**196**	$ 185	**6%**
EMEA		**88**	84	**5**
Latin America		**38**	42	**(10)**
Asia		**73**	74	**(1)**
Total	**$**	**395**	$ 385	**3%**
EOP deposits by business *(in billions of dollars)*				
Treasury and trade solutions	**$**	**621**	$ 512	**21%**
All other *ICG* businesses		**257**	227	**13**
Total	**$**	**878**	$ 739	**19%**

NM Not meaningful

ICG Revenue Details

	First Quarter		
In millions of dollars	**2020**	2019	**% Change**
Investment banking revenue details			
Advisory	**$ 386**	$ 378	**2 %**
Equity underwriting	**180**	172	**5**
Debt underwriting	**784**	804	**(2)**
Total investment banking	**$ 1,350**	$ 1,354	**— %**
Treasury and trade solutions	**2,423**	2,539	**(5)**
Corporate lending—excluding gains (losses) on loan hedges[(1)]	**448**	749	**(40)**
Private bank—excluding gains (losses) on loan hedges[(1)]	**949**	880	**8**
Total *Banking* revenues (ex-gains (losses) on loan hedges)	**$ 5,170**	$ 5,522	**(6)%**
Gains (losses) on loan hedges[(1)]	**$ 816**	$ (231)	**NM**
Total *Banking* revenues (including gains (losses) on loan hedges), net of interest expense	**$ 5,986**	$ 5,291	**13 %**
Fixed income markets	**$ 4,790**	$ 3,452	**39 %**
Equity markets	**1,169**	842	**39**
Securities services	**645**	638	**1**
Other	**(106)**	(205)	**48**
Total *Markets and securities services* revenues, net of interest expense	**$ 6,498**	$ 4,727	**37 %**
Total revenues, net of interest expense	**$ 12,484**	$ 10,018	**25 %**
Commissions and fees	**$ 189**	$ 174	**9 %**
Principal transactions[(2)]	**3,549**	2,377	**49**
Other	**(59)**	150	**NM**
Total non-interest revenue	**$ 3,679**	$ 2,701	**36 %**
Net interest revenue	**1,111**	751	**48**
Total fixed income markets[(3)]	**$ 4,790**	$ 3,452	**39 %**
Rates and currencies	**$ 4,038**	$ 2,402	**68 %**
Spread products/other fixed income	**752**	1,050	**(28)**
Total fixed income markets	**$ 4,790**	$ 3,452	**39 %**
Commissions and fees	**$ 362**	$ 293	**24 %**
Principal transactions[(2)]	**774**	396	**95**
Other	**8**	7	**14**
Total non-interest revenue	**$ 1,144**	$ 696	**64 %**
Net interest revenue	**25**	146	**(83)**
Total equity markets[(3)]	**$ 1,169**	$ 842	**39 %**

(1) Credit derivatives are used to economically hedge a portion of the private bank and corporate loan portfolio that includes both accrual loans and loans at fair value. Gains (losses) on loan hedges includes 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 private bank and corporate lending revenues to reflect the cost of credit protection. Citigroup's results of operations excluding the impact of gains (losses) on loan hedges are non-GAAP financial measures.

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

(3) Citi assesses its *Markets* business performance on a total revenue basis, as offsets may occur across revenue line items. For example, securities that generate *Net interest revenue* may be risk managed by derivatives that are recorded in *Principal transactions* revenue. For a description of the composition of these revenue line items, see Notes 4, 5 and 6 to the Consolidated Financial Statements.

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.

1Q20 vs. 1Q19

Net income increased 7%, as significant growth in revenues was partially offset by significantly higher cost of credit and higher expenses.

Revenues were up 25%, reflecting higher *Markets and securities services* revenues (increase of 37%) and higher *Banking* revenues (increase of 13% including the gains (losses) on loan hedges). Excluding the impact of the gains (losses) on loan hedges, *Banking* revenues were down 6%, driven by lower revenues in treasury and trade solutions and corporate lending, partially offset by higher revenues in the private bank, while investment banking was largely unchanged. *Markets and securities services* revenues were up 37%, primarily driven by higher revenues in fixed income and equity markets, reflecting increased client activity due to higher market volatility, particularly later in the quarter related to the impact of the COVID-19 pandemic.

Within *Banking*:

- *Investment banking* revenues were largely unchanged, as growth in equity underwriting and advisory revenues was offset by lower debt underwriting revenues. The increase in revenues reflected an improved market share despite a decline in the overall market wallet. Advisory revenues increased 2%, primarily driven by strength in *North America*. Equity underwriting revenues increased 5%, driven by growth in the market wallet, as well as share gains. Debt underwriting revenues decreased 2%, reflecting lower revenues in *EMEA*, *Asia* and *Latin America*, while investment-grade debt underwriting was up double digits, as the business assisted clients with sourcing liquidity in the evolving environment.
- *Treasury and trade solutions* revenues decreased 5%. Excluding the impact of FX translation, revenues decreased 2%, reflecting a decline in both the cash and trade businesses. The decline in revenues in the cash business reflected the continued impact of lower rates, partially offset by strong deposit volumes. End-of-period deposits increased 21% (24% excluding the impact of FX translation), while average deposit balances increased 12% (13% excluding the impact of FX translation), both reflecting strong client engagement and solid growth across all regions. In trade, revenues were impacted by a decline in average trade loans (decline of 4%, or 3% excluding the impact of FX translation), as well as a decline in spreads. However, the business experienced an increase in demand for working capital finance solutions toward the end of the quarter.
- *Corporate lending* revenues increased $746 million to $1.3 billion, reflecting gains on loan hedges as credit spreads widened during the quarter, reflecting the market volatility related to the COVID-19 pandemic. Excluding the impact of gains (losses) on loan hedges, revenues decreased 40%, driven primarily by an adjustment to the residual value of a lease financing asset, as well as marks on the portfolio, driven by the market volatility related to the pandemic. End-of-period loans were up 11% from December 31, 2019, as Citi continued to support clients during a challenging market environment with additional liquidity.
- *Private bank* revenues increased 15%. Excluding the impact of gains on loan hedges, revenues increased 8%, reflecting particular strength in *Asia*. The increase in revenues reflected strong client activity, which drove higher capital markets revenues and higher loan and deposit volumes, partially offset by the continued impact of lower deposit spreads due to the lower interest rate environment.

Within *Markets and securities services*:

- *Fixed income markets* revenues increased 39%, reflecting higher revenues across all regions, particularly later in the quarter due to the impact of market conditions related to the COVID-19 pandemic. Non-interest revenues increased, reflecting higher corporate and investor client activity as volatility, volumes and spreads reached record levels, particularly in rates and currencies and commodities. Net interest revenues also increased, reflecting lower funding costs as well as a change in the mix of trading positions in support of client activity.
- *Rates and currencies* revenues increased 68%, primarily driven by higher G10 rates and currencies revenues in *North America* and *EMEA*, as Citi helped corporate and investor clients reposition their portfolios in a challenging market environment related to the impact of the COVID-19 pandemic, including record levels of volatility. Spread products and other fixed income revenues decreased 28%, as higher revenues in commodities, reflecting increased volatility related to the impact of the COVID-19 pandemic, were offset by lower revenues in spread products, reflecting a challenging environment, particularly in *North America* and *EMEA*.
- *Equity markets* revenues increased 39%, driven by higher equity derivatives revenues across all regions, partially offset by a modest decline in prime finance, while cash equities revenues were largely unchanged. The increase in equity derivatives revenues reflected increased client

activity due to higher volatility, particularly later in the quarter related to the impact of the COVID-19 pandemic. Prime finance revenues declined modestly as underlying client momentum was more than offset by lower financing balances. Non-interest revenues increased, primarily driven by higher principal transactions and commissions and fee revenues, due to higher client activity and a more volatile trading environment related to the COVID-19 pandemic, as well as a change in the mix of trading positions in support of client activity.

- *Securities services* revenues were up 1%. Excluding the impact of FX translation, revenues increased 5%, reflecting higher client activity and deposit volumes, partially offset by lower interest revenue as interest rates declined.

For additional information on trends in *ICG*'s deposit and trade loans, see "Managing Global Risk—Liquidity Risk—Loans" below.

Expenses increased 3%, as efficiency savings were more than offset by higher compensation costs, continued investments in the businesses and volume-related growth.

Provisions increased to $2.0 billion. Provisions for credit losses included net credit losses of $127 million, compared to $78 million in the prior-year period under prior accounting standards, and a net credit loss reserve build of $1.9 billion, compared to a net credit loss release of $46 million in the prior-year period under prior accounting standards.

The increase in the net credit loss reserve build primarily reflected the impact of deterioration in the economic outlook driven by the COVID-19 pandemic across multiple sectors under the CECL standard, as well as some downgrades, along with volume growth in the portfolio.

For additional information on *ICG*'s corporate credit portfolio, see "Managing Global Risk—Credit Risk—Corporate Credit" below.

For additional information on CECL, see "Significant Accounting Policies and Estimates" below, and Notes 1 and 14 to the Consolidated Financial Statements.

For additional information about trends, uncertainties and risks related to the COVID-19 pandemic, see the "COVID-19 Overview" and "Risk Factors" sections above.

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 March 31, 2020, *Corporate/Other* had $94 billion in assets.

	First Quarter		
In millions of dollars	**2020**	2019	**% Change**
Net interest revenue	**$ 325**	$ 669	**(51)%**
Non-interest revenue	**(252)**	(201)	**(25)**
Total revenues, net of interest expense	**$ 73**	$ 468	**(84)%**
Total operating expenses	**$ 416**	$ 549	**(24)%**
Net credit losses (recoveries) on loans	**$ (2)**	$ 2	**NM**
Credit reserve build (release) for loans	**191**	(26)	**NM**
Provision (release) for credit losses on unfunded lending commitments	**5**	(1)	**NM**
Provisions for benefits and claims, HTM debt securities and other assets	**(2)**	—	**—**
Provisions (release) for credit losses and for benefits and claims	**$ 192**	$ (25)	**NM**
Income (loss) from continuing operations before taxes	**$ (535)**	$ (56)	**NM**
Income taxes (benefits)	**(198)**	(61)	**NM**
Income (loss) from continuing operations	**$ (337)**	$ 5	**NM**
Income (loss) from discontinued operations, net of taxes	**(18)**	(2)	**NM**
Net income (loss) before attribution of noncontrolling interests	**$ (355)**	$ 3	**NM**
Noncontrolling interests	**(4)**	14	**NM**
Net income (loss)	**$ (351)**	$ (11)	**NM**

NM Not meaningful

1Q20 vs. 1Q19

Net loss was $351 million, compared to a net loss of $11 million in the prior-year period, largely driven by lower revenues and significantly higher cost of credit, partially offset by lower expenses.

Revenues decreased 84%, reflecting the wind-down of legacy assets, the impact of lower interest rates and marks on legacy securities, as spreads widened during the quarter.

Expenses decreased 24%, primarily reflecting the wind-down of legacy assets, partially offset by higher infrastructure costs as well as incremental costs associated with the COVID-19 pandemic, including special compensation awarded to approximately 75,000 employees most directly impacted by the pandemic.

Provisions increased $217 million, primarily driven by a net credit loss reserve build on legacy assets in the current quarter (versus a net credit loss release in the prior-year period under prior accounting standards), reflecting the impact of changes in the economic outlook due to COVID-19 on estimated lifetime credit losses under the CECL standard.

For additional information on CECL, see "Significant Accounting Policies and Estimates" below, and Notes 1 and 14 to the Consolidated Financial Statements.

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 2019 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 2019 Annual Report on Form 10-K.

During the first quarter of 2020, Citi returned a total of $4.0 billion of capital to common shareholders in the form of share repurchases (approximately 41 million common shares) and dividends. As discussed above, on March 15, 2020, Citi announced it had joined other major U.S. banks in suspending stock repurchases to support clients in light of the COVID-19 pandemic. Citi stated there was no change to its dividend policy. For additional information, see "Unregistered Sales of Equity Securities, Repurchases of Equity Securities and Dividends—Equity Security Repurchases" below.

Regulatory Capital Relief Resulting from the COVID-19 Pandemic

The U.S. banking agencies issued several interim final rules during March 2020 to revise the current regulatory capital standards applicable to Citi, in light of the COVID-19 pandemic.

Use of Regulatory Capital Buffers

In March 2020, the U.S. banking agencies issued a statement encouraging banking organizations to use their regulatory capital buffers as they respond to the challenges presented by the effects of the COVID-19 pandemic.

Consistent with the statement, in March 2020, the U.S. banking agencies issued an interim final rule that eases capital distribution limitations in the U.S. Basel III rules, in an effort to reduce the impact of using regulatory capital buffers. The changes in the rule have the potential to prevent a complete and sudden cessation of capital distributions due to a breach of regulatory capital buffers, which include the GSIB surcharge, Capital Conservation Buffer, and any Countercyclical Capital Buffer (currently 0%). The interim final rule became effective in March 2020, and applies to risk-based capital ratios and the Supplementary Leverage ratio.

More specifically, under the U.S. Basel III rules, banking organizations that fall below their regulatory capital buffers are subject to limitations on capital distributions based on a percentage of "Eligible Retained Income" (ERI), with increasing restrictions based upon the severity of the breach. The original definition of ERI in the U.S. Basel III rules was equal to the bank's net income for the four calendar quarters preceding the current calendar quarter, net of any distributions and tax effects not already reflected in net income. The interim final rule revises the definition of ERI to equal the greater of: (i) the bank's net income for the four calendar quarters preceding the current calendar quarter, net of any distributions and tax effects not already reflected in net income, and (ii) the average of the bank's net income for the four calendar quarters preceding the current calendar quarter.

As of March 31, 2020, Citi's regulatory capital ratios exceeded effective regulatory minimum requirements. Therefore, Citi is not subject to any payout limitations.

The impact of the interim final rule on Citibank, N.A. (Citibank) is limited, because the minimum requirements to be considered "well-capitalized" under the Prompt Corrective Action (PCA) framework are unchanged. For additional information on the PCA framework, see "Capital Resources—Current Regulatory Capital Standards—Prompt Corrective Action Framework" in Citi's 2019 Annual Report on Form 10-K.

In March 2020, the Federal Reserve Board issued another interim final rule clarifying that the ERI revisions also apply to external Total Loss-Absorbing Capacity (TLAC) buffers, and are intended to provide the same easing in the automatic distribution restrictions if a U.S. global systemically important bank holding company, such as Citi, breaches its RWA-based or leverage-based TLAC buffers. Long-Term Debt requirements do not include any buffers, and are therefore unaffected by the interim final rule. 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 2019 Annual Report on Form 10-K.

Regulatory Capital Treatment—Modified Transition of the Current Expected Credit Losses Methodology

In March 2020, the U.S. banking agencies issued an interim final rule that modifies the regulatory capital transition provision related to the Current Expected Credit Losses (CECL) methodology.

The interim final rule permits banks to delay for two years the "Day One" adverse regulatory capital effects resulting from adoption of the CECL methodology on January 1, 2020 until January 1, 2022, followed by a three-year transition to phase out the regulatory capital benefit provided by the delay.

In addition, for the ongoing impact of CECL, the agencies utilize a 25% scaling factor as an approximation of the increased reserve build under CECL compared to the previous incurred loss model, and therefore allows banks to add back to Common Equity Tier 1 Capital an amount equal to 25% of the change in CECL-based allowances recognized through earnings in each quarter between January 1, 2020 and December 31, 2021. Beginning January 1, 2022, the cumulative 25% change in CECL-based allowances recognized through earnings between January 1, 2020 and December 31, 2021 will be phased in to regulatory capital at 25% per year on January 1 of each year over the three-year transition period, along with the delayed "Day One" impact.

Citigroup and Citibank have elected the modified CECL transition provision provided by the interim final

rule beginning with the quarter ended March 31, 2020. Accordingly, the Day One regulatory capital effects resulting from adoption of the CECL methodology, as well as the ongoing adjustments for 25% of the change in CECL-based allowances recognized through earnings in each quarter between January 1, 2020 and December 31, 2021, will now commence phase-in on January 1, 2022 and will be fully reflected in Citi's regulatory capital as of January 1, 2025.

For additional information on the U.S. banking agencies' original regulatory capital transition provision related to the "Day One" adverse regulatory capital effects resulting from adoption of the CECL methodology, see "Capital Resources—Regulatory Capital Treatment—Implementation and Transition of the Current Expected Credit Losses (CECL) Methodology" in Citi's 2019 Annual Report on Form 10-K. Neither the March 2020 interim final rule nor the agencies' prior guidance has any impact on U.S. GAAP accounting.

Regulatory Capital Impact of the Money Market Mutual Fund Liquidity Facility

In March 2020, the Federal Reserve Board established the Money Market Mutual Fund Liquidity Facility (MMLF), to further support the flow of credit to households and businesses by taking steps to enhance the liquidity and functioning of crucial money markets. Through the MMLF, the Federal Reserve Bank of Boston can make non-recourse loans available to eligible financial institutions secured by high-quality assets purchased by the financial institution from money market mutual funds.

To ensure that financial institutions would be able to effectively use the MMLF, in March 2020, the U.S. banking agencies issued an interim final rule that permits banking organizations to exclude exposures acquired pursuant to a non-recourse loan as part of the MMLF from risk-weighted assets under the Standardized Approach and Advanced Approaches, as well as quarterly adjusted average total assets and Total Leverage Exposure. The interim final rule is effective commencing with the quarter ended March 31, 2020.

Standardized Approach for Counterparty Credit Risk

In January 2020, the U.S. banking agencies issued a final rule to introduce the Standardized Approach for Counterparty Credit Risk (SA-CCR) in the U.S. The mandatory compliance date of the SA-CCR final rule is January 1, 2022, and early adoption was originally permitted beginning April 1, 2020. For additional information on the SA-CCR final rule, see "Capital Resources—Regulatory Capital Standards Developments" in Citi's 2019 Annual Report on Form 10-K.

In March 2020, the U.S. banking agencies issued an interim final rule permitting banks to early adopt the SA-CCR final rule beginning with the quarter ended March 31, 2020.

Citi did not adopt the SA-CCR final rule in the quarter ended March 31, 2020. Citi continues to evaluate a decision on its intended implementation date for SA-CCR, including consideration of the impact of SA-CCR on both Citigroup's and Citibank's regulatory capital ratios.

Citigroup's Capital Resources

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

In millions of dollars, except ratios	Effective Minimum Requirement[1]	Advanced Approaches		Standardized Approach	
		March 31, 2020	December 31, 2019	**March 31, 2020**	December 31, 2019
Common Equity Tier 1 Capital[2]		**$ 136,695**	$ 137,798	**$ 136,695**	$ 137,798
Tier 1 Capital		**154,304**	155,805	**154,304**	155,805
Total Capital (Tier 1 Capital + Tier 2 Capital)[2]		**184,902**	181,337	**194,369**	193,682
Total Risk-Weighted Assets[3]		**1,224,085**	1,135,553	**1,217,805**	1,166,523
Credit Risk[2]		**$ 839,439**	$ 771,508	**$ 1,136,874**	$ 1,107,775
Market Risk		**78,915**	57,317	**80,931**	58,748
Operational Risk		**305,731**	306,728	—	—
Common Equity Tier 1 Capital ratio[4]	**10.0%**	**11.17%**	12.13%	**11.22%**	11.81%
Tier 1 Capital ratio[4]	**11.5**	**12.61**	13.72	**12.67**	13.36
Total Capital ratio[4]	**13.5**	**15.11**	15.97	**15.96**	16.60

In millions of dollars, except ratios	Effective Minimum Requirement	March 31, 2020	December 31, 2019
Quarterly Adjusted Average Total Assets[2][3][5]		**$ 2,044,340**	$ 1,957,039
Total Leverage Exposure[2][3][6]		**2,585,730**	2,507,891
Tier 1 Leverage ratio	**4.0%**	**7.55%**	7.96%
Supplementary Leverage ratio	**5.0**	**5.97**	6.21

(1) Citi's effective minimum risk-based capital requirements include 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 has elected to apply the modified transition provision related to the impact of the CECL accounting standard on regulatory capital, as provided by the U.S. banking agencies' March 2020 interim final rule. Under the modified CECL transition provision, the changes in retained earnings (after-tax), deferred tax assets (DTAs) arising from temporary differences, and the allowance for credit losses upon the January 1, 2020 CECL adoption date have been deferred and will phase in to regulatory capital at 25% per year commencing January 1, 2022. For the ongoing impact of CECL, Citigroup is allowed to adjust retained earnings and the allowance for credit losses in an amount equal to 25% of the change in the allowance for credit losses recognized through earnings (pre-tax) for each period between January 1, 2020 and December 31, 2021. The cumulative adjustments to retained earnings and the allowance for credit losses between January 1, 2020 and December 31, 2021 will also phase in to regulatory capital at 25% per year commencing January 1, 2022, along with the deferred impacts related to the January 1, 2020 CECL adoption date. Corresponding adjustments to average on-balance sheet assets are reflected in quarterly adjusted average total assets and Total Leverage Exposure. Additionally, the increase in DTAs arising from temporary differences upon the January 1, 2020 adoption date has been deducted from risk-weighted assets (RWA) and will phase in to RWA at 25% per year commencing January 1, 2022.

(3) Commencing with the quarter ended March 31, 2020, exposures acquired pursuant to a non-recourse loan as part of the MMLF are excluded from risk-weighted assets under the Advanced Approaches and Standardized Approach, as well as quarterly adjusted average total assets and Total Leverage Exposure.

(4) Citi's reportable Common Equity Tier 1 Capital and Tier 1 Capital ratios were derived under the Basel III Advanced Approaches framework as of March 31, 2020, and the Basel III Standardized Approach as of December 31, 2019, whereas Citi's reportable Total Capital ratio was the lower derived under the Basel III Advanced Approaches framework for all periods presented.

(5) Tier 1 Leverage ratio denominator. Represents quarterly average total assets less amounts deducted from Tier 1 Capital.

(6) Supplementary Leverage ratio denominator.

As indicated in the table above, Citigroup's risk-based capital ratios at March 31, 2020 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 March 31, 2020.

Common Equity Tier 1 Capital Ratio

Citi's reportable Common Equity Tier 1 Capital was 11.2%, the lower derived under the Basel III Advanced Approaches framework as of March 31, 2020, and 11.8% under the Basel III Standardized Approach as of December 31, 2019. Citi's Common Equity Tier 1 Capital ratio decline from year-end 2019 was largely attributable to increases in credit and market risk-weighted assets, the return of $4.0 billion of capital to common shareholders and foreign currency translation loss of $4.1 billion, partially offset by unrealized gains on AFS debt securities of $3.1 billion, net income of $2.5 billion, and the relief of the modified CECL transition provision for the quarter.

Components of Citigroup Capital

In millions of dollars		**March 31, 2020**		December 31, 2019
Common Equity Tier 1 Capital				
Citigroup common stockholders' equity[1]	**$**	**174,502**	$	175,414
Add: Qualifying noncontrolling interests		**138**		154
Regulatory capital adjustments and deductions:				
Add: CECL transition and 25% provision deferral[2]		**4,300**		—
Less: Accumulated net unrealized gains (losses) on cash flow hedges, net of tax		**2,020**		123
Less: Cumulative unrealized net gain (loss) related to changes in fair value of financial liabilities attributable to own creditworthiness, net of tax		**2,838**		(679)
Less: Intangible assets:				
Goodwill, net of related DTLs[3]		**20,123**		21,066
Identifiable intangible assets other than MSRs, net of related DTLs		**3,953**		4,087
Less: Defined benefit pension plan net assets		**1,052**		803
Less: DTAs arising from net operating loss, foreign tax credit and general business credit carry-forwards[4]		**12,259**		12,370
Total Common Equity Tier 1 Capital (Advanced Approaches and Standardized Approach)	**$**	**136,695**	$	137,798
Additional Tier 1 Capital				
Qualifying noncumulative perpetual preferred stock[1]	**$**	**17,829**	$	17,828
Qualifying trust preferred securities[5]		**1,390**		1,389
Qualifying noncontrolling interests		**40**		42
Regulatory capital deductions:				
Less: Permitted ownership interests in covered funds[6]		**1,622**		1,216
Less: Minimum regulatory capital requirements of insurance underwriting subsidiaries[7]		**28**		36
Total Additional Tier 1 Capital (Advanced Approaches and Standardized Approach)	**$**	**17,609**	$	18,007
Total Tier 1 Capital (Common Equity Tier 1 Capital + Additional Tier 1 Capital) (Advanced Approaches and Standardized Approach)	**$**	**154,304**	$	155,805
Tier 2 Capital				
Qualifying subordinated debt	**$**	**25,461**	$	23,673
Qualifying trust preferred securities[8]		**318**		326
Qualifying noncontrolling interests		**42**		46
Excess of eligible credit reserves over expected credit losses[2][9]		**4,805**		1,523
Regulatory capital deduction:				
Less: Minimum regulatory capital requirements of insurance underwriting subsidiaries[7]		**28**		36
Total Tier 2 Capital (Advanced Approaches)	**$**	**30,598**	$	25,532
Total Capital (Tier 1 Capital + Tier 2 Capital) (Advanced Approaches)	**$**	**184,902**	$	181,337
Adjustment for eligible allowance for credit losses[2][9]	**$**	**9,467**	$	12,345
Total Tier 2 Capital (Standardized Approach)	**$**	**40,065**	$	37,877
Total Capital (Tier 1 Capital + Tier 2 Capital) (Standardized Approach)	**$**	**194,369**	$	193,682

(1) Issuance costs of $151 million as of March 31, 2020 and $152 million as of December 31, 2019 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.

(2) Citi has elected to apply the modified transition provision related to the impact of the CECL accounting standard on regulatory capital, as provided by the U.S. banking agencies' March 2020 interim final rule. Under the modified CECL transition provision, the changes in retained earnings (after-tax) and the allowance for credit losses upon the January 1, 2020 CECL adoption date have been deferred and will phase in to regulatory capital at 25% per year commencing January 1, 2022. For the ongoing impact of CECL, Citigroup is allowed to adjust retained earnings and the allowance for credit losses in an amount equal to 25% of the change in the allowance for credit losses recognized through earnings (pre-tax) for each period between January 1, 2020 and December 31, 2021. The cumulative adjustments to retained earnings and the allowance for credit losses between January 1, 2020 and December 31, 2021 will also phase in to regulatory capital at 25% per year commencing January 1, 2022, along with the deferred impacts related to the January 1, 2020 CECL adoption date.

(3) Includes goodwill "embedded" in the valuation of significant common stock investments in unconsolidated financial institutions.

Footnotes continue on the following page.

(4) Of Citi's $22.1 billion of net DTAs at March 31, 2020, $13.1 billion was includable in Common Equity Tier 1 Capital pursuant to the U.S. Basel III rules, while $9.0 billion was excluded. Excluded from Citi's Common Equity Tier 1 Capital as of March 31, 2020 was $12.3 billion of net DTAs arising from net operating loss, foreign tax credit and general business credit carry-forwards, which was reduced by $3.3 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%.

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

(6) 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. The U.S. agencies issued a revised Volcker Rule 2.0 in November 2019 that removes permitted investments in third-party covered funds from capital deduction requirements, among other changes. Upon the removal of the capital deduction, permitted investments in third-party covered funds will be included in risk-weighted assets. Mandatory compliance with the revised Volcker Rule 2.0 is required by January 1, 2021, with early adoption permitted, in whole or in part, beginning January 1, 2020. Citi continues to deduct from Tier 1 Capital all permitted ownership interests in covered funds for all periods presented.

(7) 50% of the minimum regulatory capital requirements of insurance underwriting subsidiaries must be deducted from each of Tier 1 Capital and Tier 2 Capital.

(8) 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.

(9) 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. The total amount of allowance for credit losses that were eligible for inclusion in Tier 2 Capital, subject to limitation, under the Standardized Approach framework was $14.3 billion and $13.9 billion at March 31, 2020 and December 31, 2019, respectively.

Citigroup Capital Rollforward

In millions of dollars		Three Months Ended March 31, 2020
Common Equity Tier 1 Capital, beginning of period	**$**	**137,798**
Net income		**2,522**
Common and preferred dividends declared		**(1,372)**
Net increase in treasury stock		**(2,487)**
Net decrease in common stock and additional paid-in capital		**(291)**
Net change in foreign currency translation adjustment net of hedges, net of tax		**(4,109)**
Net decrease in unrealized losses on debt securities AFS, net of tax		**3,128**
Net increase in defined benefit plans liability adjustment, net of tax		**(286)**
Net change in adjustment related to change in fair value of financial liabilities attributable to own creditworthiness, net of tax		**(377)**
Net change in excluded component of fair value hedges		**27**
Net decrease in goodwill, net of related DTLs		**943**
Net decrease in identifiable intangible assets other than MSRs, net of related DTLs		**134**
Net increase in defined benefit pension plan net assets		**(249)**
Net decrease in DTAs arising from net operating loss, foreign tax credit and general business credit carry-forwards		**111**
CECL 25% provision deferral		**1,232**
Other		**(29)**
Net decrease in Common Equity Tier 1 Capital	**$**	**(1,103)**
Common Equity Tier 1 Capital, end of period (Advanced Approaches and Standardized Approach)	**$**	**136,695**
Additional Tier 1 Capital, beginning of period	**$**	**18,007**
Net increase in qualifying perpetual preferred stock		**1**
Net increase in qualifying trust preferred securities		**1**
Net increase in permitted ownership interests in covered funds		**(406)**
Other		**6**
Net decrease in Additional Tier 1 Capital	**$**	**(398)**
Tier 1 Capital, end of period (Advanced Approaches and Standardized Approach)	**$**	**154,304**
Tier 2 Capital, beginning of period (Advanced Approaches)	**$**	**25,532**
Net increase in qualifying subordinated debt		**1,788**
Net increase in excess of eligible credit reserves over expected credit losses		**3,282**
Other		**(4)**
Net increase in Tier 2 Capital (Advanced Approaches)	**$**	**5,066**
Tier 2 Capital, end of period (Advanced Approaches)	**$**	**30,598**
Total Capital, end of period (Advanced Approaches)	**$**	**184,902**
Tier 2 Capital, beginning of period (Standardized Approach)	**$**	**37,877**
Net increase in qualifying subordinated debt		**1,788**
Net increase in eligible allowance for credit losses		**404**
Other		**(4)**
Net change in Tier 2 Capital (Standardized Approach)	**$**	**2,188**
Tier 2 Capital, end of period (Standardized Approach)	**$**	**40,065**
Total Capital, end of period (Standardized Approach)	**$**	**194,369**

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

In millions of dollars		Three Months Ended March 31, 2020
Total Risk-Weighted Assets, beginning of period	**$**	**1,135,553**
Changes in Credit Risk-Weighted Assets		
Retail exposures[(1)]		**(7,589)**
Wholesale exposures[(2)]		**21,881**
Repo-style transactions[(3)]		**15,102**
Securitization exposures		**(1,390)**
Equity exposures		**(2,427)**
Over-the-counter (OTC) derivatives[(4)]		**14,723**
Derivatives CVA[(5)]		**20,129**
Other exposures[(6)]		**4,796**
Supervisory 6% multiplier		**2,706**
Net increase in Credit Risk-Weighted Assets	**$**	**67,931**
Changes in Market Risk-Weighted Assets		
Risk levels[(7)]	**$**	**13,245**
Model and methodology updates[(7)]		**8,353**
Net increase in Market Risk-Weighted Assets	**$**	**21,598**
Net decrease in Operational Risk-Weighted Assets	**$**	**(997)**
Total Risk-Weighted Assets, end of period	**$**	**1,224,085**

(1) Retail exposures decreased during the three months ended March 31, 2020 primarily due to seasonal holiday spending repayments.
(2) Wholesale exposures increased during the three months ended March 31, 2020 primarily due to growth in commercial loans and changes in obligor ratings, partially offset by decrease due to annual model parameter updates reflecting Citi's loss experiences.
(3) Repo-style transactions include repurchase and reverse repurchase transactions as well as securities borrowing and securities lending transactions. Repo-style transactions increased during the three months ended March 31, 2020 mainly driven by market volatility.
(4) OTC derivatives increased during the three months ended March 31, 2020 primarily due to increases in mark to market gains and notionals for bilateral derivatives.
(5) Derivatives CVA increased during the three months ended March 31, 2020 primarily due to widening of credit spreads and market volatility.
(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 three months ended March 31, 2020 primarily due to increases in notional for client cleared derivatives.
(7) Market risk-weighted assets increased during the three months ended March 31, 2020 primarily due to increases in market volatility and exposure levels subject to various Market risk-weighted assets components.

As set forth in the table above, total risk-weighted assets under the Basel III Advanced Approaches increased from year-end 2019 primarily due to higher credit and market risk-weighted assets, slightly offset by a decrease in operational risk-weighted assets. The increase in credit risk-weighted assets was primarily due to an increase in wholesale exposures mainly driven by an increase in commercial loans, derivatives CVA mainly due to widening of credit spreads, OTC derivatives trade activities, repo-style transactions primarily due to market volatility, and other exposures, partially offset by decreases in retail exposures. Market risk-weighted assets increased from year-end 2019 primarily due to increases in market volatility and exposure levels.

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

In millions of dollars		Three Months Ended March 31, 2020
Total Risk-Weighted Assets, beginning of period	**$**	**1,166,523**
Changes in Credit Risk-Weighted Assets		
General credit risk exposures[(1)]		**20,904**
Repo-style transactions[(2)]		**3,505**
Securitization exposures		**(919)**
Equity exposures[(3)]		**(2,233)**
Over-the-counter (OTC) derivatives[(4)]		**23,867**
Other exposures		**1,354**
Off-balance sheet exposures[(5)]		**(17,379)**
Net increase in Credit Risk-Weighted Assets	**$**	**29,099**
Changes in Market Risk-Weighted Assets		
Risk levels[(6)]	**$**	**13,830**
Model and methodology updates[(6)]		**8,353**
Net increase in Market Risk-Weighted Assets	**$**	**22,183**
Total Risk-Weighted Assets, end of period	**$**	**1,217,805**

(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 March 31, 2020 primarily due to growth in commercial loans, partially offset by seasonal holiday spending repayments.
(2) Repo-style transactions include repurchase and reverse repurchase transactions as well as securities borrowing and securities lending transactions. Repo-style transactions increased during the three months ended March 31, 2020 primarily due to volume and exposure driven increases.
(3) Equity exposures decreased during the three months ended March 31, 2020, primarily due to a decrease in market value of investments.
(4) OTC derivatives increased during the three months ended March 31, 2020, primarily due to increases in mark to market gains and notionals for bilateral derivatives.
(5) Off-balance sheet exposures decreased during the three months ended March 31, 2020, primarily due to drawdowns in loan commitments.
(6) Market risk-weighted assets increased during the three months ended March 31, 2020 primarily due to increases in market volatility and exposure levels subject to various Market risk-weighted assets components.

As set forth in the table above, total risk-weighted assets under the Basel III Standardized Approach increased from year-end 2019 primarily due to higher credit and market risk-weighted assets. The increase in credit risk-weighted assets was primarily due to changes in OTC derivatives activities, an increase in commercial loans and repo-style transactions mainly due to market volatility, partially offset by a decrease in loan commitments primarily due to drawdowns and a decrease in equity exposures. Market risk-weighted assets increased from year-end 2019 primarily due to increases in market volatility and exposure levels.

Supplementary Leverage Ratio

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

In millions of dollars, except ratios		**March 31, 2020**		December 31, 2019
Tier 1 Capital	**$**	**154,304**	$	155,805
Total Leverage Exposure				
On-balance sheet assets(1)	**$**	**2,083,377**	$	1,996,617
Certain off-balance sheet exposures:(2)				
Potential future exposure on derivative contracts		**169,296**		169,478
Effective notional of sold credit derivatives, net(3)		**38,910**		38,481
Counterparty credit risk for repo-style transactions(4)		**22,386**		23,715
Unconditionally cancellable commitments		**71,453**		70,870
Other off-balance sheet exposures		**239,345**		248,308
Total of certain off-balance sheet exposures	**$**	**541,390**	$	550,852
Less: Tier 1 Capital deductions		**(39,037)**		(39,578)
Total Leverage Exposure	**$**	**2,585,730**	$	2,507,891
Supplementary Leverage ratio		**5.97%**		6.21%

(1) Represents the daily average of on-balance sheet assets for the quarter. Citi has elected to apply the modified transition provision related to the impact of the CECL accounting standard on regulatory capital, as provided by the U.S. banking agencies' March 2020 interim final rule. Under the modified CECL transition provision, the changes in DTAs arising from temporary differences and the allowance for credit losses upon the January 1, 2020 CECL adoption date have been deferred and will phase in to regulatory capital at 25% per year commencing January 1, 2022. For the ongoing impact of CECL, Citigroup is allowed to adjust the allowance for credit losses in an amount equal to 25% of the change in the allowance for credit losses recognized through earnings (pre-tax) for each period between January 1, 2020 and December 31, 2021. The cumulative adjustments to the allowance for credit losses between January 1, 2020 and December 31, 2021 will also phase in to regulatory capital at 25% per year commencing January 1, 2022, along with the deferred impacts related to the January 1, 2020 CECL adoption date. Corresponding adjustments to average on-balance sheet assets are reflected in Total Leverage Exposure.

(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.

As set forth in the table above, Citigroup's Supplementary Leverage ratio was 6.0% for the first quarter of 2020, compared to 6.2% for the fourth quarter of 2019. The ratio decreased from the fourth quarter of 2019, primarily driven by an increase in Total Leverage Exposure mainly due to growth in average on-balance sheet assets, the return of $4.0 billion of capital to common shareholders and foreign currency translation loss of $4.1 billion, partially offset by unrealized gains on AFS debt securities of $3.1 billion, net income of $2.5 billion, and the relief of the modified CECL transition provision for the quarter.

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.

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

		Advanced Approaches		Standardized Approach	
In millions of dollars, except ratios	**Effective Minimum Requirement[1]**	**March 31, 2020**	December 31, 2019	**March 31, 2020**	December 31, 2019
Common Equity Tier 1 Capital[2]		**$ 134,835**	$ 130,720	**$ 134,835**	$ 130,720
Tier 1 Capital		**136,919**	132,847	**136,919**	132,847
Total Capital (Tier 1 Capital + Tier 2 Capital)[2][3]		**153,194**	145,918	**161,629**	157,253
Total Risk-Weighted Assets		**1,008,709**	931,743	**1,058,427**	1,019,266
Credit Risk[2]		**$ 722,304**	$ 664,139	**$ 1,010,662**	$ 989,669
Market Risk		**47,579**	29,167	**47,765**	29,597
Operational Risk		**238,826**	238,437	—	—
Common Equity Tier 1 Capital ratio[4][5]	**7.0%**	**13.37%**	14.03%	**12.74%**	12.82%
Tier 1 Capital ratio[4][5]	**8.5**	**13.57**	14.26	**12.94**	13.03
Total Capital ratio[4][5]	**10.5**	**15.19**	15.66	**15.27**	15.43

In millions of dollars, except ratios	**Effective Minimum Requirement**	**March 31, 2020**	December 31, 2019
Quarterly Adjusted Average Total Assets[2][6]		**$ 1,512,382**	$ 1,459,780
Total Leverage Exposure[2][7]		**1,994,180**	1,951,630
Tier 1 Leverage ratio[5]	**5.0%**	**9.05%**	9.10%
Supplementary Leverage ratio[5]	**6.0**	**6.87**	6.81

(1) Citibank's effective minimum risk-based capital requirements include the 2.5% Capital Conservation Buffer (all of which must be composed of Common Equity Tier 1 Capital).

(2) Citibank has elected to apply the modified transition provision related to the impact of the CECL accounting standard on regulatory capital, as provided by the U.S. banking agencies' March 2020 interim final rule. Under the modified CECL transition provision, the changes in retained earnings (after-tax), deferred tax assets (DTAs) arising from temporary differences, and the allowance for credit losses upon the January 1, 2020 CECL adoption date have been deferred and will phase in to regulatory capital at 25% per year commencing January 1, 2022. For the ongoing impact of CECL, Citibank is allowed to adjust retained earnings and the allowance for credit losses in an amount equal to 25% of the change in the allowance for credit losses recognized through earnings (pre-tax) for each period between January 1, 2020 and December 31, 2021. The cumulative adjustments to retained earnings and the allowance for credit losses between January 1, 2020 and December 31, 2021 will also phase in to regulatory capital at 25% per year commencing January 1, 2022, along with the deferred impacts related to the January 1, 2020 CECL adoption date. Corresponding adjustments to average on-balance sheet assets are reflected in quarterly adjusted average total assets and Total Leverage Exposure. Additionally, the increase in DTAs arising from temporary differences upon the January 1, 2020 adoption date has been deducted from risk-weighted assets (RWA) and will phase in to RWA at 25% per year commencing January 1, 2022.

(3) 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.

(4) Citibank's reportable Total Capital ratio was derived under the Basel III Advanced Approaches framework as of March 31, 2020, and the Basel III Standardized Approach as of December 31, 2019, whereas Citibank's reportable Common Equity Tier 1 Capital and Tier 1 Capital ratios were the lower derived under the Basel III Standardized Approach framework for all periods presented.

(5) 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 2019 Annual Report on Form 10-K.

(6) Tier 1 Leverage ratio denominator. Represents quarterly average total assets less amounts deducted from Tier 1 Capital.

(7) Supplementary Leverage ratio denominator.

As indicated in the table above, Citibank's capital ratios at March 31, 2020 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 March 31, 2020.

Impact of Changes on Citigroup and Citibank Capital Ratios

The following tables present the estimated sensitivity of Citigroup's and Citibank's capital ratios to changes of $100 million in Common Equity Tier 1 Capital, Tier 1 Capital and Total Capital (numerator), and changes of $1 billion in Advanced Approaches and Standardized Approach risk-weighted assets and quarterly adjusted average total assets, as well as Total Leverage Exposure (denominator), as of March 31, 2020. This information is provided for the purpose of analyzing the impact that a change in Citigroup's or Citibank's financial position or results of operations could have on these ratios. These sensitivities only consider a single change to either a component of capital, risk-weighted assets, quarterly adjusted average total assets or Total Leverage Exposure. Accordingly, an event that affects more than one factor may have a larger basis point impact than is reflected in these tables.

	Common Equity Tier 1 Capital ratio		Tier 1 Capital 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	**0.8**	**0.9**	**0.8**	**1.0**	**0.8**	**1.2**
Standardized Approach	**0.8**	**0.9**	**0.8**	**1.0**	**0.8**	**1.3**
Citibank						
Advanced Approaches	**1.0**	**1.3**	**1.0**	**1.3**	**1.0**	**1.5**
Standardized Approach	**0.9**	**1.2**	**0.9**	**1.2**	**0.9**	**1.4**

	Tier 1 Leverage ratio		Supplementary Leverage ratio	
In basis points	**Impact of $100 million change in Tier 1 Capital**	**Impact of $1 billion change in quarterly adjusted average total assets**	**Impact of $100 million change in Tier 1 Capital**	**Impact of $1 billion change in Total Leverage Exposure**
Citigroup	**0.5**	**0.4**	**0.4**	**0.2**
Citibank	**0.7**	**0.6**	**0.5**	**0.3**

Citigroup Broker-Dealer Subsidiaries

At March 31, 2020, 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 $6.8 billion, which exceeded the minimum requirement by $2.6 billion.

Moreover, Citigroup Global Markets Limited, a broker-dealer registered with the United Kingdom's Prudential Regulation Authority (PRA) that is also an indirect wholly owned subsidiary of Citigroup, had total capital of $21.0 billion at March 31, 2020, 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 March 31, 2020.

Total Loss-Absorbing Capacity (TLAC)

The table below details Citi's eligible external TLAC and long-term debt (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 March 31, 2020, Citi exceeded each of the minimum TLAC and LTD requirements, resulting in a $14 billion surplus above its binding TLAC requirement of LTD as a percentage of Total Leverage Exposure.

	March 31, 2020	
In billions of dollars, except ratios	**External TLAC**	**LTD**
Total eligible amount	**$ 291**	**$ 130**
% of Advanced Approaches risk-weighted assets	**23.7%**	**10.6%**
Effective minimum requirement[1][2]	**22.5%**	**9.0%**
Surplus amount	**$ 15**	**$ 20**
% of Total Leverage Exposure	**11.2%**	**5.0%**
Effective minimum requirement	**9.5%**	**4.5%**
Surplus amount	**$ 45**	**$ 14**

(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 2019 Annual Report on Form 10-K.

Capital Resources (Full Adoption of CECL)

The following tables set forth Citigroup's and Citibank's capital components and ratios reflecting the full impact of CECL on regulatory capital as of March 31, 2020:

	Citigroup		Citibank	
	Advanced Approaches	**Standardized Approach**	**Advanced Approaches**	**Standardized Approach**
Common Equity Tier 1 Capital ratio	**10.84%**	**10.90%**	**13.00%**	**12.39%**
Tier 1 Capital ratio	**12.28**	**12.35**	**13.21**	**12.59**
Total Capital ratio	**14.80**	**15.65**	**14.84**	**14.93**

	Citigroup	**Citibank**
Tier 1 Leverage ratio	**7.35%**	**8.81%**
Supplementary Leverage ratio	**5.81**	**6.68**

Regulatory Capital Standards Developments

Stress Capital Buffer

In March 2020, the Federal Reserve Board issued the final Stress Capital Buffer (SCB) rule, integrating the annual stress testing requirements with ongoing regulatory capital requirements.

For Citigroup, the SCB rule replaces the fixed 2.5% Capital Conservation Buffer under the Standardized Approach, and would equal the peak-to-trough Common Equity Tier 1 Capital ratio decline under the Supervisory Severely Adverse scenario used in the Comprehensive Capital Analysis and Review (CCAR) and Dodd-Frank Act Stress Testing (DFAST), plus four quarters of planned common stock dividends, subject to a floor of 2.5%. The fixed 2.5% Capital Conservation Buffer will continue to apply under the Advanced Approaches. SCB-based minimum capital requirements will be updated once per year as part of the CCAR process. Similar to the current Capital Conservation Buffer, a breach of the SCB will result in graduated limitations on capital distributions. For additional information regarding limitations on capital distributions, see "Capital Resources—Regulatory Capital Relief Resulting from the COVID-19 Pandemic—Use of Regulatory Capital Buffers" above. For additional information regarding CCAR and DFAST, see "Capital Resources—Current Regulatory Capital Standards—Stress Testing Component of Capital Planning" in Citi's 2019 Annual Report on Form 10-K.

Since firms will be required to maintain risk-based capital ratio minimum requirements that integrate stress test results, the SCB final rule eliminated a number of previous CCAR requirements, including the once-a-year quantitative objection, the pre-approval requirement from the Federal Reserve Board for making distributions in excess of planned capital actions, and the 30% dividend payout ratio as a criterion for heightened supervisory scrutiny.

Citigroup's first SCB requirement will be announced by the Federal Reserve Board by June 30, 2020, based on the results of 2020 CCAR, and the SCB will become effective for Citigroup on October 1, 2020. Accordingly, Citigroup's effective minimum risk-based capital requirements under the Standardized Approach may increase as of October 1, 2020, as a result of the SCB that will be announced by the Federal Reserve Board.

The SCB applies to Citigroup only. The regulatory capital framework applicable to Citibank, including the Capital Conservation Buffer, is unchanged by the SCB final rule.

Temporary Supplementary Leverage Ratio Relief for Citigroup

In April 2020, the Federal Reserve Board issued an interim final rule that will temporarily change the calculation of the Supplementary Leverage ratio for bank holding companies, by excluding U.S. Treasuries and deposits at Federal Reserve banks from Total Leverage Exposure. Reverse repurchase receivables on U.S. Treasuries are not in scope for this relief. The Supplementary Leverage ratio is a non-risk-sensitive measure, and the temporary exclusion allows banking organizations to expand their balance sheet, as appropriate, to continue to serve as financial intermediaries and to provide credit to households and businesses during the COVID-19 pandemic.

The interim final rule will become effective for Citigroup's Supplementary Leverage ratio, as well as for Citigroup's leverage-based TLAC and LTD requirements, beginning with the quarter ended June 30, 2020, and will continue through March 31, 2021.

Supplementary Leverage ratio requirements for Citibank are unchanged by the Federal Reserve Board's interim final rule.

Regulatory Capital Impact of the Paycheck Protection Program

In April 2020, as part of the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) and in recognition of the exigent circumstances faced by small businesses, Congress created the Paycheck Protection Program (PPP). PPP covered loans are fully guaranteed as to principal and accrued interest by the Small Business Administration (SBA). As a general matter, SBA guarantees are backed by the full faith and credit of the U.S. government.

In order to provide liquidity to small business lenders and the broader credit markets, and to help stabilize the financial system, in April 2020 the Federal Reserve Board authorized each of the Federal Reserve Banks to extend credit under the Paycheck Protection Program Lending Facility (PPPLF). Under the PPPLF, Federal Reserve Banks will extend non-recourse loans to institutions that are eligible to make PPP covered loans. Eligible institutions may pledge PPP covered loans as collateral to the Federal Reserve Banks.

In April 2020, in recognition of CARES Act requirements, and to facilitate the use of the PPPLF, the U.S. banking agencies issued an interim final rule that allows banking organizations to neutralize certain regulatory capital effects of PPP loans. The interim final rule states that PPP covered loans originated by a banking organization under the PPP will be risk-weighted at 0% under the Standardized Approach and the Advanced Approaches. Additionally, the interim final rule permits banking organizations to exclude exposures pledged as collateral to the PPPLF from quarterly adjusted average total assets and Total Leverage Exposure. The interim final rule is effective commencing with the quarter ended June 30, 2020.

Deferral of Basel III Revisions

In April 2020, in light of the COVID-19 pandemic, the Basel Committee on Banking Supervision (Basel Committee) announced that the implementation date of the Basel III post-crisis regulatory reforms finalized in December 2017 has been deferred by one year to January 1, 2023. The reforms relate to the methodologies in deriving credit and operational risk-weighted assets, the imposition of a new aggregate output floor for risk-weighted assets, and revisions to the leverage ratio framework. The Basel

Committee also announced that the implementation date of the revised market risk framework finalized in January 2019 has been deferred by one year to January 1, 2023.

The U.S. banking agencies may revise the U.S. Basel III rules in the future, in response to the Basel Committee's Basel III post-crisis regulatory reforms and revised market risk framework.

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. Citi believes the presentation of TCE, TBV per share and return on average TCE provides alternate measures of capital strength and performance that are commonly used by investors and industry analysts.

In millions of dollars or shares, except per share amounts	**March 31, 2020**	December 31, 2019
Total Citigroup stockholders' equity	**$ 192,331**	$ 193,242
Less: Preferred stock	**17,980**	17,980
Common stockholders' equity	**$ 174,351**	$ 175,262
Less:		
Goodwill	**21,264**	22,126
Identifiable intangible assets (other than MSRs)	**4,193**	4,327
Tangible common equity (TCE)	**$ 148,894**	$ 148,809
Common shares outstanding (CSO)	**2,081.8**	2,114.1
Book value per share (common equity/CSO)	**$ 83.75**	$ 82.90
Tangible book value per share (TCE/CSO)	**71.52**	70.39

	Three Months Ended March 31,	
In millions of dollars	**2020**	2019
Net income available to common shareholders	**$ 2,231**	$ 4,448
Average common stockholders' equity	**174,217**	177,485
Average TCE	**148,852**	151,334
Return on average common stockholders' equity	**5.2%**	10.2%
Return on average TCE (RoTCE)[(1)]	**6.0**	11.9

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

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(1) 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 2019 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 2019 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	1Q'19	2Q'19	3Q'19	4Q'19	**1Q'20**
Retail banking:					
Mortgages	$ 80.8	$ 81.9	$ 83.0	$ 85.1	**$ 83.3**
Personal, small business and other	37.3	37.8	37.6	39.7	**36.9**
Total retail banking	$ 118.1	$ 119.7	$ 120.6	$ 124.8	**$ 120.2**
Cards:					
Citi-branded cards	$ 111.4	$ 115.5	$ 115.8	$ 122.2	**$ 110.2**
Citi retail services	48.9	49.6	50.0	52.9	**48.9**
Total cards	$ 160.3	$ 165.1	$ 165.8	$ 175.1	**$ 159.1**
Total *GCB*	$ 278.4	$ 284.8	$ 286.4	$ 299.9	**$ 279.3**
***GCB* regional distribution:**					
North America	66%	66%	66%	66%	**67%**
Latin America	6	6	6	6	**5**
Asia[2]	28	28	28	28	**28**
Total *GCB*	100%	100%	100%	100%	**100%**
***Corporate/Other*[3]**	$ 12.6	$ 11.7	$ 11.0	$ 9.6	**$ 9.1**
Total consumer loans	$ 291.0	$ 296.5	$ 297.4	$ 309.5	**$ 288.4**

(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.

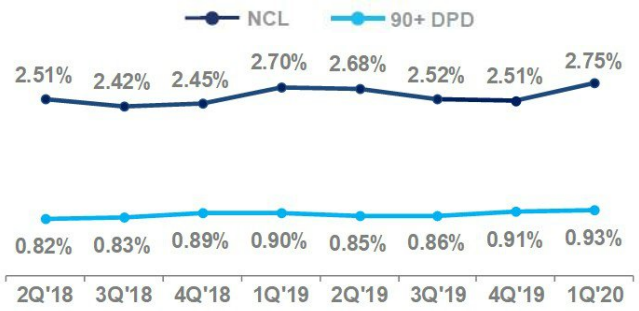
Overall Consumer Credit Trends

GCB did not experience significant delinquency or net credit loss impacts from the COVID-19 pandemic during the first quarter. Citi expects that during the remainder of 2020, the 90+ days past due delinquency and net credit loss rates in *North America GCB*, *Latin America GCB* and *Asia GCB* will be adversely impacted by the evolving macroeconomic and market conditions, including the severity and duration of the impact from the COVID-19 pandemic. This impact could be delayed or partially offset by government stimulus and assistance packages, as well as Citi's consumer relief programs and any decline in loan volumes. Citi's consumer relief programs may have an impact in the timing of the 90+ days past due delinquency and net credit loss rates. As in most programs, customers are not required to make payments for a period of time and they remain in the same delinquency bucket as when they entered the program during this period.

For additional information about trends, uncertainties and risks related to the COVID-19 pandemic, see "COVID-19 Overview" and "Risk Factors" above.

The following charts show the quarterly trends in delinquencies (90+ days past due (90+ DPD) ratio) and the net credit loss (NCL) ratio across both retail banking and cards for total *GCB* and by region.

Global Consumer Banking



North America GCB



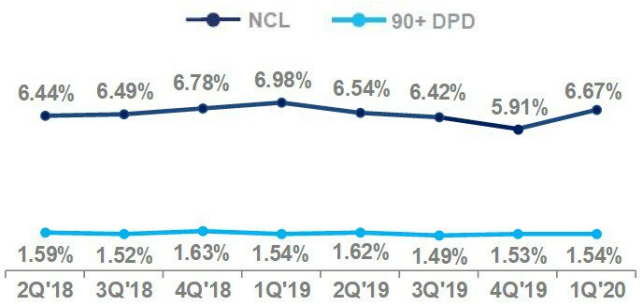
North America GCB provides mortgage, home equity, small business and personal loans through Citi's retail banking network and card products through Citi-branded cards and Citi retail services businesses. The retail bank is concentrated in six major metropolitan cities in the United States (for additional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

As of March 31, 2020, approximately 73% 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 net credit loss rate and 90+ days past due delinquency rate in *North America GCB* increased quarter-over-quarter, primarily driven by seasonality in both cards portfolios.

The net credit loss rate and 90+ days past due delinquency rate increased year-over-year, primarily driven by seasoning of more recent vintages in Citi-branded cards and an increase in net flow rates in later delinquency buckets in Citi retail services.

Latin America GCB



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

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

The net credit loss rate decreased year-over-year, primarily due to growth in recent vintages for cards as well as a slower pace of acquisitions in the retail portfolios during 2019, while the 90+ days past due delinquency rate remained stable.

Asia[1] GCB



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

Asia GCB operates in 17 countries in *Asia* and *EMEA* and provides credit cards, consumer mortgages and small business and personal loans.

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

The net credit loss rate and the 90+ days past due delinquency rate were broadly stable year-over-year.

The stability in *Asia GCB*'s portfolios reflects the strong credit profiles in the region's target customer segments. Regulatory changes in many markets in *Asia* over the past few years have also 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 Citi's *Latin America* and *Asia* Citi-branded cards portfolios.

Global Cards



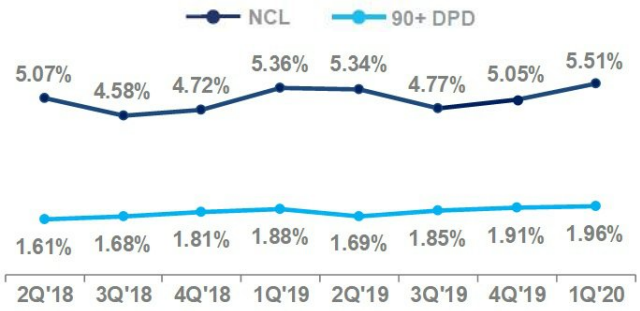
North America Citi-Branded Cards



North America GCB's Citi-branded cards portfolio issues proprietary and co-branded cards. As shown in the chart above, the net credit loss rate and 90+ days past due delinquency rate in *North America* Citi-branded cards increased quarter-over-quarter, primarily due to seasonality.

The net credit loss rate and 90+ days past due delinquency rate increased year-over-year, primarily driven by portfolio growth and seasoning of more recent vintages.

North America Citi Retail Services



Citi retail services partners directly with more than 20 retailers and dealers to offer private label and co-branded cards. Citi retail services' target market is focused on select industry segments such as home improvement, specialty retail, consumer electronics and fuel.

Citi retail services continually evaluates opportunities to add partners within target industries that have strong loyalty, lending or payment programs and growth potential.

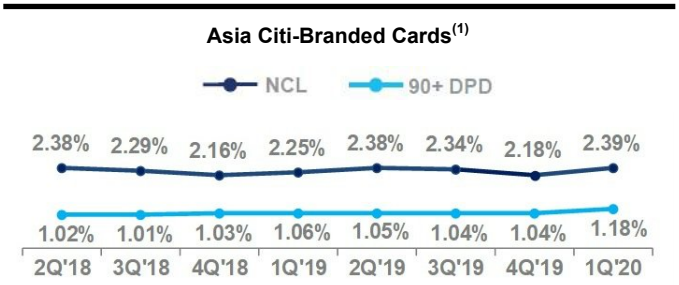
As shown in the chart above, the net credit loss rate and 90+ days past due delinquency rate in Citi retail services increased quarter-over-quarter, primarily due to seasonality.

The net credit loss rate and 90+ days past due delinquency rate increased year-over-year, primarily driven by an increase in net flow rates in later delinquency buckets.



Latin America GCB issues proprietary and co-branded cards. As shown in the chart above, the net credit loss rate in *Latin America* Citi-branded cards increased quarter-over-quarter, primarily due to seasonality, while the 90+ days past due delinquency rate decreased, also primarily due to seasonality.

The net credit loss rate and 90+ days past due delinquency rate decreased year-over-year, primarily due to growth in recent vintages.



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

Asia GCB issues proprietary and co-branded cards.

As set forth in the chart above, the net credit loss rate in *Asia* Citi-branded cards increased quarter-over-quarter, primarily due to seasonality, and the 90+ days past due delinquency rate increased, mainly due to the impact of recent regulatory changes on collections.

The net credit loss rate and 90+ days past due delinquency rate increased year-over-year, due to the impact of recent regulatory changes on collections.

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(1)	March 31, 2020	December 31, 2019	March 31, 2019
> 760	**39%**	42%	41%
680–760	**42**	40	41
< 680	**19**	18	18
Total	**100%**	100%	100%

Citi Retail Services

FICO distribution(1)	March 31, 2020	December 31, 2019	March 31, 2019
> 760	**23%**	25%	23%
680–760	**42**	42	43
< 680	**35**	33	34
Total	**100%**	100%	100%

(1) The FICO bands in the tables are consistent with general industry peer presentations.

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 Delinquencies Amounts and Ratios

In millions of dollars, except EOP loan amounts in billions	EOP loans[1] March 31, 2020	90+ days past due[2] March 31, 2020	90+ days past due[2] December 31, 2019	90+ days past due[2] March 31, 2019	30–89 days past due[2] March 31, 2020	30–89 days past due[2] December 31, 2019	30–89 days past due[2] March 31, 2019
***Global Consumer Banking*[3][4]**							
Total	**$ 279.3**	**$ 2,603**	$ 2,737	$ 2,505	**$ 2,870**	$ 3,001	$ 2,751
Ratio		**0.93%**	0.91%	0.90%	**1.03%**	1.00%	0.99%
Retail banking							
Total	**$ 120.2**	**$ 429**	$ 438	$ 394	**$ 794**	$ 816	$ 744
Ratio		**0.36%**	0.35%	0.34%	**0.66%**	0.66%	0.63%
North America	**50.8**	**161**	146	132	**298**	334	263
Ratio		**0.32%**	0.29%	0.28%	**0.59%**	0.67%	0.56%
Latin America	**9.2**	**90**	106	95	**140**	180	185
Ratio		**0.98%**	0.91%	0.84%	**1.52%**	1.54%	1.64%
Asia[5]	**60.2**	**178**	186	167	**356**	302	296
Ratio		**0.30%**	0.30%	0.28%	**0.59%**	0.48%	0.50%
Cards							
Total	**$ 159.1**	**$ 2,174**	$ 2,299	$ 2,111	**$ 2,076**	$ 2,185	$ 2,007
Ratio		**1.37%**	1.31%	1.32%	**1.30%**	1.25%	1.25%
North America—Citi-branded	**88.4**	**891**	915	828	**770**	814	731
Ratio		**1.01%**	0.95%	0.95%	**0.87%**	0.85%	0.84%
North America—Citi retail services	**48.9**	**958**	1,012	918	**903**	945	859
Ratio		**1.96%**	1.91%	1.88%	**1.85%**	1.79%	1.76%
Latin America	**4.5**	**121**	165	165	**132**	159	161
Ratio		**2.69%**	2.75%	2.95%	**2.93%**	2.65%	2.88%
Asia[5]	**17.3**	**204**	207	200	**271**	267	256
Ratio		**1.18%**	1.04%	1.06%	**1.57%**	1.34%	1.36%
***Corporate/Other*—Consumer[6]**							
Total	**$ 9.1**	**$ 281**	$ 278	$ 354	**$ 252**	$ 295	$ 348
Ratio		**3.23%**	3.02%	2.97%	**2.90%**	3.21%	2.92%
Total Citigroup	**$ 288.4**	**$ 2,884**	$ 3,015	$ 2,859	**$ 3,122**	$ 3,296	$ 3,099
Ratio		**1.00%**	0.98%	0.99%	**1.09%**	1.07%	1.07%

(1) End-of-period (EOP) loans include interest and fees on credit cards.
(2) The ratios of 90+ days past due and 30–89 days past due are calculated based on EOP loans, net of unearned income.
(3) 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.
(4) 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 agencies since the potential loss predominantly resides with the U.S. government-sponsored agencies. The amounts excluded for loans 90+ days past due and (EOP loans) were $124 million ($0.5 billion), $135 million ($0.5 billion) and $173 million ($0.6 billion) as of March 31, 2020, December 31, 2019 and March 31, 2019, respectively. The amounts excluded for loans 30–89 days past due and (EOP loans) were $64 million ($0.5 billion), $72 million ($0.5 billion) and $78 million ($0.6 billion) as of March 31, 2020, December 31, 2019 and March 31, 2019, respectively.
(5) *Asia* includes delinquencies and loans in certain *EMEA* countries for all periods presented.
(6) 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 $167 million ($0.4 billion), $172 million ($0.4 billion) and $309 million ($0.7 billion) as of March 31, 2020, December 31, 2019 and March 31, 2019, respectively. The amounts excluded for loans 30–89 days past due and (EOP loans) for each period were $58 million ($0.4 billion), $55 million ($0.4 billion) and $118 million ($0.7 billion) as of March 31, 2020, December 31, 2019 and March 31, 2019, respectively.

Consumer Loan Net Credit Losses and Ratios

In millions of dollars, except average loan amounts in billions	Average loans[1] 1Q20	Net credit losses[2] 1Q20	4Q19	1Q19
Global Consumer Banking				
Total	**$ 290.3**	**$ 1,983**	$ 1,842	$ 1,868
Ratio		**2.75 %**	2.51%	2.70%
Retail banking				
Total	**$ 123.1**	**$ 235**	$ 227	$ 233
Ratio		**0.77 %**	0.73%	0.80%
North America	**50.5**	**37**	42	39
Ratio		**0.29 %**	0.33%	0.33%
Latin America	**11.1**	**130**	116	136
Ratio		**4.71 %**	3.97%	4.80%
Asia[3]	**61.5**	**68**	69	58
Ratio		**0.44 %**	0.44%	0.40%
Cards				
Total	**$ 167.2**	**$ 1,748**	$ 1,615	$ 1,635
Ratio		**4.20 %**	3.81%	4.08%
North America—Citi-branded	**92.3**	**795**	723	706
Ratio		**3.46 %**	3.10%	3.26%
North America—Citi retail services	**50.5**	**694**	643	663
Ratio		**5.53 %**	5.05%	5.36%
Latin America	**5.6**	**147**	143	160
Ratio		**10.56 %**	9.78%	11.38%
Asia[3]	**18.8**	**112**	106	106
Ratio		**2.40 %**	2.18%	2.25%
***Corporate/Other*—Consumer**				
Total	**$ 9.4**	**$ (2)**	$ (12)	$ 1
Ratio		**(0.09)%**	0.45%	0.03%
Total Citigroup	**$ 299.7**	**$ 1,981**	$ 1,830	$ 1,869
Ratio		**2.66 %**	2.36%	2.11%

(1) Average loans include interest and fees on credit cards.
(2) The ratios of net credit losses are calculated based on average loans, net of unearned income.
(3) *Asia* includes NCLs and average loans in certain *EMEA* countries for all periods presented.

CORPORATE CREDIT

Overall Corporate Credit Trends

For information about Citi's corporate credit trends, uncertainties and risks related to the COVID-19 pandemic, see the "COVID-19 Overview" and "Risk Factor" sections above. For additional information on CECL, see "Significant Accounting Policies and Estimates" below, and Notes 1 and 14 to the Consolidated Financial Statements. For additional information on Citi's corporate loan portfolios, see Note 13 to the Consolidated Financial Statements.

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

	March 31, 2020				December 31, 2019			
In billions of dollars	**Due within 1 year**	**Greater than 1 year but within 5 years**	**Greater than 5 years**	**Total exposure**	Due within 1 year	Greater than 1 year but within 5 years	Greater than 5 years	Total exposure
Direct outstandings (on-balance sheet)[1]	**$ 152**	**$ 147**	**$ 22**	**$ 321**	$ 141	$ 117	$ 23	$ 281
Unfunded lending commitments (off-balance sheet)[2]	**137**	**217**	**10**	**364**	145	249	17	411
Total exposure	**$ 289**	**$ 364**	**$ 32**	**$ 685**	$ 286	$ 366	$ 40	$ 692

(1) Includes drawn loans, overdrafts, bankers' acceptances and leases.
(2) Includes unused commitments to lend, letters of credit and financial guarantees.

Portfolio Mix—Industry

Citi's corporate credit portfolio is diversified by industry. The following details the allocation of Citi's total corporate credit portfolio by industry (excluding private bank):

	Total exposure		
	March 31, 2020	December 31, 2019	March 31, 2019
Transportation and industrials	**22%**	21%	21%
Consumer retail	**12**	12	10
Health	**5**	5	4
Technology, media and telecom	**11**	12	12
Power, chemicals, metals and mining	**10**	11	11
Banks and finance companies	**9**	8	8
Securities firms	**—**	—	—
Real estate	**9**	8	9
Energy and commodities	**8**	8	8
Public sector	**4**	4	4
Insurance	**4**	4	4
Asset managers and funds	**3**	4	4
Financial markets infrastructure	**2**	2	3
Other industries	**1**	1	2
Total	**100%**	100%	100%

The following table details Citi's corporate credit portfolio by industry as of March 31, 2020:

In millions of dollars	Total credit exposure	Funded[1]	Unfunded	Investment grade	Non-investment grade	Credit derivative hedges[2]
Transportation and industrials	**$ 151,127**	**$ 73,368**	**$ 77,759**	**$ 118,023**	**$ 33,104**	**$ (8,836)**
Autos[3]	51,525	27,537	23,988	43,915	7,610	(3,331)
Transportation	31,265	17,680	13,585	20,093	11,172	(1,899)
Industrials	68,337	28,151	40,186	54,015	14,322	(3,606)
Consumer retail	**82,005**	**41,816**	**40,189**	**60,213**	**21,792**	**(4,545)**
Health	**32,655**	**9,960**	**22,695**	**25,689**	**6,966**	**(1,775)**
Technology, media and telecom	**77,050**	**35,373**	**41,677**	**58,923**	**18,127**	**(6,904)**
Power, chemicals, metals and mining	**69,046**	**29,931**	**39,115**	**52,087**	**16,959**	**(5,422)**
Power	29,348	9,332	20,016	24,165	5,183	(2,373)
Chemicals	24,034	11,878	12,156	18,719	5,315	(2,193)
Metals and mining	15,664	8,721	6,943	9,203	6,461	(856)
Banks and finance companies	**59,188**	**39,087**	**20,101**	**49,413**	**9,775**	**(956)**
Securities firms	**1,307**	**497**	**810**	**1,003**	**304**	**(1)**
Real estate	**58,298**	**41,560**	**16,738**	**47,149**	**11,149**	**(628)**
Energy and commodities[4]	**55,427**	**19,313**	**36,114**	**42,256**	**13,171**	**(3,350)**
Public sector	**26,218**	**13,867**	**12,351**	**22,096**	**4,122**	**(1,260)**
Insurance	**25,555**	**3,173**	**22,382**	**24,478**	**1,077**	**(2,255)**
Asset managers and funds	**22,798**	**6,828**	**15,970**	**21,530**	**1,268**	**(151)**
Financial markets infrastructure	**14,028**	**421**	**13,607**	**14,028**	**—**	**(12)**
Other industries	**10,433**	**5,434**	**4,999**	**3,888**	**6,545**	**(64)**
Total	**$ 685,135**	**$ 320,628**	**$ 364,507**	**$ 540,776**	**$ 144,359**	**$ (36,159)**

(1) Excludes $111,962 million of private bank loans at March 31, 2020.

(2) Represents the notional amount of purchased credit protection in the form of derivatives to economically hedge funded and unfunded exposures.

(3) Autos total credit exposure includes securitization financing facilities secured by auto loans and leases extended mainly to the finance company subsidiaries of global auto manufacturers, bank subsidiaries and independent auto finance companies, of approximately $19.2 billion ($11.0 billion in funded, with more than 99% rated investment grade) as of March 31, 2020.

(4) In addition to this exposure, Citi has energy-related exposure within the public sector (e.g., energy-related state-owned entities) and the transportation and industrial sector (e.g., off-shore drilling entities) included in the table above. As of March 31, 2020, Citi's total exposure to these energy-related entities remained largely consistent with December 31, 2019, at approximately $5 billion, of which approximately $3 billion consisted of direct outstanding funded loans.

The following table details Citi's corporate credit portfolio by industry as of December 31, 2019:

In millions of dollars	Total credit exposure	Funded[1]	Unfunded	Investment grade	Non-investment grade	Credit derivative hedges[2]
Transportation and industrials	**$ 146,643**	**$ 59,726**	**$ 86,917**	**$ 120,777**	**$ 25,866**	**$ (8,481)**
Autos[3]	48,604	21,564	27,040	43,570	5,034	(3,160)
Transportation	29,984	14,550	15,434	23,021	6,963	(1,640)
Industrials	68,055	23,612	44,443	54,186	13,869	(3,681)
Consumer retail	**81,338**	**36,117**	**45,221**	**62,993**	**18,345**	**(4,536)**
Health	**35,008**	**8,790**	**26,218**	**27,791**	**7,217**	**(1,779)**
Technology, media and telecom	**83,199**	**31,333**	**51,866**	**63,845**	**19,354**	**(6,820)**
Power, chemicals, metals and mining	**73,961**	**24,377**	**49,584**	**58,670**	**15,291**	**(5,378)**
Power	34,349	7,683	26,666	29,317	5,032	(2,284)
Chemicals	23,721	9,152	14,569	18,790	4,931	(2,261)
Metals and mining	15,891	7,542	8,349	10,563	5,328	(833)
Banks and finance companies	**52,036**	**32,571**	**19,465**	**43,663**	**8,373**	**(1,021)**
Securities firms	**1,151**	**423**	**728**	**801**	**350**	**(1)**
Real estate	**55,518**	**38,058**	**17,460**	**49,461**	**6,057**	**(616)**
Energy and commodities[4]	**53,317**	**17,428**	**35,889**	**42,996**	**10,321**	**(3,136)**
Public sector	**27,194**	**14,226**	**12,968**	**23,294**	**3,900**	**(1,094)**
Insurance	**24,305**	**1,658**	**22,647**	**23,370**	**935**	**(2,273)**
Asset managers and funds	**24,763**	**6,942**	**17,821**	**22,357**	**2,406**	**(107)**
Financial markets infrastructure	**16,838**	**22**	**16,816**	**16,838**	**—**	**(12)**
Other industries	**16,842**	**9,282**	**7,560**	**8,300**	**8,542**	**35**
Total	**$ 692,113**	**$ 280,953**	**$ 411,160**	**$ 565,156**	**$ 126,957**	**$ (35,219)**

(1) Excludes $108,982 million of private bank loans at December 31, 2019.
(2) Represents the notional amount of purchased credit protection in the form of derivatives to economically hedge funded and unfunded exposures.
(3) Autos total credit exposure includes securitization financing facilities secured by auto loans and leases extended mainly to the finance company subsidiaries of global auto manufacturers, bank subsidiaries and independent auto finance companies, of approximately $17.9 billion ($7.7 billion in funded) as of December 31, 2019, of which more than 99% were investment grade at December 31, 2019.
(4) In addition to this exposure, Citi has energy-related exposure within the public sector (e.g., energy-related state-owned entities) and transportation and industrial sector (e.g., off-shore drilling entities) included in the table above. As of December 31, 2019, Citi's total exposure to these energy-related entities remained largely consistent with September 30, 2019, at approximately $6 billion, of which approximately $3 billion consisted of direct outstanding funded loans.

Portfolio Mix—Geography and Counterparty

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

	March 31, 2020	December 31, 2019	March 31, 2019
North America	**55%**	55%	54%
EMEA	**26**	26	28
Asia	**12**	12	11
Latin America	**7**	7	7
Total	**100%**	100%	100%

The maintenance of accurate and consistent risk ratings across the corporate credit portfolio facilitates the comparison of credit exposure across all lines of business, geographic regions and products. Counterparty risk ratings reflect an estimated probability of default for a counterparty and are derived 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 cost-effective options to reduce greenhouse gas emissions.

The following table presents the corporate credit portfolio (excluding private bank) by facility risk rating as a percentage of the total corporate credit portfolio:

	Total exposure		
	March 31, 2020	December 31, 2019	March 31, 2019
AAA/AA/A	**44%**	46%	49%
BBB	**35**	36	35
BB/B	**19**	16	15
CCC or below	**2**	2	1
Total	**100%**	100%	100%

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

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. Citi may enter into partial-term hedges as well as full-term hedges. In advance of the expiration of partial-term hedges, Citi will determine, among other factors, the economic feasibility of hedging the remaining life of the instrument. 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 March 31, 2020, December 31, 2019 and March 31, 2019, *ICG* (excluding private bank) had economic hedges in place on the corporate credit portfolio of $36.2 billion, $35.2 billion and $30.4 billion, respectively. 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 *ICG* (excluding private bank) corporate credit portfolio exposures with the following risk rating distribution:

Rating of Hedged Exposure

	March 31, 2020	December 31, 2019	March 31, 2019
AAA/AA/A	**28%**	32%	36%
BBB	**52**	51	48
BB/B	**18**	15	15
CCC or below	**2**	2	1
Total	**100%**	100%	100%

ADDITIONAL CONSUMER AND CORPORATE CREDIT DETAILS

Loans Outstanding

In millions of dollars	1st Qtr. 2020	4th Qtr. 2019	3rd Qtr. 2019	2nd Qtr. 2019	1st Qtr. 2019
Consumer loans					
In North America offices[1]					
Residential first mortgages[2]	**$ 47,260**	$ 47,008	$ 46,337	$ 45,474	$ 45,351
Home equity loans[2]	**8,936**	9,223	9,850	10,404	10,937
Credit cards	**137,316**	149,163	141,560	140,246	135,893
Personal, small business and other	**3,675**	3,699	3,793	3,873	3,932
Total	**$ 197,187**	$ 209,093	$ 201,540	$ 199,997	$ 196,113
In offices outside North America[1]					
Residential first mortgages[2]	**$ 35,400**	$ 37,686	$ 36,644	$ 36,580	$ 36,114
Credit cards	**21,801**	25,909	24,367	24,975	24,343
Personal, small business and other	**34,042**	36,860	34,849	34,953	34,398
Total	**$ 91,243**	$ 100,455	$ 95,860	$ 96,508	$ 94,855
Consumer loans, net of unearned income[3]	**$ 288,430**	$ 309,548	$ 297,400	$ 296,505	$ 290,968
Corporate loans					
In North America offices[1]					
Commercial and industrial	**$ 81,231**	$ 55,929	$ 59,645	$ 64,601	$ 66,455
Financial institutions	**60,653**	53,922	52,678	47,610	49,985
Mortgage and real estate[2]	**55,428**	53,371	52,972	51,321	49,746
Installment and other	**30,591**	31,238	31,303	33,555	31,960
Lease financing	**988**	1,290	1,314	1,385	1,405
Total	**$ 228,891**	$ 195,750	$ 197,912	$ 198,472	$ 199,551
In offices outside North America[1]					
Commercial and industrial	**$ 121,703**	$ 112,668	$ 120,900	$ 117,759	$ 117,006
Financial institutions	**37,003**	40,211	37,908	37,523	39,155
Mortgage and real estate[2]	**9,639**	9,780	7,811	7,577	7,005
Installment and other	**31,728**	27,303	26,774	27,333	24,868
Lease financing	**72**	95	80	92	95
Governments and official institutions	**3,554**	4,128	2,958	3,409	3,698
Total	**$ 203,699**	$ 194,185	$ 196,431	$ 193,693	$ 191,827
Corporate loans, net of unearned income[4]	**$ 432,590**	$ 389,935	$ 394,343	$ 392,165	$ 391,378
Total loans—net of unearned income	**$ 721,020**	$ 699,483	$ 691,743	$ 688,670	$ 682,346
Allowance for credit losses on loans (ACLL)	**(20,841)**	(12,783)	(12,530)	(12,466)	(12,329)
Total loans—net of unearned income and ACLL	**$ 700,179**	$ 686,700	$ 679,213	$ 676,204	$ 670,017
ACLL as a percentage of total loans—net of unearned income[5]	**2.91%**	1.84%	1.82%	1.82%	1.82%
ACLL for consumer loan losses as a percentage of total consumer loans—net of unearned income[5]	**6.03%**	3.20%	3.27%	3.26%	3.30%
ACLL for corporate loan losses as a percentage of total corporate loans—net of unearned income[5]	**0.81%**	0.75%	0.72%	0.72%	0.70%

(1) North America includes the U.S., Canada and Puerto Rico. Mexico is included in offices outside North America. The classification of corporate loans between offices in North America and outside North America is based on the domicile of the booking unit. The difference between the domicile of the booking unit and the domicile of the managing unit is not material.

(2) Loans secured primarily by real estate.

(3) Consumer loans are net of unearned income of $771 million, $783 million, $783 million, $751 million and $735 million at March 31, 2020, December 31, 2019, September 30, 2019, June 30, 2019 and March 31, 2019, respectively. Unearned income on consumer loans primarily represents unamortized origination fees and costs, premiums and discounts.

(4) Corporate loans include private bank loans and are net of unearned income of $(791) million, $(814) million, $(818) million, $(853) million and $(843) million at March 31, 2020, December 31, 2019, September 30, 2019, June 30, 2019 and March 31, 2019, respectively. Unearned income on corporate loans primarily represents interest received in advance, but not yet earned, on loans originated on a discounted basis.

(5) Because loans carried at fair value do not have an ACLL, they are excluded from the ACLL ratio calculation.

Details of Credit Loss Experience

In millions of dollars	1st Qtr. 2020	4th Qtr. 2019	3rd Qtr. 2019	2nd Qtr. 2019	1st Qtr. 2019
Allowance for credit losses on loans (ACLL) at beginning of period	**$ 12,783**	$ 12,530	$ 12,466	$ 12,329	$ 12,315
Adjustment to opening balance for CECL adoption[1]	4,201	—	—	—	—
Adjusted ACLL at beginning of period	**$ 16,984**	**$ 12,530**	**$ 12,466**	**$ 12,329**	**$ 12,315**
Provision for credit losses on loans (PCLL)					
Consumer	**$ 5,001**	$ 1,948	$ 1,916	$ 1,947	$ 1,940
Corporate	**1,443**	175	146	142	4
Total	**$ 6,444**	$ 2,123	$ 2,062	$ 2,089	$ 1,944
Gross credit losses on loans					
Consumer					
In U.S. offices	**$ 1,763**	$ 1,672	$ 1,564	$ 1,659	$ 1,643
In offices outside the U.S.	**578**	535	588	591	602
Corporate					
In U.S. offices	**116**	68	98	62	60
In offices outside the U.S.	**22**	86	31	42	40
Total	**$ 2,479**	$ 2,361	$ 2,281	$ 2,354	$ 2,345
Credit recoveries on loans[2]					
Consumer					
In U.S. offices	**$ 239**	$ 249	$ 231	$ 253	$ 242
In offices outside the U.S.	**121**	128	118	123	134
Corporate					
In U.S. offices	**6**	9	13	7	7
In offices outside the U.S.	**5**	31	6	8	14
Total	**$ 371**	$ 417	$ 368	$ 391	$ 397
Net credit losses on loans (NCLs)					
In U.S. offices	**$ 1,634**	$ 1,482	$ 1,418	$ 1,461	$ 1,454
In offices outside the U.S.	**474**	462	495	502	494
Total	**$ 2,108**	$ 1,944	$ 1,913	$ 1,963	$ 1,948
Other—net[3][4][5][6][7][8]	**$ (479)**	$ 74	$ (85)	$ 11	$ 18
Allowance for credit losses on loans (ACLL) at end of period	**$ 20,841**	$ 12,783	$ 12,530	$ 12,466	$ 12,329
ACLL as a percentage of EOP loans[9]	**2.91%**	1.84%	1.82%	1.82%	1.82%
Allowance for credit losses on unfunded lending commitments (ACLUC)[10]	**$ 1,813**	$ 1,456	$ 1,385	$ 1,376	$ 1,391
Total ACLL and ACLUC	**$ 22,654**	$ 14,239	$ 13,915	$ 13,842	$ 13,720
Net consumer credit losses on loans	**$ 1,981**	$ 1,830	$ 1,803	$ 1,874	$ 1,869
As a percentage of average consumer loans	**2.66%**	2.41%	2.42%	2.57%	2.58%
Net corporate credit losses on loans	**$ 127**	$ 114	$ 110	$ 89	$ 79
As a percentage of average corporate loans	**0.13%**	0.12%	0.11%	0.09%	0.08%
ACLL by type at end of period[11]					
Consumer	**$ 17,390**	$ 9,897	$ 9,727	$ 9,679	$ 9,598
Corporate	**3,451**	2,886	2,803	2,787	2,731
Total	**$ 20,841**	$ 12,783	$ 12,530	$ 12,466	$ 12,329

(1) On January 1, 2020, Citi adopted Accounting Standards Update (ASC) 326, *Financial Instruments—Credit Losses (CECL)*. The ASU introduces a new credit loss methodology requiring earlier recognition of credit losses while also providing additional transparency about credit risk. On January 1, 2020, Citi recorded a $4.1 billion, or an approximate 29%, pretax increase in the Allowance for credit losses, along with a $3.1 billion after-tax decrease in Retained earnings and a deferred tax asset increase of $1.0 billion. This transition impact reflects (i) a $4.9 billion build to the Consumer allowance for credit losses due to longer estimated tenors than under the incurred loss methodology under prior U.S. GAAP, net of recoveries; and (ii) a $(0.8) billion decrease to the Corporate allowance for credit losses due to shorter remaining tenors, incorporation of recoveries and use of more specific historical loss data based on an increase in portfolio segmentation across industries and geographies. See Note 1 to the Consolidated Financial Statements for further discussion on the impact of Citi's adoption of CECL.

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

(3) 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.
(4) The first quarter of 2020 includes a decrease of approximately $483 million related to FX translation.
(5) The fourth quarter of 2019 includes an increase of approximately $86 million related to FX translation.
(6) The third quarter of 2019 includes a decrease of approximately $65 million related to FX translation.
(7) The second quarter of 2019 includes an increase of approximately $13 million related to FX translation.
(8) The first quarter of 2019 includes an increase of approximately $26 million related to FX translation.
(9) March 31, 2020, December 31, 2019, September 30, 2019, June 30, 2019 and March 31, 2019, exclude $4.0 billion, $4.1 billion, $3.9 billion, $3.8 billion and $3.9 billion, respectively, of loans that are carried at fair value.
(10) Represents additional credit reserves recorded as *Other liabilities* on the Consolidated Balance Sheet.
(11) See "Significant Accounting Policies and Significant Estimates" and Note 1 to the Consolidated Financial Statements. 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 Credit Losses on Loans (ACLL)

The following tables detail information on Citi's ACLL, loans and coverage ratios:

	March 31, 2020		
In billions of dollars	**ACLL**	**EOP loans, net of unearned income**	**ACLL as a percentage of EOP loans[1]**
North America cards[2]	**$ 13.4**	**$ 137.3**	**9.8%**
North America mortgages[3]	**0.6**	**56.2**	**1.1**
North America other	**0.3**	**3.7**	**8.1**
International cards	**1.7**	**21.8**	**7.8**
International other[4]	**1.4**	**69.4**	**2.0**
Total consumer	**$ 17.4**	**$ 288.4**	**6.0%**
Total corporate	**3.4**	**432.6**	**0.8**
Total Citigroup	**$ 20.8**	**$ 721.0**	**2.9%**

(1) Because loans carried at fair value do not have an ACLL, they are excluded from the ACLL ratio calculation.
(2) Includes both Citi-branded cards and Citi retail services. The $13.4 billion of loan loss reserves represented approximately 27 months of coincident net credit loss coverage. As of March 31, 2020, North America Citi-branded cards ACLL as a percentage of EOP loans was 8.2% and North America Citi retail services ACLL as a percentage of EOP loans was 12.6%.
(3) Of the $0.6 billion, approximately $0.3 billion was allocated to *North America* mortgages in *Corporate/Other*, including approximately $0.5 billion and $0.1 billion determined in accordance with ASC 450-20 and ASC 310-10-35 (troubled debt restructurings), respectively. Of the $56.2 billion in loans, approximately $54.3 billion and $1.9 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.

	December 31, 2019		
In billions of dollars	ACLL	EOP loans, net of unearned income	ACLL as a percentage of EOP loans[1]
North America cards[2]	$ 7.0	$ 149.2	4.7%
North America mortgages[3]	0.3	56.2	0.5
North America other	0.1	3.7	2.7
International cards	0.7	25.9	2.7
International other[4]	1.8	74.9	2.4
Total consumer	$ 9.9	$ 309.9	3.2%
Total corporate	2.9	389.9	0.7
Total Citigroup	$ 12.8	$ 699.8	1.8%

(1) Because loans carried at fair value do not have an ACLL, they are excluded from the ACLL ratio calculation.
(2) Includes both Citi-branded cards and Citi retail services. The $7.0 billion of loan loss reserves represented approximately 15 months of coincident net credit loss coverage.
(3) Of the $0.3 billion, nearly all was allocated to *North America* mortgages in *Corporate/Other*, including $0.1 billion and $0.2 billion determined in accordance with ASC 450-20 and ASC 310-10-35 (troubled debt restructurings), respectively. Of the $56.2 billion in loans, approximately $54.2 billion and $2.0 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 2019 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.

In millions of dollars	**Mar. 31, 2020**	Dec. 31, 2019	Sept. 30, 2019	Jun. 30, 2019	Mar. 31, 2019
Corporate non-accrual loans[1]					
North America	**$ 1,138**	$ 1,214	$ 1,056	$ 913	$ 1,061
EMEA	**720**	430	307	321	317
Latin America	**447**	473	399	353	305
Asia	**179**	71	84	80	49
Total corporate non-accrual loans	**$ 2,484**	$ 2,188	$ 1,846	$ 1,667	$ 1,732
Consumer non-accrual loans[2]					
North America	**$ 926**	$ 905	$ 1,013	$ 1,082	$ 1,090
Latin America	**489**	632	595	629	614
Asia[3]	**284**	279	258	260	251
Total consumer non-accrual loans	**$ 1,699**	$ 1,816	$ 1,866	$ 1,971	$ 1,955
Total non-accrual loans	**$ 4,183**	$ 4,004	$ 3,712	$ 3,638	$ 3,687

(1) Approximately 50%, 44%, 41%, 48% and 46% of Citi's corporate non-accrual loans were performing at March 31, 2020, December 31, 2019, September 30, 2019, June 30, 2019 and March 31, 2019, respectively.
(2) Excludes purchased credit deteriorated loans, as they are generally accreting interest. The carrying value of these loans was $129 million at March 31, 2020, $128 million at December 31, 2019, $117 million at September 30, 2019, $123 million at June 30, 2019 and $125 million at March 31, 2019.
(3) *Asia GCB* includes balances in certain *EMEA* countries for all periods presented.

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

	Three Months Ended March 31, 2020			Three Months Ended March 31, 2019		
In millions of dollars	**Corporate**	**Consumer**	**Total**	Corporate	Consumer	Total
Non-accrual loans at beginning of period	**$ 2,188**	**$ 1,816**	**$ 4,004**	$ 1,311	$ 2,027	$ 3,338
Additions	**816**	**952**	**1,768**	723	722	1,445
Sales and transfers to HFS	**(1)**	**(20)**	**(21)**	(5)	(34)	(39)
Returned to performing	**(48)**	**(91)**	**(139)**	(28)	(142)	(170)
Paydowns/settlements	**(354)**	**(324)**	**(678)**	(485)	(174)	(659)
Charge-offs	**(91)**	**(327)**	**(418)**	(35)	(402)	(437)
Other	**(26)**	**(307)**	**(333)**	251	(42)	209
Ending balance	**$ 2,484**	**$ 1,699**	**$ 4,183**	$ 1,732	$ 1,955	$ 3,687

The table below summarizes Citigroup's other real estate owned (OREO) assets. OREO is recorded on the Consolidated Balance Sheet within *Other assets*. 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	**Mar. 31, 2020**	Dec. 31, 2019	Sept. 30, 2019	Jun. 30, 2019	Mar. 31, 2019
OREO					
North America	**$ 35**	$ 39	$ 51	$ 47	$ 63
EMEA	**1**	1	1	1	1
Latin America	**6**	14	14	14	13
Asia	**8**	7	6	20	21
Total OREO	**$ 50**	$ 61	$ 72	$ 82	$ 98
Non-accrual assets					
Corporate non-accrual loans	**$ 2,484**	$ 2,188	$ 1,846	$ 1,667	$ 1,732
Consumer non-accrual loans	**1,699**	1,816	1,866	1,971	1,955
Non-accrual loans (NAL)	**$ 4,183**	$ 4,004	$ 3,712	$ 3,638	$ 3,687
OREO	**$ 50**	$ 61	$ 72	$ 82	$ 98
Non-accrual assets (NAA)	**$ 4,233**	$ 4,065	$ 3,784	$ 3,720	$ 3,785
NAL as a percentage of total loans	**0.58%**	0.57%	0.54%	0.53%	0.54%
NAA as a percentage of total assets	**0.19**	0.21	0.19	0.19	0.19
ACLL as a percentage of NAL[(1)]	**498%**	319%	338%	343%	334%

(1) The allowance for credit on loans 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 credit deteriorated 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	**Mar. 31, 2020**	Dec. 31, 2019
Corporate renegotiated loans[1]		
In U.S. offices		
Commercial and industrial[2]	**$ 332**	$ 226
Mortgage and real estate	**56**	57
Financial institutions	**—**	—
Other	**3**	4
Total	**$ 391**	$ 287
In offices outside the U.S.		
Commercial and industrial[2]	**$ 353**	$ 200
Mortgage and real estate	**21**	22
Financial institutions	**—**	—
Other	**12**	40
Total	**$ 386**	$ 262
Total corporate renegotiated loans	**$ 777**	$ 549
Consumer renegotiated loans[3]		
In U.S. offices		
Mortgage and real estate	**$ 1,916**	$ 1,956
Cards	**1,489**	1,464
Installment and other	**19**	17
Total	**$ 3,424**	$ 3,437
In offices outside the U.S.		
Mortgage and real estate	**$ 243**	$ 305
Cards	**424**	466
Installment and other	**388**	400
Total	**$ 1,055**	$ 1,171
Total consumer renegotiated loans	**$ 4,479**	$ 4,608

(1) Includes $514 million and $472 million of non-accrual loans included in the non-accrual loans table above at March 31, 2020 and December 31, 2019, respectively. The remaining loans are accruing interest.

(2) In addition to modifications reflected as TDRs at March 31, 2020 and December 31, 2019, Citi also modified $25 million and $26 million, respectively, 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 $747 million and $814 million of non-accrual loans included in the non-accrual loans table above at March 31, 2020 and December 31, 2019, respectively. The remaining loans are accruing interest.

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 2019 Annual Report on Form 10-K.

High-Quality Liquid Assets (HQLA)

	Citibank			Citi non-bank and other entities			Total		
In billions of dollars	**Mar. 31, 2020**	Dec. 31, 2019	Mar. 31, 2019	**Mar. 31, 2020**	Dec. 31, 2019	Mar. 31, 2019	**Mar. 31, 2020**	Dec. 31, 2019	Mar. 31, 2019
Available cash	**$ 170.9**	$ 158.7	$ 94.7	**$ 3.1**	$ 2.1	$ 34.9	**$ 174.0**	$ 160.8	$ 129.6
U.S. sovereign	**92.1**	100.2	94.9	**34.7**	29.6	29.5	**126.8**	129.8	124.4
U.S. agency/agency MBS	**52.4**	56.9	59.3	**7.2**	4.4	5.3	**59.6**	61.3	64.6
Foreign government debt[(1)]	**66.3**	66.4	67.7	**12.7**	16.5	3.5	**78.9**	82.9	71.2
Other investment grade	**1.5**	2.4	3.5	**1.1**	0.5	1.6	**2.7**	2.8	5.1
Total HQLA (AVG)	**$ 383.2**	$ 384.6	$ 320.1	**$ 58.8**	$ 53.1	$ 74.8	**$ 442.0**	$ 437.6	$ 394.9

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, Malaysia, India and South Korea.

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 quarter-over-quarter, primarily due to long-term debt issuance. While Citi saw strong deposit growth in the first quarter of 2020, it occurred late in the quarter and therefore did not have a meaningful impact on Citigroup's average HQLA.

As of March 31, 2020, Citigroup had approximately $840 billion of available liquidity resources to support client and business needs, including end-of-period HQLA assets; additional unencumbered securities, including excess liquidity held at bank entities that is non-transferable to other entities within Citigroup; and available assets not already accounted for within the Company's HQLA to support Federal Home Loan Bank (FHLB) and Federal Reserve Bank discount window borrowing capacity.

Short-Term Liquidity Measurement: Liquidity Coverage Ratio (LCR)

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	**Mar. 31, 2020**	Dec. 31, 2019	Mar. 31, 2019
HQLA	**$ 442.0**	$ 437.6	$ 394.9
Net outflows	**385.8**	382.0	331.6
LCR	**115%**	115%	119%
HQLA in excess of net outflows	**$ 56.2**	$ 55.6	$ 63.3

Note: The amounts are presented on an average basis.

As of March 31, 2020, Citigroup's average LCR remained unchanged from the quarter ended December 31, 2019, as an increase in the average HQLA reflecting the issuance of long-term debt was offset by an increase in the average net outflows.

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	**Mar. 31, 2020**	Dec. 31, 2019	Mar. 31, 2019
Global Consumer Banking			
North America	**$ 193.3**	$ 192.7	$ 185.5
Latin America	**16.7**	17.4	17.2
Asia[(1)]	**80.3**	80.9	77.9
Total	**$ 290.3**	$ 291.0	$ 280.6
Institutional Clients Group			
Corporate lending	**$ 159.9**	$ 154.2	$ 161.7
Treasury and trade solutions (TTS)	**73.1**	74.5	75.1
Private bank	**109.9**	106.6	97.2
Markets and securities services and other	**52.1**	56.0	51.0
Total	**$ 395.0**	$ 391.3	$ 385.0
Total *Corporate/Other*	**$ 9.4**	$ 10.3	$ 13.6
Total Citigroup loans (AVG)	**$ 694.7**	$ 692.6	$ 679.2
Total Citigroup loans (EOP)	**$ 721.0**	$ 699.5	$ 682.3

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

End-of-period loans increased 6% year-over-year and 3% sequentially. Excluding the impact of FX translation, end-of-period loans increased 8% year-over-year and 5% sequentially.

On an average basis, loans increased 2% 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 4% year-over-year, driven by growth across regions.

Excluding the impact of FX translation, average *ICG* loans increased 4% year-over-year, driven primarily by the private bank. Loans in corporate lending were largely unchanged on an average basis, but grew 22% on an end-of-period basis, reflecting drawdowns and new facilities as Citi's clients built liquidity in response to the COVID-19 pandemic.

Average *Corporate/Other* loans continued to decline (down 31%), 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	**Mar. 31, 2020**	Dec. 31, 2019	Mar. 31, 2019
Global Consumer Banking			
North America	**$ 161.3**	$ 156.2	$ 149.6
Latin America	**22.9**	23.0	22.7
Asia[(1)]	**105.9**	103.4	99.4
Total	**$ 290.1**	$ 282.6	$ 271.7
Institutional Clients Group			
Treasury and trade solutions (TTS)	**$ 571.3**	$ 558.7	$ 510.9
Banking ex-TTS	**140.1**	140.7	130.1
Markets and securities services	**100.1**	95.0	90.0
Total	**$ 811.5**	$ 794.4	$ 731.0
Corporate/Other	**$ 12.9**	$ 12.5	$ 14.4
Total Citigroup deposits (AVG)	**$ 1,114.5**	$ 1,089.5	$ 1,017.1
Total Citigroup deposits (EOP)	**$ 1,184.9**	$ 1,070.6	$ 1,030.4

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

End-of-period deposits increased 15% year-over-year and 11% sequentially. Excluding the impact of FX translation, end-of-period deposits increased 17% year-over-year and 13% sequentially.

On an average basis, deposits increased 10% year-over-year and 2% sequentially. Excluding the impact of FX translation, average deposits grew 11% from the prior-year period.

In *GCB*, average deposit growth accelerated to 8%, driven by strong growth across all regions. In *North America GCB*, strong average deposit growth of 8% reflected digital deposit sales, as well as good engagement with existing clients.

Within *ICG*, deposits grew 12% year-over-year on an average basis, and 21% on an end-of-period basis, primarily driven by strong deposit inflows in TTS and securities services, from both corporate and investor clients, particularly in March.

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 9.0 years as of March 31, 2020, compared to 8.6 years as of the prior year and 8.4 years as of the prior quarter. The weighted-average maturity is calculated based on the contractual maturity of each security. For securities that 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 benchmark 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 long-term debt outstanding for each of the dates indicated:

In billions of dollars	**Mar. 31, 2020**	Dec. 31, 2019	Mar. 31, 2019
Parent and other[1]			
Benchmark debt:			
Senior debt	**$ 115.5**	$ 106.6	$ 109.7
Subordinated debt	**27.5**	25.5	24.9
Trust preferred	**1.7**	1.7	1.7
Customer-related debt	**51.7**	53.8	42.4
Local country and other[2]	**7.3**	7.9	3.4
Total parent and other	**$ 203.7**	$ 195.5	$ 182.1
Bank			
FHLB borrowings	**$ 16.0**	$ 5.5	$ 10.5
Securitizations[3]	**20.8**	20.7	25.9
Citibank benchmark senior debt	**22.2**	23.1	21.4
Local country and other[2]	**3.4**	4.0	3.7
Total bank	**$ 62.4**	$ 53.3	$ 61.5
Total long-term debt	**$ 266.1**	$ 248.8	$ 243.6

Note: Amounts represent the current value of long-term debt on Citi's Consolidated Balance Sheet that, 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 March 31, 2020, Parent and other included $47.2 billion of long-term debt issued by Citi's broker-dealer and other subsidiaries.

(2) Local country and other includes debt issued by Citi's affiliates in support of their local operations. Within parent and other, certain secured financing is also included.

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

Citi's total long-term debt outstanding increased both year-over-year and sequentially. The increase year-over-year was primarily driven by the issuance of customer-related debt and unsecured senior benchmark debt at the non-bank entities, as an increase in FHLB borrowings was offset by a decline in securitizations at the bank. Sequentially, the increase in Citi's total long-term debt outstanding was primarily driven by the an increase in FHLB borrowings at the bank and the issuance of unsecured senior benchmark debt and customer-related debt at the non-bank entities.

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 first quarter of 2020, Citi repurchased and called an aggregate of approximately $9.4 billion of its outstanding long-term debt, including early redemptions of FHLB advances.

Long-Term Debt Issuances and Maturities

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

	1Q20		4Q19		1Q19	
In billions of dollars	**Maturities**	**Issuances**	Maturities	Issuances	Maturities	Issuances
Parent and other						
Benchmark debt:						
Senior debt	**$ 2.1**	**$ 7.6**	$ 4.3	$ 7.0	$ 0.2	$ 4.6
Subordinated debt	**—**	**—**	—	—	—	—
Trust preferred	**—**	**—**	—	—	—	—
Customer-related debt	**6.4**	**7.9**	5.9	6.3	1.0	5.2
Local country and other	**0.4**	**0.2**	0.6	5.0	—	0.3
Total parent and other	**$ 8.9**	**$ 15.7**	$ 10.8	$ 18.3	$ 1.2	$ 10.1
Bank						
FHLB borrowings	**$ 2.4**	**$ 12.9**	$ —	$ —	$ —	$ —
Securitizations	**0.1**	**—**	2.1	0.1	2.6	—
Citibank benchmark senior debt	**1.0**	**—**	—	—	2.5	5.0
Local country and other	**0.7**	**0.3**	0.2	0.6	0.3	0.5
Total bank	**$ 4.2**	**$ 13.2**	$ 2.3	$ 0.7	$ 5.4	$ 5.5
Total	**$ 13.1**	**$ 28.9**	$ 13.1	$ 19.0	$ 6.6	$ 15.6

The table below shows Citi's aggregate long-term debt maturities (including repurchases and redemptions) during the first quarter of 2020, as well as its aggregate expected remaining long-term debt maturities by year as of March 31, 2020:

		Maturities						
In billions of dollars	**1Q20**	2020	2021	2022	2023	2024	2025	Thereafter	Total
Parent and other									
Benchmark debt:									
Senior debt	**$ 2.1**	$ 4.4	$ 14.2	$ 11.5	$ 12.6	$ 7.0	$ 7.4	$ 58.5	$ 115.5
Subordinated debt	**—**	—	—	0.7	1.3	1.1	5.2	19.1	27.5
Trust preferred	**—**	—	—	—	—	—	—	1.7	1.7
Customer-related debt	**6.4**	5.3	6.1	6.1	3.9	3.2	2.1	25.0	51.7
Local country and other	**0.4**	1.0	3.7	1.5	—	—	—	1.1	7.3
Total parent and other	**$ 8.9**	$ 10.7	$ 24.0	$ 19.8	$ 17.8	$ 11.3	$ 14.7	$ 105.4	$ 203.7
Bank									
FHLB borrowings	**$ 2.4**	$ 3.1	$ 7.7	$ 5.2	$ —	$ —	$ —	$ —	$ 16.0
Securitizations	**0.1**	4.3	7.1	2.2	2.5	1.1	0.4	3.3	20.8
Citibank benchmark senior debt	**1.0**	8.8	5.1	5.6	—	2.8	—	—	22.2
Local country and other	**0.7**	1.2	0.7	0.5	0.1	0.5	—	0.2	3.4
Total bank	**$ 4.2**	$ 17.4	$ 20.6	$ 13.5	$ 2.6	$ 4.4	$ 0.4	$ 3.5	$ 62.4
Total long-term debt	**$ 13.1**	$ 28.1	$ 44.6	$ 33.3	$ 20.4	$ 15.7	$ 15.1	$ 108.9	$ 266.1

Secured Funding Transactions and Short-Term Borrowings

Citi supplements its primary sources of funding with short-term financings that generally include (i) secured funding transactions consisting of securities loaned or sold under agreements to repurchase, i.e., 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 (i) secured lending activity and (ii) 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 are typically collateralized by 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 $222 billion as of March 31, 2020 increased 17% from the prior-year period and 34% sequentially. Excluding the impact of FX translation, secured funding increased 21% from the prior-year period and 39% sequentially, both driven by normal business activity. The average balances for secured funding were approximately $199 billion for the quarter ended March 31, 2020.

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 which 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 establishing minimum required funding tenors. The weighted average maturity of Citi's secured funding of less liquid securities inventory was greater than 110 days as of March 31, 2020.

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. In addition, 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 $55 billion increased 40% year-over-year and 22% sequentially, primarily driven by an increase in FHLB advances as well as Citi's participation in the FRB's Money Market Mutual Fund Liquidity Facility (as described in "U.S. Government-Sponsored Liquidity Programs" above) to facilitate client activity and support Federal Reserve Board actions to provide additional liquidity into the market (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-term 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 March 31, 2020.

Ratings as of March 31, 2020

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

Recent Credit Rating Developments

On April 22, 2020, Fitch Ratings affirmed Citi's Long-Term and Short-Term Issuer Default Ratings (IDR) at A and F1, respectively. The Rating Outlook is revised to Negative from Stable reflecting the disruption to economic activity and financial markets from the COVID-19 pandemic. As part of this action, the outlooks for operating subsidiaries have also been revised from Stable to Negative in line with the parent company.

In addition, per Fitch's updated Bank Rating Criteria, published February 28, 2020, Fitch downgraded Citi's subordinated debt by one notch to BBB+ and removed it from under criteria observation (UCO) to reflect the change in baseline notching for loss severity. Citi's preferred stock rating was upgraded by one notch to BBB- and removed from UCO to reflect a reduction in incremental non-performance risk notching under the new criteria.

Potential Impacts of Ratings Downgrades

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

The following information is provided for the purpose of analyzing the potential funding and liquidity impact to Citigroup and Citibank of a hypothetical simultaneous ratings downgrade across all three major rating agencies. This analysis is subject to certain estimates, estimation methodologies, judgments and uncertainties. Uncertainties include potential ratings limitations that certain entities may have with respect to permissible counterparties, as well as general subjective counterparty behavior. For example, certain corporate customers and markets counterparties could re-evaluate their business relationships with Citi and limit transactions in certain contracts or market instruments with Citi. Changes in counterparty behavior could impact Citi's funding and liquidity, as well as the results of operations of certain of its businesses. The actual impact to Citigroup or Citibank is unpredictable and may differ materially from the potential funding and liquidity impacts described below. For additional information on the impact of credit rating changes on Citi and its applicable subsidiaries, see "Risk Factors—Liquidity Risks" in Citi's 2019 Annual Report on Form 10-K.

Citigroup Inc. and Citibank—Potential Derivative Triggers

As of March 31, 2020, 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 $0.6 billion, compared to $0.5 billion from December 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 March 31, 2020, 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 due to derivative triggers by approximately $0.6 billion, compared to $0.3 billion as of December 31, 2019.

In total, as of March 31, 2020, Citi estimates that a one-notch downgrade of Citigroup and Citibank across all three major rating agencies could result in increased aggregate cash obligations and collateral requirements of approximately $1.2 billion, compared to $0.8 billion as of December 31, 2019 (see also Note 19 to the Consolidated Financial Statements). As detailed under "High-Quality Liquid Assets" above, Citigroup has various liquidity resources available to its bank and non-bank entities 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 March 31, 2020, Citibank had liquidity commitments of approximately $12.2 billion to consolidated asset-backed commercial paper conduits, compared to $10.2 billion as of December 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 2019 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	**Mar. 31, 2020**	Dec. 31, 2019	Mar. 31, 2019
Estimated annualized impact to net interest revenue			
U.S. dollar[1]	**$ (142)**	$ 20	$ 527
All other currencies	**660**	606	677
Total	**$ 518**	$ 626	$ 1,204
As a percentage of average interest-earning assets	**0.03%**	0.03%	0.07%
Estimated initial impact to *AOCI* (after-tax)[2]	**$ (5,746)**	$ (5,002)	$ (3,828)
Estimated initial impact on Common Equity Tier 1 Capital ratio (bps)	**(34)**	(31)	(25)

(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 $(325) million for a 100 bps instantaneous increase in interest rates as of March 31, 2020.

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

As shown on the table above, during the first quarter of 2020, Citi Treasury continued its strategy of reducing the impact to net interest revenue from an increase in interest rates. The reduction was predominantly in U.S. dollar exposure, which changed from an asset-sensitive $20 million as of December 31, 2019 to a liability-sensitive $(142) million as of March 31, 2020.

The increase 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 a parallel instantaneous 100 bps increase in interest rates, Citi expects that the negative impact to AOCI would be offset in stockholders' equity through the expected recovery of the impact on AOCI through accretion of Citi's investment portfolio over a period of time. As of March 31, 2020, Citi expects that the negative $5.7 billion impact to *AOCI* in such a scenario could potentially be offset over approximately 41 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. The 100 bps downward rate scenarios are impacted by the low level of interest rates in several countries and the assumption that market interest rates, as well as rates paid to depositors and charged to borrowers, do not fall below zero (i.e., the "flooring assumption"). The rate scenarios are also impacted by convexity related to mortgage products.

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

In millions of dollars, except as otherwise noted	**Scenario 1**	**Scenario 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	$ (142)	$ 14	$ 211	$ (176)	$ (553)
All other currencies	660	582	46	(36)	(368)
Total	$ 518	$ 596	$ 257	$ (212)	$ (921)
Estimated initial impact to *AOCI* (after-tax)[1]	$ (5,746)	$ (3,861)	$ (2,120)	$ 1,895	$ 3,368
Estimated initial impact to Common Equity Tier 1 Capital ratio (bps)	(34)	(23)	(13)	11	15

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.

Changes in Foreign Exchange Rates—Impacts on AOCI and Capital

As of March 31, 2020, 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 $1.4 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, Indian rupee, Euro and Australian dollar.

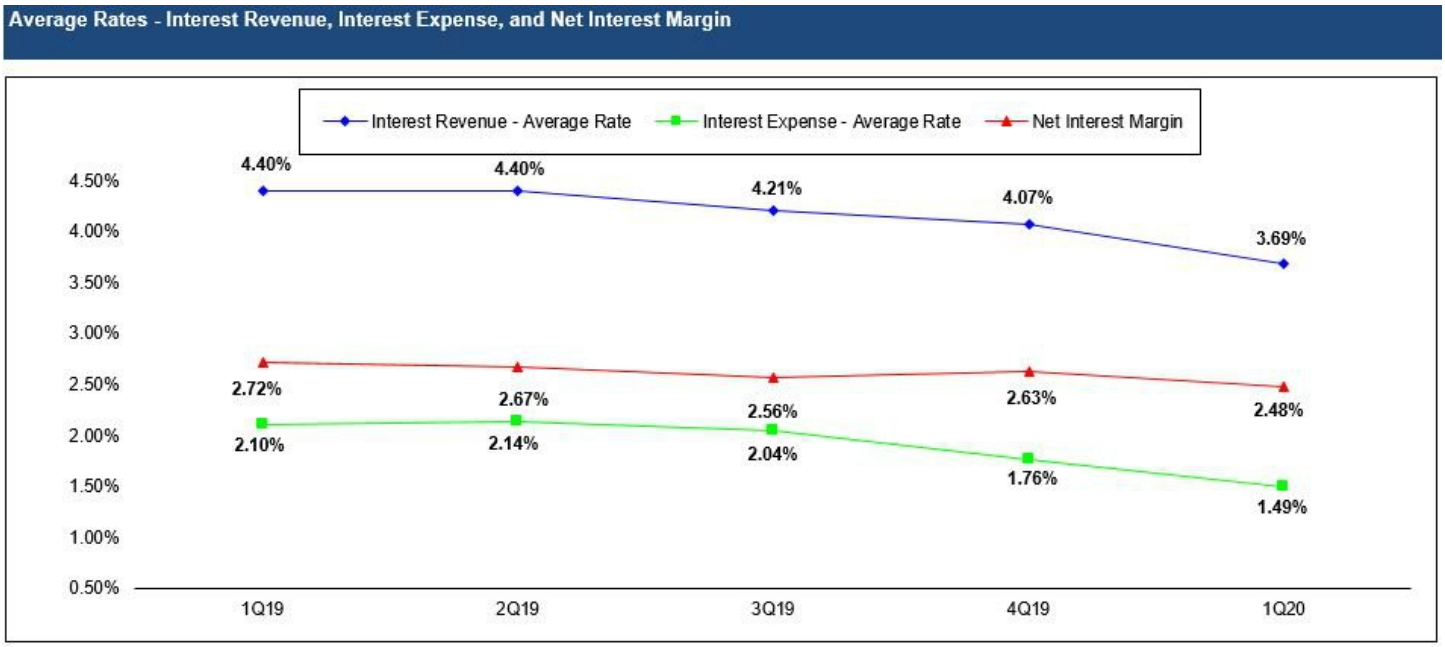
This impact is also before any mitigating actions Citi may take, including ongoing management of its foreign currency translation exposure. Specifically, as currency movements change the value of Citi's net investments in foreign currency-denominated capital, these movements also change the value of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

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

	For the quarter ended		
In millions of dollars, except as otherwise noted	**Mar. 31, 2020**	Dec. 31, 2019	Mar. 31, 2019
Change in FX spot rate[(1)]	**(9.2)%**	2.8%	0.4%
Change in TCE due to FX translation, net of hedges	**$ (3,201)**	$ 659	$ 65
As a percentage of TCE	**(2.1)%**	0.4%	—%
Estimated impact to Common Equity Tier 1 Capital ratio (on a fully implemented basis) due to changes in FX translation, net of hedges (bps)	**(5)**	(3)	—

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

Interest Revenue/Expense and Net Interest Margin (NIM)



In millions of dollars, except as otherwise noted	**1st Qtr. 2020**	4th Qtr. 2019	1st Qtr. 2019	**Change 1Q20 vs. 1Q19**
Interest revenue[1]	**$ 17,185**	$ 18,593	$ 19,140	**(10)%**
Interest expense[2]	**5,647**	6,548	7,317	**(23)**
Net interest revenue, taxable equivalent basis	**$ 11,538**	$ 12,045	$ 11,823	**(2)%**
Interest revenue—average rate[3]	**3.69%**	4.07%	4.40%	**(71) bps**
Interest expense—average rate	**1.49**	1.76	2.10	**(61) bps**
Net interest margin[3][4]	**2.48**	2.63	2.72	**(24) bps**
Interest-rate benchmarks				
Two-year U.S. Treasury note—average rate	**1.08%**	1.62%	2.49%	**(141) bps**
10-year U.S. Treasury note—average rate	**1.37**	1.79	2.65	**(128) bps**
10-year vs. two-year spread	**29 bps**	17 bps	16 bps	

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

(1) *Net interest revenue* includes the taxable equivalent adjustments related to the tax-exempt bond portfolio (based on the U.S. federal statutory tax rate of 21% in 2020 and 2019) of $46 million, $48 million and $64 million for the three months ended March 31, 2020, December 31, 2019 and March 31, 2019, 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.

Net Interest Revenue Excluding *ICG Markets*

In millions of dollars	**1st Qtr. 2020**	4th Qtr. 2019	1st Qtr. 2019	**Change 1Q20 vs. 1Q19**
Net interest revenue—taxable equivalent basis[(1)] per above	**$ 11,538**	$ 12,045	$ 11,823	**(2)%**
ICG Markets net interest revenue—taxable equivalent basis[(1)]	**1,182**	1,257	961	**23**
Net interest revenue excluding *ICG Markets*—taxable equivalent basis[(1)]	**$ 10,356**	$ 10,788	$ 10,862	**(5)%**

(1) *Net interest revenue* includes the taxable equivalent adjustments related to the tax-exempt bond portfolio (based on the U.S. federal statutory tax rate of 21% in 2020 and 2019) of $46 million, $48 million and $64 million for the three months ended March 31, 2020, December 31, 2019 and March 31, 2019, respectively.

Citi's net interest revenue in the first quarter of 2020 decreased 2% to $11.5 billion versus the prior-year period. Citi's net interest revenue on a taxable equivalent basis also decreased 2% (as set forth in the table above). Excluding the impact of FX translation, net interest revenue declined slightly year over year by approximately $60 million as a decline of $320 million in net interest revenue excluding *ICG Markets* was partially offset by a $260 million increase in *ICG Markets* (fixed income markets and equity markets) net interest revenue. The decrease in non-*ICG Markets* net interest revenue was primarily driven by the impact of lower interest rates, partially offset by overall loan growth and one additional day in the current quarter. The increase in *ICG Markets* net interest revenue was primarily driven by ongoing changes in the composition and mix of the business's revenues between net interest revenue and non-interest revenue. Citi expects its net interest revenue to decline in the near term, reflecting the full-quarter impact of lower interest rates, as well as a more pronounced impact from the COVID-19 pandemic.

Citi's NIM was 2.48% on a taxable equivalent basis in the first quarter of 2020, a decrease of 15 basis points from the prior quarter, with lower net interest revenue driving approximately half of the decline and the remainder reflecting growth in Citi's balance sheet. Citi's *ICG Markets* and non-*ICG Markets* net interest revenues are non-GAAP financial measures. Citi reviews non-*ICG Markets* net interest revenue to assess the performance of its lending, investing and deposit-raising activities. Citi believes disclosure of this metric assists in providing a meaningful depiction of the underlying fundamentals of its non-*ICG Markets* businesses.

Additional Interest Rate Details

Average Balances and Interest Rates—Assets[1][2][3]

Taxable Equivalent Basis

	Average volume			Interest revenue			% Average rate		
	1st Qtr.	4th Qtr.	1st Qtr.	**1st Qtr.**	4th Qtr.	1st Qtr.	**1st Qtr.**	4th Qtr.	1st Qtr.
In millions of dollars, except rates	**2020**	2019	2019	**2020**	2019	2019	**2020**	2019	2019
Assets									
Deposits with banks[4]	**$ 207,130**	$ 195,268	$ 171,369	**$ 527**	$ 603	$ 607	**1.02%**	1.23%	1.44%
Securities borrowed and purchased under agreements to resell[5]									
In U.S. offices	**$ 141,351**	$ 138,647	$ 152,530	**$ 749**	$ 947	$ 1,262	**2.13%**	2.71%	3.36%
In offices outside the U.S.[4]	**127,549**	117,375	123,109	**459**	504	528	**1.45**	1.70	1.74
Total	**$ 268,900**	$ 256,022	$ 275,639	**$ 1,208**	$ 1,451	$ 1,790	**1.81%**	2.25%	2.63%
Trading account assets[6][7]									
In U.S. offices	**$ 130,138**	$ 117,650	$ 95,904	**$ 975**	$ 1,083	$ 940	**3.01%**	3.65%	3.98%
In offices outside the U.S.[4]	**122,320**	125,947	124,673	**619**	874	752	**2.04**	2.75	2.45
Total	**$ 252,458**	$ 243,597	$ 220,577	**$ 1,594**	$ 1,957	$ 1,692	**2.54%**	3.19%	3.11%
Investments									
In U.S. offices									
Taxable	**$ 238,298**	$ 225,435	$ 225,733	**$ 1,158**	$ 1,156	$ 1,509	**1.95%**	2.03%	2.71%
Exempt from U.S. income tax	**14,170**	14,737	16,287	**109**	126	129	**3.09**	3.39	3.21
In offices outside the U.S.[4]	**128,867**	127,561	108,988	**1,038**	1,139	940	**3.24**	3.54	3.50
Total	**$ 381,335**	$ 367,733	$ 351,008	**$ 2,305**	$ 2,421	$ 2,578	**2.43%**	2.61%	2.98%
Loans (net of unearned income)[8]									
In U.S. offices	**$ 403,558**	$ 400,037	$ 393,397	**$ 7,318**	$ 7,592	$ 7,648	**7.29%**	7.53%	7.88%
In offices outside the U.S.[4]	**291,117**	292,594	285,811	**3,950**	4,236	4,342	**5.46**	5.74	6.16
Total	**$ 694,675**	$ 692,631	$ 679,208	**$ 11,268**	$ 11,828	$ 11,990	**6.52%**	6.78%	7.16%
Other interest-earning assets[9]	**$ 68,737**	$ 58,609	$ 66,925	**$ 283**	$ 333	$ 483	**1.66%**	2.25%	2.93%
Total interest-earning assets	**$ 1,873,235**	$ 1,813,860	$ 1,764,726	**$ 17,185**	$ 18,593	$ 19,140	**3.69%**	4.07%	4.40%
Non-interest-earning assets[6]	**$ 206,484**	$ 182,757	$ 174,688						
Total assets	**$ 2,079,719**	$ 1,996,617	$ 1,939,414						

(1) *Net interest revenue* includes the taxable equivalent adjustments related to the tax-exempt bond portfolio (based on the U.S. federal statutory tax rate of 21% in 2020 and 2019) of $46 million, $48 million and $64 million for the three months ended March 31, 2020, December 31, 2019 and March 31, 2019, respectively.
(2) Interest rates and amounts include the effects of risk management activities associated with the respective asset categories.
(3) Monthly or quarterly averages have been used by certain subsidiaries where daily averages are unavailable.
(4) Average rates reflect prevailing local interest rates, including inflationary effects and monetary corrections in certain countries.
(5) Average volumes of securities borrowed or purchased under agreements to resell are reported net pursuant to ASC 210-20-45. However, *Interest revenue* excludes the impact of ASC 210-20-45.
(6) The fair value carrying amounts of derivative contracts are reported net, pursuant to ASC 815-10-45, in *Non-interest-earning assets* and *Other non-interest-bearing liabilities*.
(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[1][2][3]

Taxable Equivalent Basis

	Average volume			Interest expense			% Average rate		
In millions of dollars, except rates	**1st Qtr. 2020**	4th Qtr. 2019	1st Qtr. 2019	**1st Qtr. 2020**	4th Qtr. 2019	1st Qtr. 2019	**1st Qtr. 2020**	4th Qtr. 2019	1st Qtr. 2019
Liabilities									
Deposits									
In U.S. offices[4]	**$ 427,957**	$ 411,452	$ 366,247	**$ 1,360**	$ 1,489	$ 1,489	**1.28%**	1.44%	1.65%
In offices outside the U.S.[5]	**506,494**	499,587	473,142	**1,254**	1,464	1,538	**1.00**	1.16	1.32
Total	**$ 934,451**	$ 911,039	$ 839,389	**$ 2,614**	$ 2,953	$ 3,027	**1.13%**	1.29%	1.46%
Securities loaned and sold under agreements to repurchase[6]									
In U.S. offices	**$ 128,499**	$ 110,261	$ 111,033	**$ 718**	$ 851	$ 1,107	**2.25%**	3.06%	4.04%
In offices outside the U.S.[5]	**70,011**	77,892	72,904	**367**	469	482	**2.11**	2.39	2.68
Total	**$ 198,510**	$ 188,153	$ 183,937	**$ 1,085**	$ 1,320	$ 1,589	**2.20%**	2.78%	3.50%
Trading account liabilities[7][8]									
In U.S. offices	**$ 36,453**	$ 34,829	$ 40,163	**$ 138**	$ 179	$ 196	**1.52%**	2.04%	1.98%
In offices outside the U.S.[5]	**48,047**	44,091	55,127	**101**	137	131	**0.85**	1.23	0.96
Total	**$ 84,500**	$ 78,920	$ 95,290	**$ 239**	$ 316	$ 327	**1.14%**	1.59%	1.39%
Short-term borrowings[9]									
In U.S. offices	**$ 86,710**	$ 78,211	$ 75,440	**$ 326**	$ 420	$ 571	**1.51%**	2.13%	3.07%
In offices outside the U.S.[5]	**19,850**	18,868	23,740	**58**	69	81	**1.18**	1.45	1.38
Total	**$ 106,560**	$ 97,079	$ 99,180	**$ 384**	$ 489	$ 652	**1.45%**	2.00%	2.67%
Long-term debt[10]									
In U.S. offices	**$ 198,006**	$ 193,463	$ 191,903	**$ 1,318**	$ 1,459	$ 1,685	**2.68%**	2.99%	3.56%
In offices outside the U.S.[5]	**4,186**	4,509	5,060	**7**	11	37	**0.67**	0.97	2.97
Total	**$ 202,192**	$ 197,972	$ 196,963	**$ 1,325**	$ 1,470	$ 1,722	**2.64%**	2.95%	3.55%
Total interest-bearing liabilities	**$ 1,526,213**	$ 1,473,163	$ 1,414,759	**$ 5,647**	$ 6,548	$ 7,317	**1.49%**	1.76%	2.10%
Demand deposits in U.S. offices	**$ 26,709**	$ 26,586	$ 26,893						
Other non-interest-bearing liabilities[7]	**333,210**	**301,662**	**301,259**						
Total liabilities	**$ 1,886,132**	$ 1,801,411	$ 1,742,911						
Citigroup stockholders' equity	**$ 192,946**	$ 194,553	$ 195,705						
Noncontrolling interests	**641**	653	798						
Total equity	**$ 193,587**	$ 195,206	$ 196,503						
Total liabilities and stockholders' equity	**$ 2,079,719**	$ 1,996,617	$ 1,939,414						
Net interest revenue as a percentage of average interest-earning assets[11]									
In U.S. offices	**$ 1,077,872**	$ 1,029,263	$ 996,569	**$ 7,001**	$ 7,169	$ 7,233	**2.61%**	2.76%	2.94%
In offices outside the U.S.[6]	**795,362**	784,598	768,157	**4,537**	4,876	4,590	**2.29**	2.47	2.42
Total	**$ 1,873,235**	$ 1,813,860	$ 1,764,726	**$ 11,538**	$ 12,045	$ 11,823	**2.48%**	2.63%	2.72%

(1) *Net interest revenue* includes the taxable equivalent adjustments related to the tax-exempt bond portfolio (based on the U.S. federal statutory tax rate of 21% in 2020 and 2019) of $46 million, $48 million and $64 million for the three months ended March 31, 2020, December 31, 2019 and March 31, 2019, respectively.
(2) Interest rates and amounts include the effects of risk management activities associated with the respective liability categories.
(3) Monthly or quarterly averages have been used by certain subsidiaries where daily averages are unavailable.
(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 assessments.
(5) Average rates reflect prevailing local interest rates, including inflationary effects and monetary corrections in certain countries.
(6) Average volumes of securities sold under agreements to repurchase are reported net pursuant to ASC 210-20-45. However, *Interest expense* excludes the impact of ASC 210-20-45.
(7) The fair value carrying amounts of derivative contracts are reported net, pursuant to ASC 815-10-45, in *Non-interest-earning assets* and *Other non-interest-bearing liabilities*.
(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 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.

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

	1st Qtr. 2020 vs. 4th Qtr. 2019			1st Qtr. 2020 vs. 1st Qtr. 2019		
	Increase (decrease) due to change in:			Increase (decrease) due to change in:		
In millions of dollars	Average volume	Average rate	Net change	Average volume	Average rate	Net change
Deposits with banks[(3)]	**$ 35**	**$ (111)**	**$ (76)**	**$ 111**	**$ (191)**	**$ (80)**
Securities borrowed and purchased under agreements to resell						
In U.S. offices	**$ 18**	**$ (216)**	**$ (198)**	**$ (87)**	**$ (426)**	**$ (513)**
In offices outside the U.S.[(3)]	**41**	**(86)**	**(45)**	**19**	**(87)**	**(68)**
Total	**$ 59**	**$ (302)**	**$ (243)**	**$ (68)**	**$ (513)**	**$ (581)**
Trading account assets[(4)]						
In U.S. offices	**$ 107**	**$ (215)**	**$ (108)**	**$ 288**	**$ (253)**	**$ 35**
In offices outside the U.S.[(3)]	**(24)**	**(231)**	**(255)**	**(14)**	**(119)**	**(133)**
Total	**$ 83**	**$ (446)**	**$ (363)**	**$ 274**	**$ (372)**	**$ (98)**
Investments[(1)]						
In U.S. offices	**$ 64**	**$ (79)**	**$ (15)**	**$ 68**	**$ (439)**	**$ (371)**
In offices outside the U.S.[(3)]	**12**	**(113)**	**(101)**	**163**	**(65)**	**98**
Total	**$ 76**	**$ (192)**	**$ (116)**	**$ 231**	**$ (504)**	**$ (273)**
Loans (net of unearned income)[(5)]						
In U.S. offices	**$ 66**	**$ (340)**	**$ (274)**	**$ 194**	**$ (525)**	**$ (331)**
In offices outside the U.S.[(3)]	**(21)**	**(265)**	**(286)**	**79**	**(471)**	**(392)**
Total	**$ 45**	**$ (605)**	**$ (560)**	**$ 273**	**$ (996)**	**$ (723)**
Other interest-earning assets[(6)]	**$ 51**	**$ (101)**	**$ (50)**	**$ 13**	**$ (213)**	**$ (200)**
Total interest revenue	**$ 349**	**$ (1,757)**	**$ (1,408)**	**$ 834**	**$ (2,789)**	**$ (1,955)**

(1) The taxable equivalent adjustments related to the tax-exempt bond portfolio, based on the U.S. federal statutory tax rate of 21% in 2020 and 2019, are included in this presentation.
(2) Rate/volume variance is allocated based on the percentage relationship of changes in volume and changes in rate to the total net change.
(3) Changes in average rates reflect changes in prevailing local interest rates, including inflationary effects and monetary corrections in certain countries.
(4) *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.
(5) Includes cash-basis loans.
(6) Includes *Brokerage receivables*.

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

	1st Qtr. 2020 vs. 4th Qtr. 2019			1st Qtr. 2020 vs. 1st Qtr. 2019		
	Increase (decrease) due to change in:			Increase (decrease) due to change in:		
In millions of dollars	Average volume	Average rate	Net change	Average volume	Average rate	Net change
Deposits						
In U.S. offices	**$ 58**	**$ (187)**	**$ (129)**	**$ 227**	**$ (356)**	**$ (129)**
In offices outside the U.S.[(3)]	**20**	**(230)**	**(210)**	**103**	**(387)**	**(284)**
Total	**$ 78**	**$ (417)**	**$ (339)**	**$ 330**	**$ (743)**	**$ (413)**
Securities loaned and sold under agreements to repurchase						
In U.S. offices	**$ 126**	**$ (259)**	**$ (133)**	**$ 154**	**$ (543)**	**$ (389)**
In offices outside the U.S.[(3)]	**(45)**	**(57)**	**(102)**	**(18)**	**(97)**	**(115)**
Total	**$ 81**	**$ (316)**	**$ (235)**	**$ 136**	**$ (640)**	**$ (504)**
Trading account liabilities[(4)]						
In U.S. offices	**$ 8**	**$ (49)**	**$ (41)**	**$ (17)**	**$ (41)**	**$ (58)**
In offices outside the U.S.[(3)]	**11**	**(47)**	**(36)**	**(16)**	**(14)**	**(30)**
Total	**$ 19**	**$ (96)**	**$ (77)**	**$ (33)**	**$ (55)**	**$ (88)**
Short-term borrowings[(5)]						
In U.S. offices	**$ 42**	**$ (136)**	**$ (94)**	**$ 75**	**$ (320)**	**$ (245)**
In offices outside the U.S.[(3)]	**3**	**(14)**	**(11)**	**(12)**	**(11)**	**(23)**
Total	**$ 45**	**$ (150)**	**$ (105)**	**$ 63**	**$ (331)**	**$ (268)**
Long-term debt						
In U.S. offices	**$ 34**	**$ (175)**	**$ (141)**	**$ 52**	**$ (419)**	**$ (367)**
In offices outside the U.S.[(3)]	**(1)**	**(3)**	**(4)**	**(5)**	**(25)**	**(30)**
Total	**$ 33**	**$ (178)**	**$ (145)**	**$ 47**	**$ (444)**	**$ (397)**
Total interest expense	**$ 256**	**$ (1,157)**	**$ (901)**	**$ 543**	**$ (2,213)**	**$ (1,670)**
Net interest revenue	**$ 92**	**$ (599)**	**$ (507)**	**$ 292**	**$ (577)**	**$ (285)**

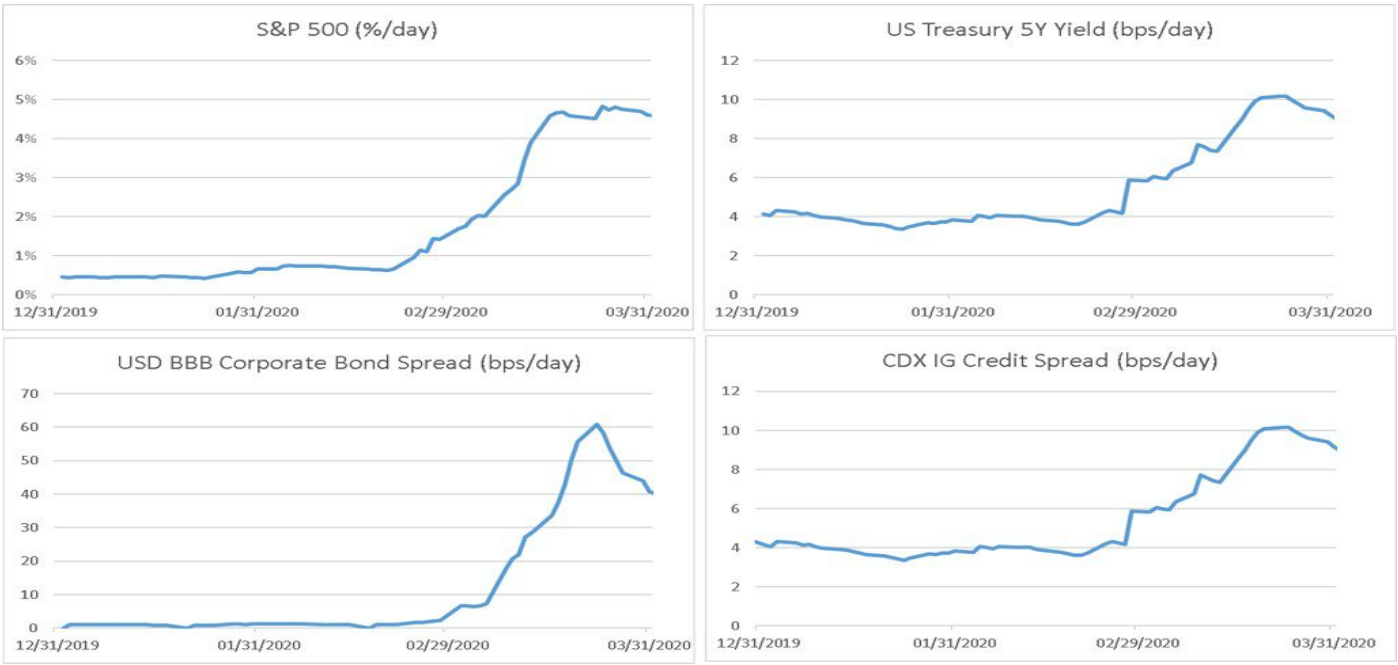
(1) The taxable equivalent adjustments related to the tax-exempt bond portfolio, based on the U.S. federal statutory tax rate of 21% in 2020 and 2019, are included in this presentation.
(2) Rate/volume variance is allocated based on the percentage relationship of changes in volume and changes in rate to the total net change.
(3) Changes in average rates reflect changes in prevailing local interest rates, including inflationary effects and monetary corrections in certain countries.
(4) *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.
(5) Includes *Brokerage payables*.

Market Risk of Trading Portfolios

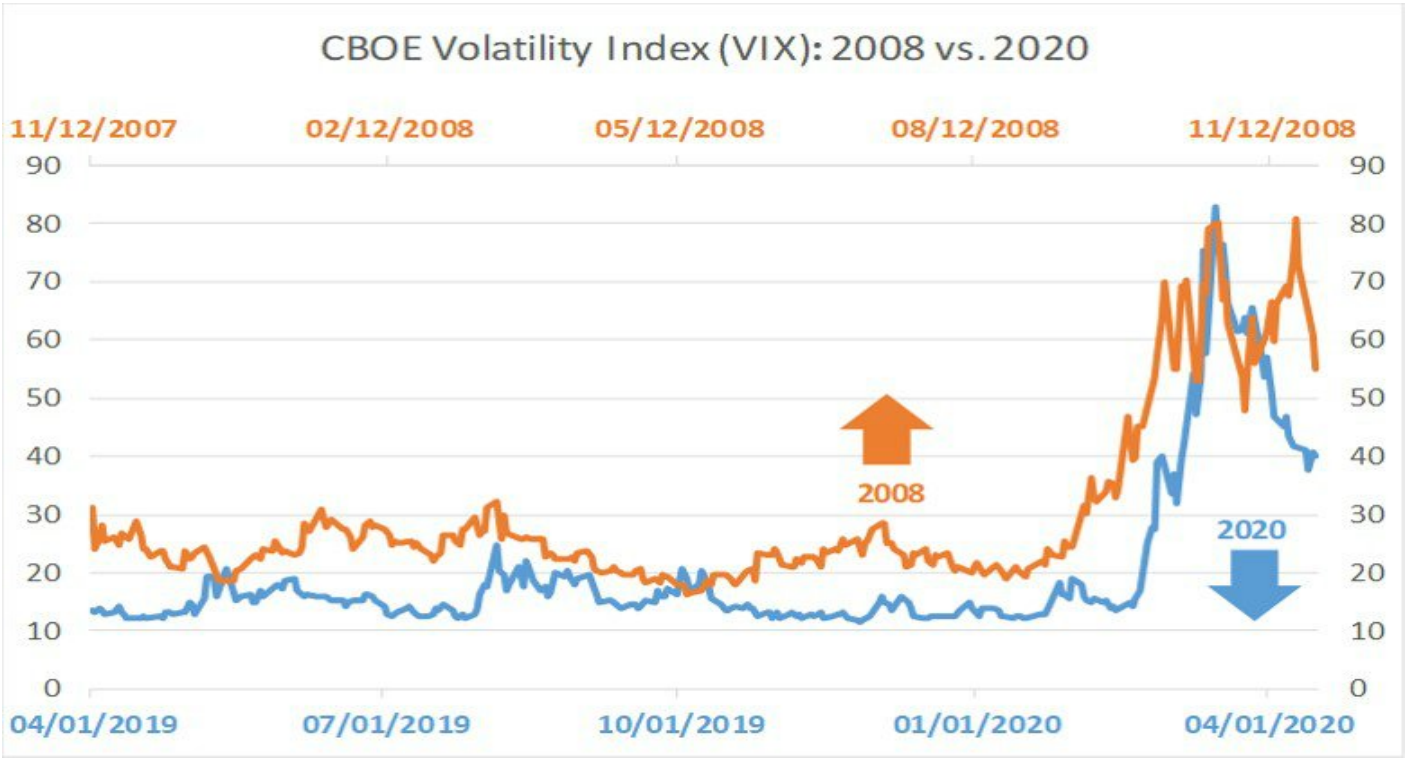
Value at Risk (VAR)

As of March 31, 2020, Citi estimates that the quick-responsive features of the VAR calibration contribute an approximate 348% add-on to what would be a VAR estimated under the assumption of normal and stable markets. As of December 31, 2019, the add-on was 26%.

Realized volatilities in February and March 2020 increased by multiples of 6.7, 2.4, 34 and 9 for the S&P 500, U.S. 5-year Treasury yield, USD BBB bond spread and CDX IG credit spread, respectively, as illustrated for the following key market benchmarks:



While often broadly similar in magnitude to the financial crisis experience in 2008, the increase in volatility was more sudden, unfolding over a four-week period rather than a two-month period, as depicted in the volatility index chart below:



As set forth in the table below, Citi's average trading VAR and average trading and credit portfolio VAR both increased from December 31, 2019 to March 31, 2020. The increases were mainly due to an increase in market volatility in March due to the COVID-19 pandemic. As Citi uses log normal credit spread risk rather than a normal modeling approach, the VAR increase from the credit spread risk contribution to the trading VAR was magnified by the increase in credit spread levels, as well as the increase in realized volatilities. The proportionally higher increase in trading and credit portfolio VAR was also reflective of this modeling impact on the relative contribution of credit valuation adjustment (CVA) exposures and mark-to-market credit default swap (CDS) hedges of loan exposures accounted for under accrual methods.

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

		First Quarter		Fourth Quarter		First Quarter
In millions of dollars	**March 31, 2020**	**2020 Average**	December 31, 2019	2019 Average	March 31, 2019	2019 Average
Interest rate	**$ 78**	**$ 38**	$ 32	$ 33	$ 32	$ 37
Credit spread	**157**	**55**	44	44	43	48
Covariance adjustment[1]	**(55)**	**(26)**	(27)	(26)	(21)	(23)
Fully diversified interest rate and credit spread[2]	**$ 180**	**$ 67**	$ 49	$ 51	$ 54	$ 62
Foreign exchange	**29**	**21**	22	21	15	26
Equity	**92**	**37**	21	17	20	17
Commodity	**45**	**16**	13	16	30	28
Covariance adjustment[1]	**(155)**	**(66)**	(52)	(54)	(66)	(67)
Total trading VAR—all market risk factors, including general and specific risk (excluding credit portfolios)[2]	**$ 191**	**$ 75**	$ 53	$ 51	$ 53	$ 66
Specific risk-only component[3]	**$ (16)**	**$ 7**	$ 3	$ 3	$ 2	$ 3
Total trading VAR—general market risk factors only (excluding credit portfolios)	**$ 207**	**$ 68**	$ 50	$ 48	$ 51	$ 63
Incremental impact of the credit portfolio[4]	**$ 217**	**$ 44**	$ 30	$ 16	$ 14	$ 15
Total trading and credit portfolio VAR	**$ 408**	**$ 119**	$ 83	$ 67	$ 67	$ 81

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

	First Quarter 2020		Fourth Quarter 2019		First Quarter 2019	
In millions of dollars	**Low**	**High**	Low	High	Low	High
Interest rate	**$ 28**	**$ 78**	$ 28	$ 45	$ 30	$ 58
Credit spread	**36**	**162**	36	54	41	55
Fully diversified interest rate and credit spread	**$ 44**	**$ 180**	$ 43	$ 60	$ 51	$ 89
Foreign exchange	**14**	**32**	13	29	15	34
Equity	**13**	**141**	12	24	10	29
Commodity	**12**	**45**	12	19	19	43
Total trading	**$ 47**	**$ 191**	$ 40	$ 59	$ 53	$ 87
Total trading and credit portfolio	**58**	**414**	56	83	62	103

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	**Mar. 31, 2020**
Total—all market risk factors, including general and specific risk	
Average—during quarter	**$ 71**
High—during quarter	**188**
Low—during quarter	**44**

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 exceed 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 March 31, 2020, there were four back-testing exceptions observed for Citi's Regulatory VAR for the prior 12 months. All of those exceptions occurred during March 2020 due to the significant market volatility in response to the COVID-19 pandemic.

STRATEGIC RISK

For additional information on strategic risk at Citi, see "Strategic Risk" in Citi's 2019 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 March 31, 2020. The total exposure as of March 31, 2020 to the top 25 countries disclosed below, in combination with the U.S., would represent approximately 96% 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, for U.K. exposure, only 35% of corporate loans presented in the table below are to U.K. domiciled entities (and 38% of unfunded lending commitments are to U.K. domiciled entities), with the balance of the loans predominately outstanding to European domiciled counterparties. Approximately 81% of the total U.K. funded loans and 89% of the total U.K. unfunded lending commitments were investment grade as of March 31, 2020. 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.

In billions of dollars	ICG loans[1]	GCB loans	Other funded[2]	Unfunded[3]	Net MTM on derivatives /repos[4]	Total hedges (on loans and CVA)	Investment securities[5]	Trading account assets[6]	**Total as of 1Q20**	Total as of 4Q19	Total as of 1Q19	**Total as a % of Citi as of 1Q20**
United Kingdom	$ 46.0	$ —	$ 3.6	$ 51.2	$ 19.6	$ (5.4)	$ 4.6	$ (0.7)	**$ 118.9**	$ 105.8	$ 122.3	6.9%
Mexico	17.7	13.7	0.2	6.9	1.2	(0.9)	13.8	4.3	**56.9**	65.0	63.4	3.3
Hong Kong	20.7	12.2	0.9	5.9	1.1	(0.9)	7.9	1.5	**49.3**	49.0	50.3	2.9
Singapore	15.2	12.9	0.1	4.8	2.2	(0.5)	8.3	1.6	**44.6**	43.3	41.0	2.6
Ireland	13.5	—	0.6	25.3	0.5	—	—	0.6	**40.5**	39.9	33.5	2.4
South Korea	3.3	15.7	0.1	2.0	0.9	(0.5)	10.7	1.3	**33.5**	34.7	33.7	2.0
India	6.6	4.4	0.8	5.9	2.5	(0.5)	9.7	0.8	**30.2**	30.0	32.0	1.8
Brazil	14.6	—	—	1.8	4.1	(0.8)	3.5	3.0	**26.2**	28.3	26.8	1.5
Australia	4.9	8.6	—	5.4	4.2	(0.4)	1.4	(1.5)	**22.6**	21.5	22.9	1.3
Germany	0.8	—	0.1	4.6	7.6	(4.1)	12.2	0.3	**21.5**	21.8	22.2	1.3
China	7.8	3.2	0.5	2.7	2.3	(0.6)	6.3	(0.7)	**21.5**	18.7	17.4	1.3
Japan	2.7	—	0.1	2.6	4.7	(1.8)	5.8	6.4	**20.5**	17.0	14.4	1.2
Canada	3.4	0.5	0.5	5.8	2.9	(0.6)	4.8	0.9	**18.2**	15.2	15.3	1.1
Taiwan	5.9	7.7	0.1	1.3	0.3	(0.1)	0.7	0.7	**16.6**	17.9	17.6	1.0
Poland	3.8	1.8	—	2.2	0.2	—	5.5	1.2	**14.7**	13.4	15.3	0.9
United Arab Emirates	8.4	1.3	0.1	3.6	0.7	(0.1)	0.1	0.1	**14.2**	12.8	12.4	0.8
Jersey	7.6	—	0.5	4.0	—	(0.4)	—	—	**11.7**	12.8	9.9	0.7
Malaysia	1.8	3.8	0.2	0.9	0.3	(0.1)	1.3	0.4	**8.6**	8.4	10.0	0.5
Thailand	0.9	2.5	—	1.7	0.3	—	1.7	0.2	**7.3**	7.7	6.8	0.4
Luxembourg	0.7	—	—	—	0.5	(0.3)	4.7	0.5	**6.1**	4.6	4.0	0.4
Indonesia	2.2	0.7	—	1.3	0.2	(0.1)	0.8	0.2	**5.3**	5.9	6.1	0.3
Russia	1.9	0.8	—	1.3	0.4	(0.2)	0.9	—	**5.1**	5.0	4.7	0.3
Philippines	1.0	1.5	—	0.5	—	—	2.0	—	**5.0**	4.9	5.9	0.3
South Africa	1.5	—	—	0.5	0.6	(0.2)	1.6	—	**4.0**	3.5	3.9	0.2
Czech Republic	0.8	—	—	0.5	1.8	—	0.2	—	**3.3**	4.3	3.3	0.2
Total as a % of Citi's total exposure												**35.6%**
Total as a % of Citi's non-U.S. total exposure												**90.4%**

(1) *ICG* loans reflect funded corporate loans and private bank loans, net of unearned income. As of March 31, 2020, private bank loans in the table above totaled $28.6 billion, concentrated in Hong Kong ($8.8 billion), Singapore ($6.3 billion) and the U.K. ($6.7 billion).

(2) Other funded includes other direct exposures 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.

Argentina

Citi operates in Argentina through its *ICG* businesses. As of March 31, 2020, Citi's net investment in its Argentine operations was approximately $850 million. Citi uses the U.S. dollar as the functional currency for its operations in Argentina because the Argentine economy is considered highly inflationary under U.S. GAAP. For additional information about Citi's exposures in Argentina, see "Managing Global Risk—Country Risk—Argentina" in Citi's 2019 Annual Report on Form 10-K.

In April 2020, the government of Argentina announced a postponement of debt payments related to foreign currency debt issued under Argentine law. In addition, as previously disclosed, the government of Argentina has continued to maintain certain capital and currency controls that restrict Citi's ability to access U.S. dollars in Argentina and remit earnings from its Argentine operations.

Citi economically hedges the foreign currency risk in its net Argentine peso-denominated assets to the extent possible and prudent using non-deliverable forward (NDF) derivative instruments that are executed outside of Argentina. As of March 31, 2020, the international NDF market had very limited liquidity, resulting in Citi being unable to economically hedge a significant portion of its Argentine peso exposure. To the extent that Citi is unable to execute additional NDF contracts in the future, devaluations on Citi's net Argentine peso-denominated assets would be recorded in earnings, without any benefit from a change in the fair value of derivative positions used to economically hedge the exposure.

In addition, Citi continually evaluates its economic exposure to its Argentine counterparties and reserves for changes in credit risk and sovereign risk associated with its Argentine assets. Citi believes it has established appropriate loan loss reserves on its Argentine loans, and appropriate fair value adjustments on Argentine assets and liabilities measured at fair value, for such risks under U.S. GAAP as of March 31, 2020. However, given the recent events in Argentina, U.S. regulatory agencies may require Citi to record additional reserves in the future, increasing *ICG*'s cost of credit, based on the perceived country risk associated with its Argentine exposures. For additional information on emerging markets risks, see "Risk Factors—Strategic Risks" in Citi's 2019 Annual Report on Form 10-K.

SIGNIFICANT ACCOUNTING POLICIES AND SIGNIFICANT ESTIMATES

This section contains a summary of Citi's most significant accounting policies. Note 1 to the Consolidated Financial Statements in Citigroup's 2019 Annual Report on Form 10-K contains a summary of all of Citigroup's significant accounting policies. These policies, as well as estimates made by management, are integral to the presentation of Citi's results of operations and financial condition. While all of these policies require a certain level of management judgment and estimates, this section highlights and discusses the significant accounting policies that require management to make highly difficult, complex or subjective judgments and estimates at times regarding matters that are inherently uncertain and susceptible to change (see also "Risk Factors—Operational Risks" in Citigroup's 2019 Annual Report on Form 10-K). Management has discussed each of these significant accounting policies, the related estimates and its judgments with the Audit Committee of the Citigroup Board of Directors.

Valuations of Financial Instruments

Citigroup holds debt and equity securities, derivatives, retained interests in securitizations, investments in private equity and other financial instruments. A substantial majority of these assets and liabilities is reflected at fair value on Citi's Consolidated Balance Sheet as *Trading account assets*, *Available-for-sale securities* and *Trading account liabilities*.

Citi purchases securities under agreements to resell (reverse repurchase agreements) and sells securities under agreements to repurchase (repurchase agreements), a majority of which are carried at fair value. In addition, certain loans, short-term borrowings, long-term debt and deposits, as well as certain securities borrowed and loaned positions that are collateralized with cash, are carried at fair value. Citigroup holds its investments, trading assets and liabilities, and resale and repurchase agreements on Citi's Consolidated Balance Sheet to meet customer needs and to manage liquidity needs, interest rate risks and private equity investing.

When available, Citi generally uses quoted market prices to determine fair value and classifies such items within Level 1 of the fair value hierarchy established under ASC 820-10, *Fair Value Measurement*. If quoted market prices are not available, fair value is based upon internally developed valuation models that use, where possible, current market-based or independently sourced market parameters, such as interest rates, currency rates and option volatilities. Such models are often based on a discounted cash flow analysis. In addition, items valued using such internally generated valuation techniques are classified according to the lowest level input or value driver that is significant to the valuation. Thus, an item may be classified under the fair value hierarchy as Level 3 even though there may be some significant inputs that are readily observable.

Citi is required to exercise subjective judgments relating to the applicability and functionality of internal valuation models, the significance of inputs or value drivers to the valuation of an instrument and the degree of illiquidity and subsequent lack of observability in certain markets. These judgments have the potential to impact the Company's financial performance for instruments where the changes in fair value are recognized in either the Consolidated Statement of Income or in *AOCI*.

Losses on available-for-sale securities whose fair values are less than the amortized cost, where Citi intends to sell the security or could more-likely-than-not be required to sell the security, are recognized in earnings. Where Citi does not intend to sell the security nor could more-likely-than-not be required to sell the security, the portion of the loss related to credit is recognized as an allowance for credit losses with a corresponding provision for credit losses and the remainder of the loss is recognized in other comprehensive income. Such losses are capped at the difference between the fair value and amortized cost of the security.

For equity securities carried at cost or under the measurement alternative, decreases in fair value are recognized as impairment in the Consolidated Statement of Income. Moreover, for certain equity method investments, decreases in fair value are only recognized in earnings in the Consolidated Statement of Income if such decreases are judged to be an other-than-temporary impairment (OTTI). Adjudicating the temporary nature of fair value impairments is also inherently judgmental.

The fair value of financial instruments incorporates the effects of Citi's own credit risk and the market view of counterparty credit risk, the quantification of which is also complex and judgmental. For additional information on Citi's fair value analysis, see Notes 6, 20 and 21 to the Consolidated Financial Statements and Note 1 to the Consolidated Financial Statements in Citi's 2019 Annual Report on Form 10-K.

Allowance for Credit Losses (ACL)

Management provides reserves for an estimate of current expected credit losses in the funded loan portfolio and for the unfunded lending commitments, standby letters of credit and financial guarantees on the Consolidated Balance Sheet in *Allowance for credit losses on loans* (ACLL) and *Other liabilities*, respectively. In addition, Citi provides allowances for an estimate of current expected credit losses for other financial assets measured at amortized cost, including held-to-maturity securities, reverse repurchase agreements, securities borrowed, deposits with banks and other financial receivables carried at amortized cost.

The total ACL is composed of quantitative and qualitative components. For the quantitative component, Citi uses a single forward-looking macroeconomic forecast across the Company complemented by a qualitative component. This qualitative component reflects economic uncertainty related to a separate scenario and specific adjustments based on the associated portfolio for estimating the ACL.

Quantitative Component

Citi estimates expected credit losses based upon (i) its internal system of credit risk ratings, (ii) its comprehensive internal history and rating agency information regarding default rates and and loss data, including internal data on the severity of losses in the event of default, and (iii) a reasonable and supportable forecast of future macroeconomic conditions.

Expected credit loss is determined primarily by utilizing models for the borrowers' probability of default (PD), loss given default (LGD) and exposure at default (EAD). The loss likelihood and severity models use both internal and external information and are sensitive to changes in the macroeconomic variables that inform the forecasts. Adjustments may be made to this data, including (i) statistically calculated estimates to cover the historical fluctuation of the default rates over the credit cycle, the historical variability of loss severity among defaulted loans and obligor concentrations in the global portfolio, and (ii) adjustments made for specifically known items, such as other current economic factors and credit trends.

In addition, delinquency-managed portfolios containing smaller-balance homogeneous loans also use PD x LGD x EAD models to determine the expected credit losses and the reserve balances based upon leading credit indicators, including loan delinquencies and changes in portfolio size, as well as economic trends, including housing prices, unemployment and gross domestic product (GDP). This methodology is applied separately for each individual product within each geographic region in which these portfolios exist.

This evaluation process is subject to numerous estimates and judgments. The frequency of default, risk ratings, loss recovery rates, size and diversity of individual large credits and ability of borrowers with foreign currency obligations to obtain the foreign currency necessary for orderly debt servicing, among other things, are all taken into account during this evaluation. Changes in these estimates could have a direct impact on Citi's credit costs and the allowance in any period.

Qualitative Component

The qualitative component considers, among other things: the uncertainty of forward-looking economic scenarios based on the probability of a recession and the degrees of severity that Citi would expect in a recession, which considers possible severities of 30%, 50%, 75% and 100% relative to the 2008 recession; certain portfolio characteristics and concentrations; collateral coverage; model limitations; idiosyncratic events; and other relevant criteria under banking supervisory guidance for loan loss reserves. The quantitative component and qualitative adjustment for the first quarter of 2020 reflect the estimated impact of the COVID-19 pandemic on the economic forecasts and their impact on credit loss estimates. The outlook around many of these metrics, such as GDP and unemployment, continues to evolve. Although the impact of the COVID-19 pandemic only began to be felt in North America during March 2020, the Company has leveraged its experience in Asia to inform its credit loss reserve. Citi believes its analysis of the allowance for credit losses reflects the forward view of the economic analysis as of March 31, 2020.

ACLL and Non-accrual Ratios

At March 31, 2020, the ratio of the allowance for credit losses to total funded loans was 2.91% (6.10% for consumer loans and 0.81% for corporate loans), compared to 1.82% at December 31, 2019 (3.20% for consumer loans and 0.75% for corporate loans).

Citi's total non-accrual loans were $4,183 million at March 31, 2020, up $179 million from December 31, 2019. Consumer non-accrual loans declined to $1.7 billion at March 31, 2020 from $1.8 billion at December 31, 2019, while corporate non-accrual loans grew to $2.5 billion at March 31, 2020 from $2.2 billion at December 31, 2019. In addition, the ratio of non-accrual loans to total corporate loans was 0.57%, and to total consumer loans was 0.59% at March 31, 2020.

Macroeconomic Factors

Citi uses over 4,000 variables in its macroeconomic forecast, including both domestic and international variables spanning Citi's global portfolios and exposures. The primary macroeconomic variables that significantly affect Citi's estimate of the consumer allowance for credit losses on loans are:

- U.S. cards: unemployment rate-state level, Housing Price Index (HPI) -state level;
- U.S. consumer mortgages: real GDP, unemployment rate-state level and HPI-state and county levels; and
- U.S. installment loans: unemployment rate-state level, GDP-state level and personal income-state level.

International markets use a similar set of indicators, but they may vary by geography.

The primary macroeconomic variables that significantly affect the estimation of the corporate allowance for credit losses are:

- For loans: GDP, unemployment rates, Morgan Stanley Capital Indices, Dow Jones Industrial Average (DJIA), S&P 500 Index Value, Volatility Index (VIX) and West Texas Intermediate (WTI) oil prices; and
- For HTM securities: GDP and total country reserves.

In the first quarter of 2020, the estimated impact of the COVID-19 pandemic on key consumer macroeconomic variables was as follows:

- In the U.S. and Mexico, the GDP forecasts declined significantly and remain negative through the end of 2020, while the unemployment rate projections for 2020 have also increased significantly.
- In Asia, the total regional unemployment rate forecast for 2020 increased, particularly in Hong Kong and China.

The economic shocks caused by the pandemic were not felt until late in the first quarter of 2020. Moreover, there is significant uncertainty with how the pandemic will evolve, but Citi expects a continued significant impact on its reserves for credit losses during the remainder of 2020. The extent of the pandemic's impact will depend upon: (i) how consumers respond to the various consumer relief programs established by the federal government, as well as Citi's own customer relief efforts, and how the federal corporate stimulus programs are implemented by small and medium-size businesses; (ii) the impact on unemployment, which is unclear; (iii) the timing and extent of the economic recovery; (iv) whether there is a

resurgence of COVID-19 as businesses and schools reopen and the extent of that resurgence; and (v) the extent of market volatility.

For a further description of the allowance for credit losses and related accounts, see Notes 1 and 14 to the Consolidated Financial Statements.

For a discussion of the recently adopted CECL accounting pronouncement, see Note 1 to the Consolidated Financial Statements.

Goodwill

Citi tests goodwill for impairment annually on July 1 (the annual test) and through interim assessments between annual tests if an event occurs or circumstances change that would more-likely-than-not reduce the fair value of a reporting unit below its carrying amount, such as a significant adverse change in the business climate, a decision to sell or dispose of all or a significant portion of a reporting unit or a significant decline in Citi's stock price.

Citi qualitatively assessed the environment in the first quarter of 2020, including the estimated impact of the COVID-19 pandemic on macroeconomic variables and economic forecasts and how those might impact the fair value of reporting units. While many key metrics such as GDP and unemployment continue to evolve, the economic shocks caused by the pandemic were not felt until late in the first quarter of 2020. Moreover, there is significant uncertainty with how the COVID-19 pandemic will evolve, but Citi expects that it will continue to have a significant impact during the remainder of 2020. The extent of the pandemic's impact will depend upon: (1) how consumers respond to the various consumer relief programs established by the federal government, as well as Citi's own customer relief efforts, and how the federal corporate stimulus programs are implemented by small and medium size businesses; (2) the impact on unemployment, which is unclear; (3) the timing and extent of the economic recovery; (4) whether there is a resurgence of COVID-19 as businesses and schools reopen and the extent of that resurgence; and (5) the extent of market volatility.

After consideration of the items above, the first quarter 2020 results, as well as the results of the 2019 impairment test that resulted in an excess of reporting unit fair values over book values between approximately 33% and 134%, Citi determined it was not more-likely-than-not that the fair value of any report unit was below book value as of March 31, 2020. See Note 15 for a further discussion on goodwill.

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 2019 Annual Report on Form 10-K.

At March 31, 2020, Citigroup had recorded net DTAs of approximately $22.1 billion, a decrease of $1.0 billion from December 31, 2019. The decrease for the quarter was primarily driven by gains in *Other comprehensive income*, partially offset by DTAs recorded through retained earnings related to the adoption of the new CECL accounting standard.

The table below summarizes Citi's net DTAs balance:

Jurisdiction/Component

In billions of dollars	**March 31, 2020**	December 31, 2019
Total U.S.	**$ 20.4**	$ 21.0
Total foreign	**1.7**	2.1
Total	**$ 22.1**	$ 23.1

Of Citi's total net DTAs of $22.1 billion as of March 31, 2020, $9.0 billion (primarily relating to net operating losses, foreign tax credit and general business credit carry-forwards, which Citi reduced by $0.1 billion in the current quarter) was deducted in calculating Citi's regulatory capital. Net DTAs arising from temporary differences are deducted from regulatory capital if they are in excess of the 10%/15% limitations (see "Capital Resources" above). For the quarter ended March 31, 2020, Citi did not have any such DTAs. Accordingly, the remaining $13.1 billion of net DTAs as of March 31, 2020 was not deducted in calculating regulatory capital pursuant to Basel III standards, and was appropriately risk weighted under those rules.

DTA Realizability

Citi believes that the realization of the recognized net DTAs of $22.1 billion at March 31, 2020 is more-likely-than-not, based on management's expectations as to future taxable income in the jurisdictions in which the DTAs arise, as well as consideration of available tax planning strategies (as defined in ASC Topic 740, *Income Taxes*). In the second quarter of 2020, as part of the normal planning process, Citi will update its forecasts of operating income and will also update its foreign source income forecast. These updates, particularly in light of the COVID-19 pandemic, could affect Citi's valuation allowance against FTC carry-forwards.

Effective Tax Rate

Citi's reported effective tax rate for the first quarter of 2020 was approximately 19%, which included a discrete benefit for vested equity compensation. This compares to an effective tax rate of approximately 21% in the first quarter of 2019.

Litigation Accruals

See the discussion in Note 23 to the Consolidated Financial Statements for information regarding Citi's policies on establishing accruals for litigation and regulatory contingencies.

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 March 31, 2020. 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 had no reportable activities pursuant to Section 219 for the first quarter of 2020.

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 and 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 2019 Annual Report on Form 10-K and other SEC filings; (ii) the factors listed and described under "Risk Factors" above and in Citi's 2019 Annual Report on Form 10-K; and (iii) the risks and uncertainties summarized below:

- rapidly evolving macroeconomic and other challenges and uncertainties related to the COVID-19 pandemic and the potential impact on Citi's businesses, revenues, expenses, credit costs, regulatory capital and liquidity, as well as overall results of operations and financial condition;
- 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, including implementation of the firm-specific "stress capital buffer" (SCB), and any resulting year-to-year variability in the SCB and impact on Citi's estimated management buffer;
- the potential impact to Citi's regulatory capital ratios under the Basel III Advanced Approaches framework for determining risk-weighted assets, given that credit risk-weighted assets calculated under the Advanced Approaches are more risk sensitive than those calculated under the Standardized Approach;
- the potential impact to Citi's businesses, and results of operations and financial condition as a result of macroeconomic and geopolitical and other challenges and uncertainties and volatilities, including, among others, protracted or widespread trade tensions, including changes in U.S. trade policies and resulting retaliatory measures, geopolitical tensions and conflicts, natural disasters, pandemics and election outcomes, governmental fiscal and monetary actions, such as changes in interest rates, and the terms or conditions related to the U.K.'s withdrawal from the European Union;
- the ongoing regulatory and legislative uncertainties and changes faced by financial institutions, including Citi, in the U.S. and globally, such as potential fiscal, monetary, regulatory and other changes from the U.S. federal government and others, potential changes to various aspects of the regulatory capital framework and the terms of and other uncertainties resulting from the U.K.'s exit from the European Union, and the potential impact these uncertainties and changes could have on Citi's businesses, results of operations, financial condition, business planning and compliance risks and costs;
- Citi's ability to achieve its projected or expected results from its continued investments and efficiency initiatives, such as revenue growth and expense savings, as part of Citi's overall strategy to meet operational and financial objectives, including as a result of factors that Citi cannot control;
- the transition away from or discontinuance of LIBOR or any other interest rate benchmark and the adverse consequences it could have for market participants, including Citi;
- 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;
- the potential impact to Citi if its interpretation or application of the complex tax laws to which it is subject, such as the Tax Cuts and Jobs Act (Tax Reform), withholding, stamp, service and other non-income taxes, differs from those of the relevant governmental taxing authorities;
- the various risks faced by Citi as a result of its presence in the emerging markets, including, among others, limitations of hedges on foreign investments, foreign currency volatility, sovereign volatility, election outcomes, 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 potential impact to Citi if the economic situation in a non-U.S. jurisdiction where Citi operates were to deteriorate to below a certain level that U.S. regulators impose mandatory loan loss or other reserve requirements on Citi;
- the potential impact from a deterioration in or failure to maintain Citi's co-branding or private label credit card relationships, 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;
- Citi's ability in its resolution plan submissions to address any shortcomings or deficiencies identified or 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 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, that could result in, among other things, theft, loss, misuse or disclosure of confidential client, customer or corporate information or assets and a disruption of computer, software or network systems, and the potential impact from such risks, including reputational damage, regulatory penalties, loss of revenues, additional costs (including repair, remediation and other costs), exposure to litigation and other financial losses;
- the potential impact of changes to or incorrect assumptions, judgments or estimates in Citi's financial statements, including reclassification of any foreign currency translation adjustment (CTA) component 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 businesses;
- the impact of changes to financial accounting and reporting standards or interpretations, on how Citi records and reports its financial condition and results of operations, including the future impact from the CECL methodology, 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 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, or require refinement, modification or enhancement, or any related approval is withdrawn by Citi's U.S. banking regulators;
- 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 borrowers or other counterparties in the U.S. or in various countries and jurisdictions globally, including from indemnification obligations in connection with various transactions, such as hedging or reinsurance arrangements related to those obligations;
- the potential impact on Citi's liquidity and/or costs of funding as a result of external factors, including, among others, the competitive environment for deposits, market disruptions and governmental fiscal and monetary policies as well as regulatory changes or negative investor perceptions of Citi's creditworthiness, unexpected increases in cash or collateral requirements and the inability to monetize available liquidity resources;
- the impact of a ratings downgrade of Citi or one or more of its more significant subsidiaries or issuing entities on Citi's funding and liquidity as well as operations of certain of its businesses;
- the potential impact to Citi of ongoing interpretation and implementation of regulatory and legislative requirements and changes in the U.S. and globally, as well as heightened regulatory scrutiny and expectations for large financial institutions and their employees and agents, with respect to, among other things, governance and risk management practices and controls, including on Citi's compliance, regulatory and other risks and costs, such as increased regulatory oversight and restrictions, 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 by regulators on conduct risk and controls and policies and procedures, as well as remediating deficiencies on a timely basis, together with the heightened scrutiny and expectations generally from regulators, and the severity of the remedies sought, such as enforcement proceedings, 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

In millions of dollars, except per share amounts	Three Months Ended March 31, 2020	2019
Revenues		
Interest revenue	**$ 17,139**	$ 19,076
Interest expense	**5,647**	7,317
Net interest revenue	**$ 11,492**	$ 11,759
Commissions and fees	**$ 3,021**	$ 2,926
Principal transactions	**5,261**	2,804
Administration and other fiduciary fees	**854**	839
Realized gains on sales of investments, net	**432**	130
Impairment losses on investments		
Gross impairment losses	**(55)**	(8)
Net impairment losses recognized in earnings	**$ (55)**	$ (8)
Other revenue (loss)	**$ (274)**	$ 126
Total non-interest revenues	**$ 9,239**	$ 6,817
Total revenues, net of interest expense	**$ 20,731**	$ 18,576
Provisions for credit losses and for benefits and claims		
Provision for credit losses on loans	**$ 6,444**	$ 1,944
Provision for credit losses on held-to-maturity (HTM) debt securities	**6**	—
Provision for credit losses on other assets	**(4)**	—
Policyholder benefits and claims	**24**	12
Provision for credit losses on unfunded lending commitments	**557**	24
Total provisions for credit losses and for benefits and claims	**$ 7,027**	$ 1,980
Operating expenses		
Compensation and benefits	**$ 5,654**	$ 5,658
Premises and equipment	**565**	564
Technology/communication	**1,723**	1,720
Advertising and marketing	**328**	359
Other operating	**2,324**	2,283
Total operating expenses	**$ 10,594**	$ 10,584
Income from continuing operations before income taxes	**$ 3,110**	$ 6,012
Provision for income taxes	**576**	1,275
Income from continuing operations	**$ 2,534**	$ 4,737
Discontinued operations		
Loss from discontinued operations	**$ (18)**	$ (2)
Benefit for income taxes	**—**	—
Loss from discontinued operations, net of taxes	**$ (18)**	$ (2)
Net income before attribution of noncontrolling interests	**$ 2,516**	$ 4,735
Noncontrolling interests	**(6)**	25
Citigroup's net income	**$ 2,522**	$ 4,710
Basic earnings per share[1]		
Income from continuing operations	**$ 1.06**	$ 1.88
Income from discontinued operations, net of taxes	**(0.01)**	—
Net income	**$ 1.05**	$ 1.88
Weighted average common shares outstanding *(in millions)*	**2,097.9**	2,340.4
Diluted earnings per share[1]		
Income from continuing operations	**$ 1.06**	$ 1.87
Income (loss) from discontinued operations, net of taxes	**(0.01)**	—
Net income	**$ 1.05**	$ 1.87
Adjusted weighted average common shares outstanding *(in millions)*	**2,113.7**	2,342.4

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

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

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME (UNAUDITED)

Citigroup Inc. and Subsidiaries

	Three Months Ended March 31,	
In millions of dollars	**2020**	2019
Citigroup's net income	**$ 2,522**	$ 4,710
Add: Citigroup's other comprehensive income[1]		
Net change in unrealized gains and losses on debt securities, net of taxes[1]	**$ 3,128**	$ 1,135
Net change in debt valuation adjustment (DVA), net of taxes[2]	**3,140**	(571)
Net change in cash flow hedges, net of taxes	**1,897**	286
Benefit plans liability adjustment, net of taxes	**(286)**	(64)
Net change in foreign currency translation adjustment, net of taxes and hedges	**(4,109)**	58
Net change in excluded component of fair value hedges, net of taxes	**27**	18
Citigroup's total other comprehensive income	**$ 3,797**	$ 862
Citigroup's total comprehensive income	**$ 6,319**	$ 5,572
Add: Other comprehensive income (loss) attributable to noncontrolling interests	**$ (51)**	$ (13)
Add: Net income attributable to noncontrolling interests	**(6)**	25
Total comprehensive income	**$ 6,262**	$ 5,584

(1) See Note 17 to the Consolidated Financial Statements.
(2) See Note 20 to the Consolidated Financial Statements.

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

CONSOLIDATED BALANCE SHEET *Citigroup Inc. and Subsidiaries*

In millions of dollars		March 31, 2020 (Unaudited)		December 31, 2019
Assets				
Cash and due from banks (including segregated cash and other deposits)	**$**	**23,755**	$	23,967
Deposits with banks, net of allowance		**262,165**		169,952
Securities borrowed and purchased under agreements to resell (including $155,637 and $153,193 as of March 31, 2020 and December 31, 2019, respectively, at fair value), net of allowance		**262,536**		251,322
Brokerage receivables, net of allowance		**68,555**		39,857
Trading account assets (including $190,227 and $120,236 pledged to creditors at March 31, 2020 and December 31, 2019, respectively)		**365,000**		276,140
Investments:				
Available-for-sale debt securities (including $8,989 and $8,721 pledged to creditors as of March 31, 2020 and December 31, 2019, respectively)		**308,219**		280,265
Held-to-maturity debt securities (including $1,119 and $1,923 pledged to creditors as of March 31, 2020 and December 31, 2019, respectively), net of allowance		**82,315**		80,775
Equity securities (including $1,213 and $1,162 at fair value as of March 31, 20120 and December 31, 2019, respectively)		**8,349**		7,523
Total investments	**$**	**398,883**	$	368,563
Loans:				
Consumer (including $18 and $18 as of March 31, 2020 and December 31, 2019, respectively, at fair value)		**288,430**		309,548
Corporate (including $3,981 and $4,067 as of March 31, 2020 and December 31, 2019, respectively, at fair value)		**432,590**		389,935
Loans, net of unearned income	**$**	**721,020**	$	699,483
Allowance for credit losses on loans (ACLL)		**(20,841)**		(12,783)
Total loans, net	**$**	**700,179**	$	686,700
Goodwill		**21,264**		22,126
Intangible assets (including MSRs of $367 and $495 as of March 31, 2020 and December 31, 2019, at fair value)		**4,560**		4,822
Other assets (including $14,663 and $12,830 as of March 31, 2020 and December 31, 2019, respectively, at fair value), net of allowance		**112,873**		107,709
Total assets	**$**	**2,219,770**	$	1,951,158

The following table presents certain assets of consolidated variable interest entities (VIEs), which are included on 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. In addition, 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		March 31, 2020 (Unaudited)		December 31, 2019
Assets of consolidated VIEs to be used to settle obligations of consolidated VIEs				
Cash and due from banks	**$**	**110**	$	108
Trading account assets		**6,278**		6,719
Investments		**987**		1,295
Loans, net of unearned income				
Consumer		**42,573**		46,977
Corporate		**19,845**		16,175
Loans, net of unearned income	**$**	**62,418**	$	63,152
Allowance for credit losses on loans (ACLL)		**(3,729)**		(1,841)
Total loans, net	**$**	**58,689**	$	61,311
Other assets		**70**		73
Total assets of consolidated VIEs to be used to settle obligations of consolidated VIEs	**$**	**66,134**	$	69,506

Statement continues on the next page.

In millions of dollars, except shares and per share amounts		**March 31, 2020 (Unaudited)**		December 31, 2019
Liabilities				
Non-interest-bearing deposits in U.S. offices	**$**	**113,371**	$	98,811
Interest-bearing deposits in U.S. offices (including $1,090 and $1,624 as of March 31, 2020 and December 31, 2019, respectively, at fair value)		**462,327**		401,418
Non-interest-bearing deposits in offices outside the U.S.		**85,439**		85,692
Interest-bearing deposits in offices outside the U.S. (including $1,557 and $695 as of March 31, 2020 and December 31, 2019, respectively, at fair value)		**523,774**		484,669
Total deposits	**$**	**1,184,911**	$	1,070,590
Securities loaned and sold under agreements to repurchase (including $62,734 and $40,651 as of March 31, 2020 and December 31, 2019, respectively, at fair value)		**222,324**		166,339
Brokerage payables		**74,368**		48,601
Trading account liabilities		**163,995**		119,894
Short-term borrowings (including $8,364 and $4,946 as of March 31, 2020 and December 31, 2019, respectively, at fair value)		**54,951**		45,049
Long-term debt (including $52,914 and $55,783 as of March 31, 2020 and December 31, 2019, respectively, at fair value)		**266,098**		248,760
Other liabilities (including $4,339 and $6,343 as of March 31, 2020 and December 31, 2019, respectively, at fair value), including allowance		**60,141**		57,979
Total liabilities	**$**	**2,026,788**	$	1,757,212
Stockholders' equity				
Preferred stock ($1.00 par value; authorized shares: 30 million), issued shares: **as of March 31, 2020—719,200** and as of December 31, 2019—719,200, at aggregate liquidation value	**$**	**17,980**	$	17,980
Common stock ($0.01 par value; authorized shares: 6 billion), issued shares: **as of March 31, 2020—3,099,632,709** and as of December 31, 2019—3,099,602,856		**31**		31
Additional paid-in capital		**107,550**		107,840
Retained earnings		**163,438**		165,369
Treasury stock, at cost: **March 31, 2020—1,017,824,700 shares** and December 31, 2019—985,479,501 shares		**(64,147)**		(61,660)
Accumulated other comprehensive income (loss) (AOCI)		**(32,521)**		(36,318)
Total Citigroup stockholders' equity	**$**	**192,331**	$	193,242
Noncontrolling interest		**651**		704
Total equity	**$**	**192,982**	$	193,946
Total liabilities and equity	**$**	**2,219,770**	$	1,951,158

The following table presents certain liabilities of consolidated VIEs, which are included on 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.

In millions of dollars		**March 31, 2020 (Unaudited)**		December 31, 2019
Liabilities of consolidated VIEs for which creditors or beneficial interest holders do not have recourse to the general credit of Citigroup				
Short-term borrowings	**$**	**11,397**	$	10,031
Long-term debt		**25,393**		25,582
Other liabilities		**926**		917
Total liabilities of consolidated VIEs for which creditors or beneficial interest holders do not have recourse to the general credit of Citigroup	**$**	**37,716**	$	36,530

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

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

In millions of dollars	Three Months Ended March 31, 2020	2019
Preferred stock at aggregate liquidation value		
Balance, beginning of period	**$ 17,980**	$ 18,460
Issuance of new preferred stock	**1,500**	—
Redemption of preferred stock	**(1,500)**	(480)
Balance, end of period	**$ 17,980**	$ 17,980
Common stock and additional paid-in capital		
Balance, beginning of period	**$ 107,871**	$ 107,953
Employee benefit plans	**(292)**	(382)
Preferred stock issuance costs	**2**	—
Other	**—**	11
Balance, end of period	**$ 107,581**	$ 107,582
Retained earnings		
Balance, beginning of period	**$ 165,369**	$ 151,347
Adjustment to opening balance, net of taxes[(1)]	**(3,076)**	151
Adjusted balance, beginning of period	**$ 162,293**	$ 151,498
Citigroup's net income	**2,522**	4,710
Common dividends[(2)]	**(1,081)**	(1,075)
Preferred dividends	**(291)**	(262)
Other	**(5)**	(12)
Balance, end of period	**$ 163,438**	$ 154,859
Treasury stock, at cost		
Balance, beginning of period	**$ (61,660)**	$ (44,370)
Employee benefit plans[(3)]	**438**	564
Treasury stock acquired[(4)]	**(2,925)**	(4,055)
Balance, end of period	**$ (64,147)**	$ (47,861)
Citigroup's accumulated other comprehensive income (loss)		
Balance, beginning of period	**$ (36,318)**	$ (37,170)
Citigroup's total other comprehensive income	**3,797**	862
Balance, end of period	**$ (32,521)**	$ (36,308)
Total Citigroup common stockholders' equity	**$ 174,351**	$ 178,272
Total Citigroup stockholders' equity	**$ 192,331**	$ 196,252
Noncontrolling interests		
Balance, beginning of period	**$ 704**	$ 854
Transactions between Citigroup and the noncontrolling-interest shareholders	**(6)**	(99)
Net income attributable to noncontrolling-interest shareholders	**(6)**	25
Distributions paid to noncontrolling-interest shareholders	**—**	(4)
Other comprehensive income (loss) attributable to noncontrolling-interest shareholders	**(51)**	(13)
Other	**10**	—
Net change in noncontrolling interests	**$ (53)**	$ (91)
Balance, end of period	**$ 651**	$ 763
Total equity	**$ 192,982**	$ 197,015

(1) See Note 1 to the Consolidated Financial Statements for additional details.
(2) Common dividends declared were $0.51 per share in the first quarter of 2020 and $0.45 per share in the first quarter of 2019.
(3) 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.
(4) Primarily consists of open market purchases under Citi's Board of Directors-approved common stock repurchase program.

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

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

In millions of dollars	Three Months Ended March 31, 2020	2019
Cash flows from operating activities of continuing operations		
Net income before attribution of noncontrolling interests	**$ 2,516**	$ 4,735
Net income attributable to noncontrolling interests	**(6)**	25
Citigroup's net income	**$ 2,522**	$ 4,710
Loss from discontinued operations, net of taxes	**(18)**	(2)
Income from continuing operations—excluding noncontrolling interests	**$ 2,540**	$ 4,712
Adjustments to reconcile net income to net cash provided by (used in) operating activities of continuing operations		
Depreciation and amortization	**927**	931
Provisions for credit losses on loans and unfunded lending commitments	**7,001**	1,944
Realized gains from sales of investments	**(432)**	(130)
Impairment losses on investments	**55**	8
Change in trading account assets	**(88,875)**	(30,427)
Change in trading account liabilities	**44,101**	(7,913)
Change in brokerage receivables net of brokerage payables	**(2,931)**	(10,965)
Change in loans HFS	**(1,393)**	1,439
Change in other assets	**(3,010)**	(2,961)
Change in other liabilities	**1,605**	2,585
Other, net	**14,879**	3,161
Total adjustments	**$ (28,073)**	$ (42,328)
Net cash used in operating activities of continuing operations	**$ (25,533)**	$ (37,616)
Cash flows from investing activities of continuing operations		
Change in securities borrowed and purchased under agreements to resell	**$ (11,214)**	$ 6,189
Change in loans	**(26,743)**	(892)
Proceeds from sales and securitizations of loans	**596**	2,062
Purchases of investments	**(108,658)**	(69,673)
Proceeds from sales of investments	**44,399**	31,436
Proceeds from maturities of investments	**29,203**	47,363
Capital expenditures on premises and equipment and capitalized software	**(460)**	(518)
Proceeds from sales of premises and equipment, subsidiaries and affiliates and repossessed assets	**2**	38
Other, net	**18**	38
Net cash provided by (used in) investing activities of continuing operations	**$ (72,857)**	$ 16,043
Cash flows from financing activities of continuing operations		
Dividends paid	**$ (1,365)**	$ (1,320)
Issuance of preferred stock	**1,500**	—
Redemption of preferred stock	**(1,500)**	(480)
Treasury stock acquired	**(2,925)**	(4,055)
Stock tendered for payment of withholding taxes	**(406)**	(358)
Change in securities loaned and sold under agreements to repurchase	**55,985**	12,604
Issuance of long-term debt	**28,927**	15,552
Payments and redemptions of long-term debt	**(13,081)**	(6,568)
Change in deposits	**114,321**	17,186
Change in short-term borrowings	**9,902**	6,976

CONSOLIDATED STATEMENT OF CASH FLOWS
(UNAUDITED) (Continued)

In millions of dollars	Three Months Ended March 31, 2020	2019
Net cash provided by financing activities of continuing operations	**$ 191,358**	$ 39,537
Effect of exchange rate changes on cash and due from banks	**$ (967)**	$ (176)
Change in cash, due from banks and deposits with banks	**$ 92,001**	$ 17,788
Cash, due from banks and deposits with banks at beginning of period	**193,919**	188,105
Cash, due from banks and deposits with banks at end of period	**$ 285,920**	$ 205,893
Cash and due from banks	**$ 23,755**	$ 24,448
Deposits with banks, net of allowance	**262,165**	181,445
Cash, due from banks and deposits with banks at end of period	**$ 285,920**	$ 205,893
Supplemental disclosure of cash flow information for continuing operations		
Cash paid during the period for income taxes	**$ 1,441**	$ 1,325
Cash paid during the period for interest	**5,424**	6,931
Non-cash investing activities[(1)]		
Transfers to loans HFS *(Other assets)* from loans	**$ 224**	$ 2,000

(1) Operating and finance lease right-of-use assets and lease liabilities represent non-cash investing and financing activities, respectively, and are not included in the non-cash investing activities presented here. See Note 22 to the Consolidated Financial Statements for more information and balances as of March 31, 2020.

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

1. BASIS OF PRESENTATION, UPDATED ACCOUNTING POLICIES AND ACCOUNTING CHANGES

Basis of Presentation

The accompanying unaudited Consolidated Financial Statements as of March 31, 2020 and for the three-month periods ended March 31, 2020 and 2019 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, 2019 (2019 Annual Report on Form 10-K).

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 these 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.

UPDATED ACCOUNTING POLICIES

The accounting policies below have been updated from those disclosed in Citi's 2019 Annual Report on Form 10-K as a result of accounting standards adoptions during the first quarter of 2020. See Note 1 to the Consolidated Financial Statements in Citigroup's 2019 Annual Report on Form 10-K for a summary of all of Citigroup's significant accounting policies.

Allowances for Credit Losses (ACL)

Commencing January 1, 2020, Citi adopted Accounting Standards Update (ASC) 326, *Financial Instruments—Credit Losses*, using the methodologies described below. For information about Citi's accounting for loan losses prior to January 1, 2020, see Note 1 in Citigroup's 2019 Annual Report on Form 10-K.

The Current Expected Credit Losses (CECL) methodology is based on relevant information about past events, including historical experience, current conditions and reasonable and supportable (R&S) forecasts that affect the collectability of the reported financial asset balances. If the asset's life extends beyond the R&S forecast period, then historical experience is considered over the remaining life of the assets in the allowance for credit losses. The resulting allowance for credit losses is adjusted in each subsequent reporting period through *Provisions for credit losses* in the Consolidated Statement of Income to reflect changes in history, current conditions and forecasts as well as changes in asset positions and portfolios. ASC 326 defines the allowance for credit losses (ACL) as a valuation account that is deducted from the amortized cost of a financial asset to present the net amount that management expects to collect on the financial asset over its expected life. All financial assets carried at amortized cost are in the scope of ASC 326, while assets measured at fair value are excluded. See Note 13 to the Consolidated Financial Statements for a discussion of impairment on available-for-sale (AFS) securities.

Increases and decreases to the allowances are recorded in *Provisions for credit losses*. The CECL methodology utilizes a lifetime expected credit loss (ECL) measurement objective for the recognition of credit losses for held-for-investment (HFI) loans, held-to-maturity (HTM) debt securities, receivables and other financial assets measured at amortized cost at the time the financial asset is originated or acquired. Within the life of a loan or other financial asset, the methodology generally results in the earlier recognition of the provision for credit losses and the related ACL than prior U.S. GAAP.

Estimation of ECLs requires Citi to make assumptions regarding the likelihood and severity of credit loss events and their impact on expected cash flows, which drive the probability of default (PD), loss given default (LGD) and exposure at default (EAD) models and, where Citi discounts the ECL, using discounting techniques for certain products. Where the asset's life extends beyond the R&S forecast period, Citi considers historical experience over the remaining life of the assets in estimating the ACL.

The following are the main factors and interpretations that Citi considers when estimating the ACL under the CECL methodology:

- CECL reserves are estimated over the contractual term of the financial asset, which is generally adjusted for expected prepayments. Expected extensions are generally not considered unless the option to extend the loan cannot be canceled unilaterally by Citi. Modifications are also not considered, unless Citi has a reasonable expectation that it will execute a troubled debt restructuring (TDR).
- Credit enhancements that are not freestanding (such as those that are included in the original terms of the contract or those executed in conjunction with the lending transaction) are considered loss mitigants for purposes of CECL reserve estimation.
- For unconditionally cancelable accounts such as credit cards, reserves are based on the expected life of the balance as of the evaluation date (assuming no further charges) and do not include any undrawn commitments that are unconditionally cancelable. Reserves are

included for undrawn commitments for accounts that are not unconditionally cancelable (such as letters of credit and corporate loan commitments, HELOCs, undrawn mortgage loan commitments and financial guarantees).
- CECL models are designed to be economically sensitive. They utilize the macroeconomic forecasts provided by Citi's economic forecasting team (EFT) that are approved by senior management. Analysis is performed and documented to determine the necessary qualitative management adjustment (QMA) to capture forward-looking macroeconomic expectations.
- The portion of the forecast that reflects the EFT's R&S period indicates the maximum length of time its models can produce a R&S macroeconomic forecast, after which mean reversion is used for the remaining life of the loan to estimate expected credit losses. For the loss forecast, businesses may consume a portion or all of the macroeconomic forecast as determined to be appropriate and justifiable. For losses occurring beyond the consumption period of the macroeconomic forecast, historical loss experience is used.
- The ACL incorporates provisions for accrued interest on products that are not subject to a non-accrual and timely write-off policy (e.g., cards and Ready Credit, etc.).
- The reserves for TDRs are calculated using the discounted cash flow method and consider appropriate macroeconomic forecast data for the exposure type. For TDR loans that are collateral dependent, the ACL is based on the fair value of the collateral.
- Citi uses the most recent available information to inform its macroeconomic forecasts, allowing sufficient time for analysis of the results and corresponding approvals.
- Reserves are calculated at an appropriately granular level and on a pooled basis where financial assets share risk characteristics. At a minimum, reserves are calculated at a portfolio level (product and country). Where a financial asset does not share risk characteristics with any of the pools, it is evaluated for credit losses individually.

Quantitative and Qualitative Components of the ACL

The loss likelihood and severity models use both internal and external information and are sensitive to forecasts of different macroeconomic conditions. For the quantitative component, Citi uses a single forward-looking macroeconomic forecast, complemented by the qualitative component that reflects economic uncertainty due to a different possible scenario for estimating the ACL. Estimates of these ECLs are based upon (i) Citigroup's internal system of credit risk ratings; (ii) historical default and loss data, including comprehensive internal history and rating agency information regarding default rates and internal data on the severity of losses in the event of default; and (iii) a R&S forecast of future macroeconomic conditions. ECL is determined primarily by utilizing models for the borrowers' PD, LGD and EAD. Adjustments may be made to this data, including (i) statistically calculated estimates to cover the historical fluctuation of the default rates over the credit cycle, the historical variability of loss severity among defaulted loans and the degree to which there are large obligor concentrations in the global portfolio, and (ii) adjustments made for specifically known items, such as current environmental factors and credit trends.

Any adjustments needed to the modeled expected losses in the quantitative calculations are addressed through a qualitative adjustment. The qualitative adjustment considers, among other things: the uncertainty of forward-looking scenarios based on the likelihood and severity of a possible recession; the uncertainty of economic conditions; certain portfolio characteristics and concentrations; collateral coverage; model limitations; idiosyncratic events; and other relevant criteria under banking supervisory guidance for loan loss reserves. The qualitative adjustment also reflects the estimated impact of the COVID-19 pandemic on the economic forecasts and the impact on credit loss estimates. The total ACL is composed of the quantitative and qualitative components.

Consumer Loans

For consumer loans, most portfolios including North America cards, mortgages and personal installment loans (PILs) are covered by the PD, LGD and EAD loss forecasting models. Some smaller international portfolios are covered by econometric models where the gross credit loss (GCL) rate is forecasted. The modeling of all retail products is performed by examining risk drivers for a given portfolio; these drivers relate to exposures with similar credit risk characteristics and consider past events, current conditions and R&S forecasts. Under the PD x LGD x EAD approach, GCLs and recoveries are captured on an undiscounted basis. Citi incorporates expected recoveries on loans into its reserve estimate, including expected recoveries on assets previously written off. The R&S forecast period for consumer loans is 13 quarters and reverts to historical loss experience thereafter.

CECL defines the exposure's expected life as the remaining contractual maturity including any expected prepayments. Subsequent changes to the contractual terms that are the result of a re-underwriting are not included in the loan's expected CECL life.

Citi does not establish reserves for the uncollectible accrued interest on non-revolving consumer products, such as mortgages and installment loans, which are subject to a non-accrual and timely write-off policy. As such, only the principal balance is subject to the CECL reserve methodology and interest does not attract a further reserve. FAS 91-deferred origination costs or fees related to new account originations are amortized within a 12-month period, and an ACL is provided for components in the scope of the ASC.

Separate valuation allowances are determined for impaired smaller-balance homogeneous loans whose terms have been modified in a TDR. Long-term modification programs, and short-term (less than 12 months) modifications that provide concessions (such as interest rate reductions) to borrowers in financial difficulty, are reported as TDRs. In addition, loan modifications that involve a trial period are reported as TDRs at the start of the trial period.

The ACL for TDRs is determined using a discounted cash flow (DCF) approach. When a DCF approach is used, the initial allowance for ECLs is calculated as the expected contractual cash flows discounted at the loan's original effective interest rate. DCF techniques are applied only for consumer loans classified as TDR loan exposures.

For cards, Citi uses the payment rate approach, which leverages payment rate curves, to determine the payments that should be applied to liquidate the end-of-period balance (CECL balance) in the estimation of EAD. The payment rate approach uses customer payment behavior (payment rate) to establish the portion of the CECL balance that will be paid each month. These payment rates are defined as the percentage of principal payments received in the respective month divided by the prior month's billed principal balance. The liquidation (CECL payment) amount for each forecast period is determined by multiplying the CECL balance by that period's forecasted payment rate. The cumulative sum of these payments less the CECL balance produces the balance liquidation curve. Citi does not apply a non-accrual policy to credit card receivables; rather, they are subject to full charge-off at 180 days past due. As such, the entire customer balance up until write-off, including accrued interest and fees, will be subject to the CECL reserve methodology.

Corporate Loans and HTM Securities

Citi records allowances for credit losses on all financial assets carried at amortized cost that are in the scope of CECL, including corporate loans classified as HFI and HTM debt securities. Discounting techniques are applied for corporate loans classified as HFI and HTM securities and non-accrual/TDR loan exposures. All cash flows are discounted to the reporting date under the LGD models. The ACLs include Citi's estimate of all credit losses expected to be incurred over the estimated full contractual life of the financial asset. The contractual life of the financial asset does not include expected extensions, renewals or modifications, except for instances where the Company reasonably expects to extend the tenor of the financial asset pursuant to a future TDR. The decrease in credit losses under CECL at the date of adoption on January 1, 2020, compared with the prior incurred loss methodology, is largely due to more precise contractual maturities that result in shorter remaining tenors, the incorporation of recoveries and use of more specific historical loss data based on an increase in portfolio segmentation across industries and geographies.

The R&S forecast period for wholesale portfolios is nine quarters. After the R&S period, the models revert to historical averages over a three-quarter transition period. The R&S and reversion periods were determined primarily based on historical analysis of losses for various portfolio segments.

The Company primarily bases its allowances for ECLs on models that assess the likelihood and severity of credit events and their impact on cash flows under R&S forecasted economic scenarios. Allowances consider the probability of the borrower's default, the loss the Company would incur upon default and the borrower's exposure at default. Such models discount the present value of all future cash flows, discounted using the asset's EIR. Citi applies a more simplified approach based on historical loss rates to certain exposures recorded in *Other assets* and certain loan exposures in the private bank.

The Company considers the risk of nonpayment to be zero for U.S. Treasuries and U.S. government-sponsored agency guaranteed mortgage-backed securities (MBS), and as such, Citi does not have an ACL for these securities. For all other HTM debt securities, ECLs are estimated using PD models and discounting techniques, which incorporate assumptions regarding the likelihood and severity of credit losses. For structured securities, specific models use relevant assumptions for the underlying collateral type. A discounting approach is applied to HTM direct obligations of a single issuer, similar to that used for corporate HFI loans.

Other Financial Assets with Zero Expected Credit Losses

For certain financial assets, zero expected credit losses will be recognized where the expectation of nonpayment of the amortized cost basis is zero, based on there being no history of loss and the nature of the receivables.

Secured Financing Transactions

Most of Citi's reverse repurchase agreements, securities borrowing arrangements and margin loans require that the borrower continually adjust the amount of the collateral securing Citi's interest, primarily resulting from changes in the fair value of such collateral. In such arrangements, ACLs are recorded based only on the amount by which the asset's amortized cost basis exceeds the fair value of the collateral. No ACLs are recorded where the fair value of the collateral is equal to or exceeds the asset's amortized cost basis, as Citi does not expect to incur credit losses on such well-collateralized exposures. For certain margin loans presented in *Loans* on the Consolidated Balance Sheet, credit losses are estimated using the same approach as corporate loans.

Accrued Interest

CECL permits entities to make an accounting policy election not to reserve for interest, if the entity has a policy in place that will result in timely reversal or write-off of interest. However, when a non-accrual or timely charge-off policy is not applied, an ACL is recognized on accrued interest. For HTM debt securities, Citi established a non-accrual policy that results in timely write-off of accrued interest. For corporate loans, where a timely charge-off policy is used, Citi has elected to recognize an ACL on accrued interest receivable. The LGD models for corporate loans include an adjustment for estimated accrued interest.

Reasonably Expected TDRs
For corporate loans, the reasonable expectation of TDR concept requires that the contractual life over which ECLs are estimated be extended when a TDR that results in a tenor extension is reasonably expected. Reasonably expected TDRs are included in the life of the asset. A discounting technique or collateral-dependent practical expedient is used for non-accrual and TDR loan exposures that do not share risk characteristics with other loans and are individually assessed.

Purchased Credit Deteriorated (PCD) Assets
ASC 326 requires entities that have acquired financial assets (such as loans and HTM securities) with an intent to hold, to evaluate whether those assets have experienced a more-than-insignificant deterioration in credit quality since origination. These assets are subject to specialized accounting at initial recognition under CECL. Subsequent measurement of PCD assets will remain consistent with other purchased or originated assets, i.e., non-PCD assets. CECL introduces the notion of PCD assets, which replaces purchased credit impaired (PCI) accounting under legacy U.S. GAAP.

CECL requires the estimation of credit losses to be performed on a pool basis unless a PCD asset does not share characteristics with any pool. If certain PCD assets do not meet the conditions for aggregation, those PCD assets should be accounted for separately. This determination must be made at the date the PCD asset is purchased. In estimating ECLs from day 2 onward, pools can potentially be reassembled based upon similar risk characteristics. When PCD assets are pooled, Citi will determine the amount of the initial ACL at the pool level. The amount of the initial ACL for a PCD asset represents the portion of the total discount at acquisition that relates to credit and is recognized as a "gross-up" of the purchase price to arrive at the PCD asset's (or pool's) amortized cost. Any difference between the unpaid principal balance and the amortized cost is considered to be related to non-credit factors and results in a discount or premium, which is amortized to interest income over the life of the individual asset (or pool). Direct expenses incurred related to the acquisition of PCD assets and other assets and liabilities in a business combination must be expensed as incurred. Subsequent accounting for acquired PCD assets is the same as the accounting for originated assets; changes in the allowance are recorded in *Provisions for credit losses*.

Consumer
Citi does not purchase whole portfolios of PCD assets in its retail businesses. However, there may be a small portion of a purchased portfolio that is identified as PCD at the purchase date. Interest income recognition does not vary between PCD and non-PCD assets. A consumer financial asset is considered to be more-than-insignificantly credit deteriorated if it is more than 30 days past due at the purchase date.

Corporate
Citi generally classifies wholesale loans and debt securities classified HTM or AFS as PCD when both of the following criteria are met: (i) the purchase price discount is at least 10% of par and (ii) the purchase date is more than 90 days after the origination or issuance date. Citi classifies HTM beneficial interests rated AA- and lower obtained at origination from certain securitization transactions as PCD when there is a significant difference (i.e., 10% or greater) between contractual cash flows, adjusted for prepayments, and expected cash flows at the date of recognition.

Reserve Estimates and Policies
Management provides reserves for an estimate of lifetime ECLs in the funded loan portfolio on the Consolidated Balance Sheet in the form of an ACL. These reserves are established in accordance with Citigroup's credit reserve policies, as approved by the Audit Committee of the Citigroup Board of Directors. Citi's Chief Risk Officer and Chief Financial Officer review the adequacy of the credit loss reserves each quarter with representatives from the risk management and finance staffs for each applicable business area. Applicable business areas include those having classifiably managed portfolios, where internal credit risk ratings are assigned (primarily *ICG*) and delinquency managed portfolios (primarily *GCB*) or modified consumer loans, where concessions were granted due to the borrowers' financial difficulties. The aforementioned representatives for these business areas present recommended reserve balances for their funded and unfunded lending portfolios along with supporting quantitative and qualitative data discussed below:

Estimated credit losses for non-performing, non-homogeneous exposures within a business line's classifiably managed portfolio and impaired smaller-balance homogeneous loans whose terms have been modified due to the borrowers' financial difficulties, where it was determined that a concession was granted to the borrower.
Consideration may be given to the following, as appropriate, when determining this estimate: (i) the present value of expected future cash flows discounted at the loan's original effective rate, (ii) the borrower's overall financial condition, resources and payment record and (iii) the prospects for support from financially responsible guarantors or the realizable value of any collateral. In the determination of the ACL for TDRs, management considers a combination of historical re-default rates, the current economic environment and the nature of the modification program when forecasting expected cash flows. When impairment is measured based on the present value of expected future cash flows, the entire change in present value is recorded in *Provisions for credit losses*.

Estimated credit losses in the delinquency-managed portfolios for performing exposures.
In addition, representatives from each of the risk management and finance staffs who cover business areas with delinquency-managed portfolios containing smaller-balance homogeneous loans present their recommended

reserve balances based on leading credit indicators, including loan delinquencies and changes in portfolio size as well as economic trends, including current and future housing prices, unemployment, length of time in foreclosure, costs to sell and GDP. This methodology is applied separately for each product within each geographic region in which these portfolios exist. This evaluation process is subject to numerous estimates and judgments. The frequency of default, risk ratings, loss recovery rates, size and diversity of individual large credits and ability of borrowers with foreign currency obligations to obtain the foreign currency necessary for orderly debt servicing, among other things, are all taken into account during this review. Changes in these estimates could have a direct impact on the credit costs in any period and could result in a change in the allowance.

Allowance for Unfunded Lending Commitments

Credit loss reserves are recognized on all off-balance sheet commitments that are not unconditionally cancelable. Corporate loan EAD models include an incremental usage factor (or credit conversion factor) to estimate ECLs on amounts undrawn at the reporting date. Off-balance sheet commitments include unfunded exposures, revolving facilities, securities underwriting commitments, letters of credit, HELOCs and financial guarantees. This reserve is classified on the Consolidated Balance Sheet in *Other liabilities*. Changes to the allowance for unfunded lending commitments are recorded in *Provision for credit losses on unfunded lending commitments*.

ACCOUNTING CHANGES

Accounting for Financial Instruments—Credit Losses

Overview

In June 2016, the Financial Accounting Standards Board (FASB) issued ASU No. 2016-13, *Financial Instruments—Credit Losses (Topic 326)*. The ASU introduces a new credit loss methodology, the Current Expected Credit Losses (CECL) methodology, which requires earlier recognition of credit losses while also providing additional transparency about credit risk. Citi adopted the ASU as of January 1, 2020, which, as discussed below, resulted in an increase in Citi's *Allowance for credit losses* and a decrease to opening *Retained earnings*, net of deferred income taxes, at January 1, 2020.

The CECL methodology utilizes a lifetime "expected credit loss" measurement objective for the recognition of credit losses for loans, held-to-maturity debt securities, receivables and other financial assets 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. The CECL methodology represents a significant change from prior U.S. GAAP and replaced the prior multiple existing impairment methods, which generally required that a loss be incurred before it was recognized. Within the life cycle of a loan or other financial asset, the methodology generally results in the earlier recognition of the provision for credit losses and the related allowance for credit losses than prior U.S. GAAP. For available-for-sale debt securities where fair value is less than cost that Citi intends to hold or more-likely-than-not will not be required to sell, credit-related impairment, if any, is recognized through an allowance for credit losses and adjusted each period for changes in credit risk.

January 1, 2020 CECL Transition (Day 1) Impact

The CECL methodology's impact on expected credit losses, among other things, reflects Citi's view of the current state of the economy, forecasted macroeconomic conditions and Citi's portfolios. At the January 1, 2020 date of adoption, based on forecasts of macroeconomic conditions and exposures at that time, the aggregate impact to Citi was an approximate $4.1 billion, or an approximate 29%, pretax increase in the *Allowance for credit losses*, along with a $3.1 billion after-tax decrease in *Retained earnings* and a deferred tax asset increase of $1.0 billion. This transition impact reflects (i) a $4.9 billion build to the *Allowance for credit losses* for Citi's consumer exposures, primarily driven by the impact on credit card receivables of longer estimated tenors under the CECL lifetime expected credit loss methodology (loss coverage of approximately 23 months) compared to shorter estimated tenors under the probable loss methodology under prior U.S. GAAP (loss coverage of approximately 14 months), net of recoveries; and (ii) a release of $0.8 billion of reserves primarily related to Citi's corporate net loan loss exposures, largely due to more precise contractual maturities that result in shorter remaining tenors, incorporation of recoveries and use of more specific

historical loss data based on an increase in portfolio segmentation across industries and geographies.

Under the CECL methodology, the *Allowance for credit losses* consists of quantitative and qualitative components. Citi's quantitative component of the *Allowance for credit losses* is model based and utilizes a single forward-looking macroeconomic forecast, complemented by the qualitative component described below, in estimating expected credit losses and discounts inputs for the corporate classifiably managed portfolios. Reasonable and supportable forecast periods vary by product. For example, Citi's consumer models use a 13-quarter reasonable and supportable period and revert to historical loss experience thereafter, while its corporate loan models use a nine-quarter reasonable and supportable period followed by a three-quarter graduated transition to historical loss experience.

Citi's qualitative component of the *Allowance for credit losses* considers (i) the uncertainty of forward-looking scenarios based on the likelihood and severity of a possible recession as another possible scenario; (ii) certain portfolio characteristics, such as portfolio concentration and collateral coverage; and (iii) model limitations as well as idiosyncratic events.

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., previously referred to as 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, 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 was adopted by Citi as of January 1, 2020 with prospective application and did not impact the first quarter of 2020 results. The future 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.

FUTURE APPLICATION OF ACCOUNTING STANDARDS

Reference Rate Reform

In March 2020, the FASB issued ASU No. 2020-04, *Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting*, which provides optional guidance to ease the potential burden in accounting for (or recognizing the effects of) reference rate reform on financial reporting. Specifically, the guidance permits an entity, when certain criteria are met, to consider amendments to contracts made to comply with reference rate reform to meet the definition of a modification under U.S. GAAP. It further allows hedge accounting to be maintained and a one-time transfer or sale of qualifying held-to-maturity securities. The expedients and exceptions provided by the amendments are permitted to be adopted any time through December 31, 2022 and do not apply to contract modifications made and hedging relationships entered into or evaluated after December 31, 2022, except for certain optional expedients elected for certain hedging relationships existing as of December 31, 2022. Citi plans to adopt the optional expedients in 2020 and does not expect a material impact.

2. DISCONTINUED OPERATIONS AND SIGNIFICANT DISPOSALS

The Company's *Discontinued operations* consisted of residual activities related to the sale of the Egg Banking business in 2011. All *Discontinued operations* results are recorded within *Corporate/Other*.

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

	Three Months Ended March 31,	
In millions of dollars	**2020**	2019
Total revenues, net of interest expense	**$ —**	$ —
Loss from discontinued operations	**$ (18)**	$ (2)
Benefit for income taxes	**—**	—
Loss from discontinued operations, net of taxes	**$ (18)**	$ (2)

Cash flows from *Discontinued operations* were not material for the periods presented and there were no significant disposals during these periods. For a description of the Company's significant disposal transactions in prior periods and financial impact, see Note 2 to the Consolidated Financial Statements in Citi's 2019 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.

For additional information regarding Citigroup's business segments, see Note 3 to the Consolidated Financial Statements in Citi's 2019 Annual Report on Form 10-K.

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

	Three Months Ended March 31,							
	Revenues, net of interest expense[1]		Provision (benefits) for income taxes		Income (loss) from continuing operations[2]		Identifiable assets	
In millions of dollars, except identifiable assets in billions	**2020**	2019	**2020**	2019	**2020**	2019	**March 31, 2020**	December 31, 2019
Global Consumer Banking	**$ 8,174**	$ 8,090	**$ (270)**	$ 381	**$ (755)**	$ 1,320	**$ 403**	$ 407
Institutional Clients Group	**12,484**	10,018	**1,044**	955	**3,626**	3,412	**1,723**	1,447
Corporate/Other	**73**	468	**(198)**	(61)	**(337)**	5	**94**	97
Total	**$ 20,731**	$ 18,576	**$ 576**	$ 1,275	**$ 2,534**	$ 4,737	**$ 2,220**	$ 1,951

(1) Includes total revenues, net of interest expense (excluding *Corporate/Other*), in *North America* of $10.2 billion and $8.3 billion; in *EMEA* of $3.5 billion and $3.2 billion; in *Latin America* of $2.6 billion and $2.5 billion; and in *Asia* of $4.4 billion and $4.1 billion for the three months ended March 31, 2020 and 2019, 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 $4.8 billion and $2.0 billion; in the *ICG* results of $2,004 million and $32 million; and in the *Corporate/Other* results of $192 million and $(25) million for the three months ended March 31, 2020 and 2019, respectively.

4. INTEREST REVENUE AND EXPENSE

Interest revenue and *Interest expense* consisted of the following:

	Three Months Ended March 31,	
In millions of dollars	**2020**	2019
Interest revenue		
Loan interest, including fees	**$ 11,250**	$ 11,969
Deposits with banks	**527**	607
Securities borrowed and purchased under agreements to resell	**1,208**	1,783
Investments, including dividends	**2,281**	2,548
Trading account assets[(1)]	**1,590**	1,686
Other interest	**283**	483
Total interest revenue	**$ 17,139**	$ 19,076
Interest expense		
Deposits[(2)]	**$ 2,614**	$ 3,027
Securities loaned and sold under agreements to repurchase	**1,085**	1,589
Trading account liabilities[(1)]	**239**	327
Short-term borrowings	**384**	652
Long-term debt	**1,325**	1,722
Total interest expense	**$ 5,647**	$ 7,317
Net interest revenue	**$ 11,492**	$ 11,759
Provision for credit losses on loans	**6,444**	1,944
Net interest revenue after provision for credit losses on loans	**$ 5,048**	$ 9,815

(1) Interest expense on *Trading account liabilities* is reported as a reduction of interest revenue from *Trading account assets*.
(2) Includes deposit insurance fees and charges of $225 million and $193 million for the three months ended March 31, 2020 and 2019, respectively.

5. COMMISSIONS AND FEES; ADMINISTRATION AND OTHER FIDUCIARY FEES

For additional information on Citi's commissions and fees, and administration and other fiduciary fees, see Note 5 to the Consolidated Financial Statements in Citi's 2019 Annual Report on Form 10-K.

The following tables present *Commissions and fees* revenue:

	Three Months Ended March 31, 2020			
In millions of dollars	**ICG**	**GCB**	**Corporate/ Other**	**Total**
Investment banking	**$ 1,040**	**$ —**	**$ —**	**$ 1,040**
Brokerage commissions	**577**	**249**	**—**	**826**
Credit- and bank-card income				
Interchange fees	**261**	**1,917**	**—**	**2,178**
Card-related loan fees	**11**	**166**	**—**	**177**
Card rewards and partner payments	**(149)**	**(2,093)**	**—**	**(2,242)**
Deposit-related fees[1]	**233**	**115**	**—**	**348**
Transactional service fees	**227**	**24**	**—**	**251**
Corporate finance[2]	**146**	**—**	**—**	**146**
Insurance distribution revenue	**4**	**125**	**—**	**129**
Insurance premiums	**—**	**43**	**—**	**43**
Loan servicing	**20**	**11**	**8**	**39**
Other	**30**	**56**	**—**	**86**
Total commissions and fees[3]	**$ 2,400**	**$ 613**	**$ 8**	**$ 3,021**

	Three Months Ended March 31, 2019			
In millions of dollars	ICG	GCB	Corporate/ Other	Total
Investment banking	$ 914	$ —	$ —	$ 914
Brokerage commissions	471	186	—	657
Credit- and bank-card income				
Interchange fees	279	1,983	—	2,262
Card-related loan fees	13	160	—	173
Card rewards and partner payments	(153)	(2,061)	—	(2,214)
Deposit-related fees[1]	262	122	—	384
Transactional service fees	201	30	—	231
Corporate finance[2]	179	—	—	179
Insurance distribution revenue	4	132	—	136
Insurance premiums	—	47	—	47
Loan servicing	50	22	6	78
Other	17	62	1	79
Total commissions and fees[3]	$ 2,236	$ 683	$ 7	$ 2,926

(1) Includes overdraft fees of $31 million and $31 million for the three months ended March 31, 2020 and 2019, respectively. Overdraft fees are accounted for under ASC 310.

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

(3) *Commissions and fees* includes $(1,802) million and $(1,703) million not accounted for under ASC 606, *Revenue from Contracts with Customers*, for the three months ended March 31, 2020 and 2019, 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.

The following table presents *Administration and other fiduciary fees* revenue:

	Three Months Ended March 31,			
	2020			
In millions of dollars	ICG	GCB	Corporate /Other	Total
Custody fees	$ 366	$ 8	$ 15	$ 389
Fiduciary fees	172	156	—	328
Guarantee fees	134	2	1	137
Total administration and other fiduciary fees[1]	$ 672	$ 166	$ 16	$ 854

	Three Months Ended March 31,			
	2019			
In millions of dollars	ICG	GCB	Corporate/ Other	Total
Custody fees	$ 364	$ 3	$ 16	$ 383
Fiduciary fees	152	146	12	310
Guarantee fees	142	2	2	146
Total administration and other fiduciary fees[1]	$ 658	$ 151	$ 30	$ 839

(1) *Administration and other fiduciary fees* includes $136 million and $146 million for the three months ended March 31, 2020 and 2019, 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:

	Three Months Ended March 31,	
In millions of dollars	**2020**	2019
Interest rate risks[1]	**$ 1,977**	$ 1,718
Foreign exchange risks[2]	**995**	473
Equity risks[3]	**819**	456
Commodity and other risks[4]	**327**	119
Credit products and risks[5]	**1,143**	38
Total	**$ 5,261**	$ 2,804

(1) Includes revenues from government securities and corporate debt, municipal securities, mortgage securities and other debt instruments. Also includes spot and forward trading of currencies and exchange-traded and over-the-counter (OTC) currency options, options on fixed income securities, interest rate swaps, currency swaps, swap options, caps and floors, financial futures, OTC options and forward contracts on fixed income securities.

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

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

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

(5) Includes revenues from structured credit products.

7. INCENTIVE PLANS

For additional information on Citi's incentive plans, see Note 7 to the Consolidated Financial Statements in Citi's 2019 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 2019 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 March 31,							
	Pension plans				**Postretirement benefit plans**			
	U.S. plans		**Non-U.S. plans**		**U.S. plans**		**Non-U.S. plans**	
In millions of dollars	**2020**	2019	**2020**	2019	**2020**	2019	**2020**	2019
Benefits earned during the period	**$ —**	$ —	**$ 37**	$ 36	**$ —**	$ —	**$ 2**	$ 2
Interest cost on benefit obligation	**106**	130	**64**	75	**5**	7	**24**	26
Expected return on plan assets	**(208)**	(203)	**(65)**	(68)	**(5)**	(5)	**(20)**	(21)
Amortization of unrecognized:								
Prior service cost (benefit)	**1**	1	**(1)**	(1)	**—**	—	**(2)**	(2)
Net actuarial loss	**56**	44	**17**	15	**—**	—	**5**	5
Total net (benefit) expense	**$ (45)**	$ (28)	**$ 52**	$ 57	**$ —**	$ 2	**$ 9**	$ 10

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:

	Three Months Ended March 31, 2020			
	Pension plans		Postretirement 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	$ 13,453	$ 8,105	$ 692	$ 1,384
Plans measured annually	(26)	(2,068)	—	(323)
Projected benefit obligation at beginning of year—Significant Plans	$ 13,427	$ 6,037	$ 692	$ 1,061
Benefits earned during the period		21	—	1
Interest cost on benefit obligation	106	55	5	21
Actuarial loss (gain)	65	(419)	(13)	(63)
Benefits paid, net of participants' contributions and government subsidy	(249)	(69)	(5)	(12)
Foreign exchange impact and other	—	(522)	—	(202)
Projected benefit obligation at period end—Significant Plans	$ 13,349	$ 5,103	$ 679	$ 806
Change in plan assets				
Plan assets at fair value at beginning of year	$ 12,717	$ 7,556	$ 345	$ 1,127
Plans measured annually	—	(1,349)	—	(9)
Plan assets at fair value at beginning of year—Significant Plans	$ 12,717	$ 6,207	$ 345	$ 1,118
Actual return on plan assets	(628)	(156)	(11)	(45)
Company contributions, net of reimbursements	13	16	(8)	—
Benefits paid, net of participants' contributions and government subsidy	(249)	(69)	(5)	(12)
Foreign exchange impact and other	—	(511)	—	(213)
Plan assets at fair value at period end—Significant Plans	$ 11,853	$ 5,487	$ 321	$ 848
Funded status of the Significant Plans				
Qualified plans[(1)]	$ (818)	$ 384	$ (358)	$ 42
Nonqualified plans	(678)	—	—	—
Funded status of the plans at period end—Significant Plans	$ (1,496)	$ 384	$ (358)	$ 42
Net amount recognized at period end				
Benefit asset	$ —	$ 1,001	$ —	$ 42
Benefit liability	(1,496)	(617)	(358)	—
Net amount recognized on the balance sheet—Significant Plans	$ (1,496)	$ 384	$ (358)	$ 42
Amounts recognized in *AOCI* at period end				
Prior service benefit	$ —	$ 8	$ —	$ 54
Net actuarial (loss) gain	(7,932)	(780)	22	(289)
Net amount recognized in equity (pretax)—Significant Plans	$ (7,932)	$ (772)	$ 22	$ (235)
Accumulated benefit obligation at period end—Significant Plans	$ 13,344	$ 4,827	$ 679	$ 806

(1) The U.S. qualified pension plan is fully funded pursuant to the Employee Retirement Income Security Act of 1974, as amended (ERISA), funding rules as of January 1, 2020 and no minimum required funding is expected for 2020.

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

In millions of dollars		Three Months Ended March 31, 2020		For Year Ended December 31, 2019
Beginning of period balance, net of tax[1][2]	**$**	**(6,809)**	$	(6,257)
Actuarial assumptions changes and plan experience		**430**		(2,300)
Net asset gain (loss) due to difference between actual and expected returns		**(1,128)**		1,427
Net amortization		**76**		274
Prior service cost		**—**		(7)
Curtailment/settlement gain[3]		**—**		1
Foreign exchange impact and other		**204**		(66)
Change in deferred taxes, net		**132**		119
Change, net of tax	**$**	**(286)**	$	(552)
End of period balance, net of tax[1][2]	**$**	**(7,095)**	$	(6,809)

(1) See Note 17 to the Consolidated Financial Statements for further discussion of net *AOCI* balance.
(2) Includes net-of-tax amounts for certain profit-sharing plans outside the U.S.
(3) Curtailment and settlement relate to repositioning and divestiture activities.

Plan Assumptions

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

Net (benefit) expense assumed discount rates during the period	Three Months Ended Mar. 31, 2020	Dec. 31, 2019
U.S. plans		
Qualified pension	**3.25%**	3.10%
Nonqualified pension	**3.25**	3.10
Postretirement	**3.15**	3.00
Non-U.S. plans		
Pension [1]	**0.20-8.95**	-0.05-9.00
Weighted average	**4.21**	4.05
Postretirement	**9.10**	9.20

(1) Due to substantial downward movement in yields, there were negative discount rates for plans with relatively short duration in major markets such as Switzerland.

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	Mar. 31, 2020	Dec. 31, 2019	Mar. 31, 2019
U.S. plans			
Qualified pension	**3.20%**	3.25%	3.85%
Nonqualified pension	**3.25**	3.25	3.90
Postretirement	**3.20**	3.15	3.80
Non-U.S. plans			
Pension	**0.45-9.45**	0.20-8.95	0.45-10.30
Weighted average	**4.38**	4.21	4.74
Postretirement	**9.75**	9.10	10.30

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 March 31, 2020	
In millions of dollars	One-percentage-point increase	One-percentage-point decrease
Pension		
U.S. plans	**$ 7**	**$ (12)**
Non-U.S. plans	**(2)**	**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 three months of 2020. The Company made discretionary contributions 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 three months ended March 31, 2020 and 2019, as well as expected Company contributions for the remainder of 2020 and the actual contributions made in 2019:

	Pension plans				Postretirement plans			
	U.S. plans[1]		Non-U.S. plans		U.S. plans		Non-U.S. plans	
In millions of dollars	**2020**	2019	**2020**	2019	**2020**	2019	**2020**	2019
Company contributions[2] for the three months ended March 31	**$ 14**	$ 14	**$ 37**	$ 34	**$ —**	$ —	**$ 2**	$ 3
Company contributions made during the remainder of the year	**—**	467	**—**	116	**—**	4	**—**	222
Company contributions expected to be made during the remainder of the year	**43**	—	**116**	—	**—**	—	**6**	—

(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 Months Ended March 31,	
In millions of dollars	**2020**	2019
U.S. plans	**$ 101**	$ 99
Non-U.S. plans	**76**	68

Post Employment Plans

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

	Three Months Ended March 31,	
In millions of dollars	**2020**	2019
Service-related expense		
Amortization of unrecognized:		
Net actuarial loss	**—**	1
Total service-related expense	**$ —**	$ 1
Non-service-related expense	**$ 5**	$ 4
Total net expense	**$ 5**	$ 5

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 March 31,	
In millions of dollars, except per share amounts	**2020**	2019
Earnings per common share		
Income from continuing operations before attribution of noncontrolling interests	**$ 2,534**	$ 4,737
Less: Noncontrolling interests from continuing operations	**(6)**	25
Net income from continuing operations (for EPS purposes)	**$ 2,540**	$ 4,712
Loss from discontinued operations, net of taxes	**(18)**	(2)
Citigroup's net income	**$ 2,522**	$ 4,710
Less: Preferred dividends[1]	**291**	262
Net income available to common shareholders	**$ 2,231**	$ 4,448
Less: Dividends and undistributed earnings allocated to employee restricted and deferred shares with rights to dividends, applicable to basic EPS	**21**	59
Net income allocated to common shareholders for basic EPS	**$ 2,210**	$ 4,389
Weighted-average common shares outstanding applicable to basic EPS *(in millions)*	**2,097.9**	2,340.4
Basic earnings per share[2]		
Income from continuing operations	**$ 1.06**	$ 1.88
Discontinued operations	**(0.01)**	—
Net income per share—basic	**$ 1.05**	$ 1.88
Diluted earnings per share		
Net income allocated to common shareholders for basic EPS	**$ 2,210**	$ 4,389
Add back: Dividends allocated to employee restricted and deferred shares with rights to dividends that are forfeitable	**7**	—
Net income allocated to common shareholders for diluted EPS	**$ 2,217**	$ 4,389
Weighted-average common shares outstanding applicable to basic EPS *(in millions)*	**2,097.9**	2,340.4
Effect of dilutive securities		
Options[3]	**0.1**	0.1
Other employee plans	**15.7**	1.9
Adjusted weighted-average common shares outstanding applicable to diluted EPS *(in millions)*[4]	**2,113.7**	2,342.4
Diluted earnings per share[2]		
Income from continuing operations	**$ 1.06**	$ 1.87
Discontinued operations	**(0.01)**	—
Net income per share—diluted	**$ 1.05**	$ 1.87

(1) On April 21, 2020, Citi declared preferred dividends of approximately $253 million for the second quarter of 2020. As of May 4, 2020, Citi estimates it will distribute preferred dividends of approximately $284 million and $253 million in the third and fourth quarters of 2020, respectively, subject to such dividends being declared by the Citi Board of Directors. During the first quarter of 2020, in March, Citi redeemed all of its 1.5 million Series O preferred shares for $1.5 billion; in January, Citi also issued 1.5 million of Series V preferred shares for $1.5 billion.

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

(3) During the first quarter of 2020 and 2019, no significant options to purchase shares of common stock were outstanding.

(4) Due to rounding, weighted-average common shares outstanding applicable to basic EPS and the effect of dilutive securities may not sum to weighted-average common shares outstanding applicable to diluted EPS.

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 2019 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	**March 31, 2020**	December 31, 2019
Securities purchased under agreements to resell	**$ 178,930**	$ 169,874
Deposits paid for securities borrowed	**83,606**	81,448
Total[(1)]	**$ 262,536**	$ 251,322

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

In millions of dollars	**March 31, 2020**	December 31, 2019
Securities sold under agreements to repurchase	**$ 213,525**	$ 155,164
Deposits received for securities loaned	**8,799**	11,175
Total[(1)]	**$ 222,324**	$ 166,339

(1) The above tables do not include securities-for-securities lending transactions of $9.2 billion and $6.3 billion at March 31, 2020 and December 31, 2019, 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 amounts 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 has 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 March 31, 2020				
In millions of dollars	**Gross amounts of recognized assets**	**Gross amounts offset on the Consolidated Balance Sheet[(1)]**	**Net amounts of assets included on the Consolidated Balance Sheet**	**Amounts not offset on the Consolidated Balance Sheet but eligible for offsetting upon counterparty default[(2)]**	**Net amounts[(3)]**
Securities purchased under agreements to resell	**$ 304,427**	**$ 125,497**	**$ 178,930**	**$ 142,194**	**$ 36,736**
Deposits paid for securities borrowed	**87,669**	**4,063**	**83,606**	**27,015**	**56,591**
Total	**$ 392,096**	**$ 129,560**	**$ 262,536**	**$ 169,209**	**$ 93,327**

In millions of dollars	**Gross amounts of recognized liabilities**	**Gross amounts offset on the Consolidated Balance Sheet[(1)]**	**Net amounts of liabilities included on the Consolidated Balance Sheet**	**Amounts not offset on the Consolidated Balance Sheet but eligible for offsetting upon counterparty default[(2)]**	**Net amounts[(3)]**
Securities sold under agreements to repurchase	**$ 339,022**	**$ 125,497**	**$ 213,525**	**$ 125,995**	**$ 87,530**
Deposits received for securities loaned	**12,862**	**4,063**	**8,799**	**3,109**	**5,690**
Total	**$ 351,884**	**$ 129,560**	**$ 222,324**	**$ 129,104**	**$ 93,220**

	As of December 31, 2019				
In millions of dollars	Gross amounts of recognized assets	Gross amounts offset on the Consolidated Balance Sheet[(1)]	Net amounts of assets included on the Consolidated Balance Sheet	Amounts not offset on the Consolidated Balance Sheet but eligible for offsetting upon counterparty default[(2)]	Net amounts[(3)]
Securities purchased under agreements to resell	$ 281,274	$ 111,400	$ 169,874	$ 134,150	$ 35,724
Deposits paid for securities borrowed	90,047	8,599	81,448	27,067	54,381
Total	$ 371,321	$ 119,999	$ 251,322	$ 161,217	$ 90,105

In millions of dollars	Gross amounts of recognized liabilities	Gross amounts offset on the Consolidated Balance Sheet[(1)]	Net amounts of liabilities included on the Consolidated Balance Sheet	Amounts not offset on the Consolidated Balance Sheet but eligible for offsetting upon counterparty default[(2)]	Net amounts[(3)]
Securities sold under agreements to repurchase	$ 266,564	$ 111,400	$ 155,164	$ 91,034	$ 64,130
Deposits received for securities loaned	19,774	8,599	11,175	3,138	8,037
Total	$ 286,338	$ 119,999	$ 166,339	$ 94,172	$ 72,167

(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 amounts of liabilities associated with repurchase agreements and securities lending agreements by remaining contractual maturity:

	As of March 31, 2020				
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	**$ 173,961**	**$ 66,488**	**$ 54,421**	**$ 44,153**	**$ 339,022**
Deposits received for securities loaned	**9,189**	**529**	**1,712**	**1,432**	**12,862**
Total	**$ 183,150**	**$ 67,017**	**$ 56,133**	**$ 45,585**	**$ 351,884**

	As of December 31, 2019				
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	$ 108,534	$ 82,749	$ 35,108	$ 40,173	$ 266,564
Deposits received for securities loaned	15,758	208	1,789	2,019	19,774
Total	$ 124,292	$ 82,957	$ 36,897	$ 42,192	$ 286,338

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

In millions of dollars	**As of March 31, 2020**		
	Repurchase agreements	**Securities lending agreements**	**Total**
U.S. Treasury and federal agency securities	**$ 142,676**	**$ 1**	**$ 142,677**
State and municipal securities	**3,280**	**1**	**3,281**
Foreign government securities	**110,459**	**280**	**110,739**
Corporate bonds	**18,177**	**327**	**18,504**
Equity securities	**8,034**	**12,135**	**20,169**
Mortgage-backed securities	**38,102**	**—**	**38,102**
Asset-backed securities	**4,792**	**—**	**4,792**
Other	**13,502**	**118**	**13,620**
Total	**$ 339,022**	**$ 12,862**	**$ 351,884**

In millions of dollars	As of December 31, 2019		
	Repurchase agreements	Securities lending agreements	Total
U.S. Treasury and federal agency securities	$ 100,781	$ 27	$ 100,808
State and municipal securities	1,938	5	1,943
Foreign government securities	95,880	272	96,152
Corporate bonds	18,761	249	19,010
Equity securities	12,010	19,069	31,079
Mortgage-backed securities	28,458	—	28,458
Asset-backed securities	4,873	—	4,873
Other	3,863	152	4,015
Total	$ 266,564	$ 19,774	$ 286,338

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 2019 Annual Report on Form 10-K.

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

In millions of dollars	**March 31, 2020**	December 31, 2019
Receivables from customers	**$ 22,390**	$ 15,912
Receivables from brokers, dealers and clearing organizations	**46,165**	23,945
Total brokerage receivables[(1)]	**$ 68,555**	$ 39,857
Payables to customers	**$ 51,506**	$ 37,613
Payables to brokers, dealers and clearing organizations	**22,862**	10,988
Total brokerage payables[(1)]	**$ 74,368**	$ 48,601

(1) Includes brokerage receivables and payables recorded by Citi broker-dealer entities that are accounted for in accordance with the AICPA Accounting Guide for Brokers and Dealers in Securities as codified in ASC 940-320.

12. INVESTMENTS

For additional information regarding Citi's investment portfolios, including evaluating investments for impairment, see Note 13 to the Consolidated Financial Statements in Citi's 2019 Annual Report on Form 10-K.

The following table presents Citi's investments by category:

In millions of dollars	**March 31, 2020**	December 31, 2019
Debt securities available-for-sale (AFS)	**$ 308,219**	$ 280,265
Debt securities held-to-maturity (HTM)[1]	**82,315**	80,775
Marketable equity securities carried at fair value[2]	**682**	458
Non-marketable equity securities carried at fair value[2]	**532**	704
Non-marketable equity securities measured using the measurement alternative[3]	**741**	700
Non-marketable equity securities carried at cost[4]	**6,394**	5,661
Total investments	**$ 398,883**	$ 368,563

(1) Carried at adjusted amortized cost basis, net of any allowance for credit losses.
(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. See "Recognition and Measurement of Impairment" below.
(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 March 31,	
In millions of dollars	**2020**	2019
Taxable interest	**$ 2,179**	$ 2,372
Interest exempt from U.S. federal income tax	**76**	127
Dividend income	**26**	49
Total interest and dividend income	**$ 2,281**	$ 2,548

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

	Three Months Ended March 31,	
In millions of dollars	**2020**	2019
Gross realized investment gains	**$ 464**	$ 168
Gross realized investment losses	**(32)**	(38)
Net realized gains on sale of investments	**$ 432**	$ 130

Debt Securities Available-for-Sale

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

In millions of dollars	**March 31, 2020** Amortized cost	**Gross unrealized gains**	**Gross unrealized losses**	**Fair value**	December 31, 2019 Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value
Debt securities AFS								
Mortgage-backed securities[1]								
U.S. government-sponsored agency guaranteed	**$ 42,559**	**$ 1,271**	**$ 277**	**$ 43,553**	$ 34,963	$ 547	$ 280	$ 35,230
Non-U.S. residential	**752**	**3**	**3**	**752**	789	3	—	792
Commercial	**69**	**—**	**1**	**68**	75	—	—	75
Total mortgage-backed securities	**$ 43,380**	**$ 1,274**	**$ 281**	**$ 44,373**	$ 35,827	$ 550	$ 280	$ 36,097
U.S. Treasury and federal agency securities								
U.S. Treasury	**$ 118,298**	**$ 2,863**	**$ 2**	**$ 121,159**	$ 106,429	$ 50	$ 380	$ 106,099
Agency obligations	**4,080**	**30**	**7**	**4,103**	5,336	3	20	5,319
Total U.S. Treasury and federal agency securities	**$ 122,378**	**$ 2,893**	**$ 9**	**$ 125,262**	$ 111,765	$ 53	$ 400	$ 111,418
State and municipal	**$ 5,677**	**$ 224**	**$ 436**	**$ 5,465**	$ 5,024	$ 43	$ 89	$ 4,978
Foreign government	**116,703**	**983**	**319**	**117,367**	110,958	586	241	111,303
Corporate	**11,243**	**116**	**162**	**11,197**	11,266	52	101	11,217
Asset-backed securities[1]	**479**	**1**	**14**	**466**	524	—	2	522
Other debt securities	**4,086**	**3**	**—**	**4,089**	4,729	1	—	4,730
Allowance for AFS securities at the end of the period	**$ —**	**$ —**	**$ —**	**$ —**				
Total debt securities AFS	**$ 303,946**	**$ 5,494**	**$ 1,221**	**$ 308,219**	$ 280,093	$ 1,285	$ 1,113	$ 280,265

(1) 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:

In millions of dollars	Less than 12 months		12 months or longer		Total	
	Fair value	Gross unrealized losses	Fair value	Gross unrealized losses	Fair value	Gross unrealized losses
March 31, 2020						
Debt securities AFS						
Mortgage-backed securities						
U.S. government-sponsored agency guaranteed	**$ 7,937**	**$ 225**	**$ 858**	**$ 52**	**$ 8,795**	**$ 277**
Non-U.S. residential	**360**	**3**	**—**	**—**	**360**	**3**
Commercial	**38**	**—**	**8**	**1**	**46**	**1**
Total mortgage-backed securities	**$ 8,335**	**$ 228**	**$ 866**	**$ 53**	**$ 9,201**	**$ 281**
U.S. Treasury and federal agency securities						
U.S. Treasury	**$ 3,062**	**$ 2**	**$ —**	**$ —**	**$ 3,062**	**$ 2**
Agency obligations	**—**	**—**	**249**	**7**	**249**	**7**
Total U.S. Treasury and federal agency securities	**$ 3,062**	**$ 2**	**$ 249**	**$ 7**	**$ 3,311**	**$ 9**
State and municipal	**$ 968**	**$ 415**	**$ 236**	**$ 21**	**$ 1,204**	**$ 436**
Foreign government	**26,966**	**235**	**2,963**	**84**	**29,929**	**319**
Corporate	**2,540**	**155**	**61**	**7**	**2,601**	**162**
Asset-backed securities	**136**	**6**	**148**	**8**	**284**	**14**
Other debt securities	**118**	**—**	**—**	**—**	**118**	**—**
Total debt securities AFS	**$ 42,125**	**$ 1,041**	**$ 4,523**	**$ 180**	**$ 46,648**	**$ 1,221**
December 31, 2019						
Debt securities AFS						
Mortgage-backed securities						
U.S. government-sponsored agency guaranteed	$ 9,780	$ 242	$ 1,877	$ 38	$ 11,657	$ 280
Non-U.S. residential	208	—	1	—	209	—
Commercial	16	—	27	—	43	—
Total mortgage-backed securities	$ 10,004	$ 242	$ 1,905	$ 38	$ 11,909	$ 280
U.S. Treasury and federal agency securities						
U.S. Treasury	$ 45,484	$ 248	$ 26,907	$ 132	$ 72,391	$ 380
Agency obligations	781	2	3,897	18	4,678	20
Total U.S. Treasury and federal agency securities	$ 46,265	$ 250	$ 30,804	$ 150	$ 77,069	$ 400
State and municipal	$ 362	$ 62	$ 266	$ 27	$ 628	$ 89
Foreign government	35,485	149	8,170	92	43,655	241
Corporate	2,916	98	123	3	3,039	101
Asset-backed securities	112	1	166	1	278	2
Other debt securities	1,307	—	—	—	1,307	—
Total debt securities AFS	$ 96,451	$ 802	$ 41,434	$ 311	$ 137,885	$ 1,113

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

	March 31, 2020		December 31, 2019	
In millions of dollars	**Amortized cost**	**Fair value**	Amortized cost	Fair value
Mortgage-backed securities[1]				
Due within 1 year	**$ 629**	**$ 640**	$ 20	$ 20
After 1 but within 5 years	**584**	**585**	573	574
After 5 but within 10 years	**1,009**	**1,067**	594	626
After 10 years[2]	**41,158**	**42,081**	34,640	34,877
Total	**$ 43,380**	**$ 44,373**	$ 35,827	$ 36,097
U.S. Treasury and federal agency securities				
Due within 1 year	**$ 27,233**	**$ 27,403**	$ 40,757	$ 40,688
After 1 but within 5 years	**88,605**	**91,130**	70,128	69,850
After 5 but within 10 years	**6,515**	**6,697**	854	851
After 10 years[2]	**25**	**32**	26	29
Total	**$ 122,378**	**$ 125,262**	$ 111,765	$ 111,418
State and municipal				
Due within 1 year	**$ 937**	**$ 937**	$ 932	$ 932
After 1 but within 5 years	**601**	**608**	714	723
After 5 but within 10 years	**291**	**312**	195	215
After 10 years[2]	**3,848**	**3,608**	3,183	3,108
Total	**$ 5,677**	**$ 5,465**	$ 5,024	$ 4,978
Foreign government				
Due within 1 year	**$ 46,369**	**$ 46,491**	$ 42,611	$ 42,666
After 1 but within 5 years	**59,050**	**59,561**	58,820	59,071
After 5 but within 10 years	**9,481**	**9,505**	8,192	8,198
After 10 years[2]	**1,803**	**1,810**	1,335	1,368
Total	**$ 116,703**	**$ 117,367**	$ 110,958	$ 111,303
All other[3]				
Due within 1 year	**$ 5,836**	**$ 5,846**	$ 7,306	$ 7,311
After 1 but within 5 years	**8,894**	**8,908**	8,279	8,275
After 5 but within 10 years	**921**	**891**	818	797
After 10 years[2]	**157**	**107**	116	86
Total	**$ 15,808**	**$ 15,752**	$ 16,519	$ 16,469
Total debt securities AFS	**$ 303,946**	**$ 308,219**	$ 280,093	$ 280,265

(1) Includes mortgage-backed securities of U.S. government-sponsored agencies.
(2) Investments with no stated maturities are included as contractual maturities of greater than 10 years. Actual maturities may differ due to call or prepayment rights.
(3) Includes corporate, asset-backed and other debt securities.

There were no purchased credit-deteriorated AFS debt securities held by the Company as of March 31, 2020.

Debt Securities Held-to-Maturity

The carrying value and fair value of debt securities HTM were as follows:

In millions of dollars	Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value
March 31, 2020				
Debt securities HTM				
Mortgage-backed securities[1]				
U.S. government-sponsored agency guaranteed	**$ 48,270**	**$ 2,010**	**$ 16**	**$ 50,264**
Non-U.S. residential	**1,112**	**—**	**12**	**1,100**
Commercial	**654**	**1**	**—**	**655**
Total mortgage-backed securities	**$ 50,036**	**$ 2,011**	**$ 28**	**$ 52,019**
State and municipal	**$ 9,269**	**$ 516**	**$ 25**	**$ 9,760**
Foreign government	**1,553**	**40**	**—**	**1,593**
Asset-backed securities[1]	**21,533**	**4**	**1,251**	**20,286**
Allowance for HTM securities at the end of the period	**$ (76)**	**$ —**	**$ —**	**$ (76)**
Total debt securities HTM, net	**$ 82,315**	**$ 2,571**	**$ 1,304**	**$ 83,582**
December 31, 2019				
Debt securities HTM				
Mortgage-backed securities[1]				
U.S. government-sponsored agency guaranteed	$ 46,637	$ 1,047	$ 21	$ 47,663
Non-U.S. residential	1,039	5	—	1,044
Commercial	582	1	—	583
Total mortgage-backed securities	$ 48,258	$ 1,053	$ 21	$ 49,290
State and municipal	$ 9,104	$ 455	$ 28	$ 9,531
Foreign government	1,934	37	1	1,970
Asset-backed securities[1]	21,479	12	59	21,432
Total debt securities HTM	$ 80,775	$ 1,557	$ 109	$ 82,223

(1) 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 table below shows the fair value of debt securities HTM that have been in an unrecognized loss position at December 31, 2019:

	Less than 12 months		12 months or longer		Total	
In millions of dollars	Fair value	Gross unrecognized losses	Fair value	Gross unrecognized losses	Fair value	Gross unrecognized losses
December 31, 2019						
Debt securities held-to-maturity						
Mortgage-backed securities	$ 3,590	$ 10	$ 1,116	$ 11	$ 4,706	$ 21
State and municipal	34	1	1,125	27	1,159	28
Foreign government	1,970	1	—	—	1,970	1
Asset-backed securities	7,972	11	765	48	8,737	59
Total debt securities held-to-maturity	$ 13,566	$ 23	$ 3,006	$ 86	$ 16,572	$ 109

Note: Excluded from the gross unrecognized losses presented in the table above is $(582) million of net unrealized losses recorded in *AOCI* as of December 31, 2019, 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 December 31, 2019.

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

	March 31, 2020		December 31, 2019	
In millions of dollars	**Amortized cost**	**Fair value**	**Amortized cost**	Fair value
Mortgage-backed securities				
Due within 1 year	**$ 14**	**$ 14**	$ 17	$ 17
After 1 but within 5 years	**474**	**486**	458	463
After 5 but within 10 years	**1,604**	**1,757**	1,662	1,729
After 10 years[1]	**47,944**	**49,762**	46,121	47,081
Total	**$ 50,036**	**$ 52,019**	$ 48,258	$ 49,290
State and municipal				
Due within 1 year	**$ 52**	**$ 50**	$ 2	$ 26
After 1 but within 5 years	**89**	**90**	123	160
After 5 but within 10 years	**577**	**604**	597	590
After 10 years[1]	**8,551**	**9,016**	8,382	8,755
Total	**$ 9,269**	**$ 9,760**	$ 9,104	$ 9,531
Foreign government				
Due within 1 year	**$ 521**	**$ 522**	$ 650	$ 652
After 1 but within 5 years	**1,032**	**1,071**	1,284	1,318
After 5 but within 10 years	**—**	**—**	—	—
After 10 years[1]	**—**	**—**	—	—
Total	**$ 1,553**	**$ 1,593**	$ 1,934	$ 1,970
All other[2]				
Due within 1 year	**$ —**	**$ —**	$ —	$ —
After 1 but within 5 years	**—**	**—**	—	—
After 5 but within 10 years	**7,092**	**6,753**	8,545	8,543
After 10 years[1]	**14,441**	**13,457**	12,934	12,889
Total	**$ 21,533**	**$ 20,210**	$ 21,479	$ 21,432
Total debt securities HTM	**$ 82,391**	**$ 83,582**	$ 80,775	$ 82,223

(1) Investments with no stated maturities are included as contractual maturities of greater than 10 years. Actual maturities may differ due to call or prepayment rights.
(2) Includes corporate and asset-backed securities.

HTM Debt Securities Delinquency and Non-Accrual Details

Citi did not have any HTM securities that were delinquent or on non-accrual status at March 31, 2020.

There were no purchased credit-deteriorated HTM debt securities held by the Company as of March 31, 2020.

Evaluating Investments for Impairment

AFS Debt Securities

Overview—AFS Debt Securities
The Company conducts periodic reviews of all AFS debt securities with unrealized losses to evaluate whether the impairment resulted from expected credit losses or from other factors and to evaluate the Company's intent to sell such securities.

An AFS debt security is impaired when the current fair value of an individual AFS debt security is less than its amortized cost basis.

The Company recognizes the entire difference between amortized cost basis and fair value in earnings for impaired AFS debt securities that Citi has an intent to sell or for which Citi believes it will more-likely-than-not be required to sell prior to recovery of the amortized cost basis. However, for those AFS 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 by recording an allowance for credit losses. Any remaining fair value decline for such securities is recorded in *AOCI*. The Company does not consider the length of time that the fair value of a security is below its amortized cost when determining if a credit loss exists.

For AFS debt securities, credit losses exist where Citi does not expect to receive contractual principal and interest cash flows sufficient to recover the entire amortized cost basis of a security. The allowance for credit losses is limited to the amount by which the AFS debt security's amortized cost basis exceeds its fair value. The allowance is increased or decreased if credit conditions subsequently worsen or improve. Reversals of credit losses are recognized in earnings.

The Company's review for impairment of AFS debt securities generally entails:

- identification and evaluation of impaired investments;
- consideration of evidential matter, including an evaluation of factors or triggers that could cause individual positions to qualify as credit impaired and those that would not support credit impairment; and
- documentation of the results of these analyses, as required under business policies.

The sections below describe the Company's process for identifying expected credit impairments for debt security types that have the most significant unrealized losses as of March 31, 2020.

Mortgage-Backed Securities

Citi records no allowances for credit losses on U.S. government-agency-guaranteed mortgage-backed securities, because the Company expects to incur no credit losses in the event of default due to a history of incurring no credit losses and due to the nature of the counterparties.

State and Municipal Securities

The process for estimating credit losses in Citigroup's AFS state and municipal bonds is primarily based on a credit analysis that incorporates third-party credit ratings. Citi 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 Aa2/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 AFS state and municipal bonds with unrealized losses that Citi plans to sell, or would be more-likely-than-not required to sell, the full impairment is recognized in earnings. For AFS state and municipal bonds where Citi has no intent to sell and it is more-likely-than-not that the Company will not be required to sell, Citi records an allowance for expected credit losses for the amount it expects not to collect, capped at the difference between the bond's amortized cost basis and fair value.

Equity Method Investments

Management assesses equity method investments that have fair values that are less than their respective carrying values for other-than-temporary impairment (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 more-likely-than-not 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 more-likely-than-not 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 Impairment

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

In millions of dollars	**Three Months Ended March 31, 2020**			Three Months Ended March 31, 2019			
	AFS	**Other assets**	**Total**	AFS	HTM	Other assets	Total
Impairment losses related to debt securities that the Company does not intend to sell nor will likely be required to sell:							
Total impairment losses recognized during the period	**$ —**	**$ —**	**$ —**	$ —	$ —	$ —	$ —
Less: portion of impairment loss recognized in *AOCI* (before taxes)	**—**	**—**	**—**	—	—	—	—
Net impairment losses recognized in earnings for debt securities that the Company does not intend to sell nor will likely be required to sell	**$ —**	**$ —**	**$ —**	$ —	$ —	$ —	$ —
Impairment losses recognized in earnings for debt securities that the Company intends to sell, would more-likely-than-not be required to sell or will be subject to an issuer call deemed probable of exercise	**52**	**—**	**52**	3	—	—	3
Total impairment losses recognized in earnings	**$ 52**	**$ —**	**$ 52**	$ 3	$ —	$ —	$ 3

The following are three-month rollforwards of the credit-related impairments recognized in earnings for AFS debt securities held that the Company does not intend to sell nor will likely be required to sell:

	Cumulative credit losses recognized in earnings on debt securities still held				
In millions of dollars	December 31, 2019 balance	**Credit impairments recognized in earnings on securities not previously impaired**	**Credit impairments recognized in earnings on securities that have been previously impaired**	**Changes due to credit-impaired securities sold, transferred or matured**	**March 31, 2020 balance**
AFS debt securities					
Mortgage-backed securities	$ 1	**$ —**	**$ —**	**$ —**	**$ 1**
State and municipal	4	**—**	**—**	**—**	**4**
Corporate	4	**—**	**—**	**—**	**4**
All other debt securities	1	**—**	**—**	**—**	**1**
Total credit losses recognized for AFS debt securities	$ 10	**$ —**	**$ —**	**$ —**	**$ 10**

In millions of dollars	Cumulative OTTI credit losses recognized in earnings on debt securities still held: December 31, 2018 balance	Credit impairments recognized in earnings on securities not previously impaired	Credit impairments recognized in earnings on securities that have been previously impaired	Changes due to credit-impaired securities sold, transferred or matured	March 31, 2019 balance
AFS debt securities					
Mortgage-backed securities	$ 1	$ —	$ —	$ —	$ 1
State and municipal	—	—	—	—	—
Corporate	4	—	—	—	4
All other debt securities	—	—	—	—	—
Total OTTI credit losses recognized for AFS debt securities	$ 5	$ —	$ —	$ —	$ 5
HTM debt securities					
Mortgage-backed securities	$ —	$ —	$ —	$ —	$ —
State and municipal	—	—	—	—	—
Total OTTI credit losses recognized for HTM debt securities	$ —	$ —	$ —	$ —	$ —

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 March 31, 2020 and December 31, 2019:

In millions of dollars	**March 31, 2020**	December 31, 2019
Measurement alternative:		
Carrying value	**$ 741**	$ 700

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

	Three Months Ended March 31,	
In millions of dollars	**2020**	2019
Measurement alternative[1]:		
Impairment losses	**$ 3**	$ 5
Downward changes for observable prices	**—**	—
Upward changes for observable prices	**25**	66

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

	Life-to-date amounts on securities still held
In millions of dollars	**March 31, 2020**
Measurement alternative:	
Impairment losses	**$ 19**
Downward changes for observable prices	**34**
Upward changes for observable prices	**367**

A similar impairment analysis is performed for non-marketable equity securities carried at cost. For the three months ended March 31, 2020 and 2019, 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 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 value		**Unfunded commitments**		**Redemption frequency (if currently eligible) monthly, quarterly, annually**	**Redemption notice period**
In millions of dollars	**March 31, 2020**	December 31, 2019	**March 31, 2020**	December 31, 2019		
Hedge funds	**$ —**	$ —	**$ —**	$ —	Generally quarterly	10–95 days
Private equity funds[1][2]	**123**	134	**62**	62	—	—
Real estate funds[2][3]	**9**	10	**18**	18	—	—
Mutual/collective investment funds	**20**	26	**—**	—	—	—
Total	**$ 152**	$ 170	**$ 80**	$ 80	—	—

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

(2) With respect to the Company's investments in private equity funds and real estate funds, distributions from each fund will be received as the underlying assets held by these funds are liquidated. It is estimated that the underlying assets of these funds will be liquidated over a period of several years as market conditions allow. Private equity and real estate funds do not allow redemption of investments by their investors. Investors are permitted to sell or transfer their investments, subject to the approval of the general partner or investment manager of these funds, which generally may not be unreasonably withheld.

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

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 1 to the Consolidated Financial Statements and Notes 1 and 14 to the Consolidated Financial Statements in Citi's 2019 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, delinquencies and non-accrual details:

Amortized Cost Basis by Consumer Loan Delinquency and Non-Accrual Status at March 31, 2020

In millions of dollars	Total current[1][2]	30–89 days past due[3]	≥ 90 days past due[3]	Past due government guaranteed[4]	Total loans	Non-accrual loans for which there are no loan loss reserves	Non-accrual loans for which there are loan loss reserves	Total non-accrual	90 days past due and accruing
In North America offices[5]									
Residential first mortgages[6]	$ 46,227	$ 390	$ 230	$ 413	$ 47,260	$ 142	$ 358	$ 500	$ 274
Home equity loans[7][8]	8,608	127	201	—	8,936	28	379	407	—
Credit cards	133,794	1,673	1,849	—	137,316	—	—	—	1,849
Personal, small business and other	3,631	33	11	—	3,675	—	19	19	—
Total	$ 192,260	$ 2,223	$ 2,291	$ 413	$197,187	$ 170	$ 756	$ 926	$ 2,123
In offices outside North America[5]									
Residential first mortgages[6]	$ 35,033	$ 218	$ 149	$ —	$ 35,400	$ —	$ 375	$ 375	$ —
Credit cards	21,073	403	325	—	21,801	—	243	243	236
Personal, small business and other	33,645	278	119	—	34,042	7	148	155	—
Total	$ 89,751	$ 899	$ 593	$ —	$ 91,243	$ 7	$ 766	$ 773	$ 236
Total Citigroup[9]	$ 282,011	$ 3,122	$ 2,884	$ 413	$288,430	$ 177	$ 1,522	$ 1,699	$ 2,359

(1) Loans less than 30 days past due are presented as current.
(2) Includes $18 million of residential first mortgages recorded at fair value.
(3) Excludes loans guaranteed by U.S. government-sponsored agencies.
(4) Consists of residential first mortgages that are guaranteed by U.S. government-sponsored agencies that are 30–89 days past due of $0.1 billion and 90 days or more past due of $0.3 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 $771 million. Unearned income on consumer loans primarily represents unamortized origination fees and costs, premiums and discounts.

Interest Income Recognized for Non-Accrual Consumer Loans During the Quarter Ended March 31, 2020

In millions of dollars	Interest income
In North America offices[1]	
Residential first mortgages	$ 3
Home equity loans	2
Credit cards	—
Personal, small business and other	—
Total	**$ 5**
In offices outside North America[1]	
Residential first mortgages	$ —
Credit cards	—
Personal, small business and other	—
Total	**$ —**
Total Citigroup	**$ 5**

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

Amortized Cost Basis by Consumer Loan Delinquency and Non-Accrual Status at December 31, 2019

In millions of dollars	Total current[1][2]	30–89 days past due[3]	≥ 90 days past due[3]	Past due government guaranteed[4]	Total loans[2]	Total non-accrual	90 days past due and accruing
In North America offices[5]							
Residential first mortgages[6]	$ 45,942	$ 411	$ 221	$ 434	$ 47,008	$ 479	$ 288
Home equity loans[7][8]	8,860	174	189	—	9,223	405	—
Credit cards	145,477	1,759	1,927	—	149,163	—	1,927
Personal, small business and other	3,641	44	14	—	3,699	21	—
Total	$ 203,920	$ 2,388	$ 2,351	$ 434	$ 209,093	$ 905	$ 2,215
In offices outside North America[5]							
Residential first mortgages[6]	$ 37,316	$ 210	$ 160	$ —	$ 37,686	$ 421	$ —
Credit cards	25,111	426	372	—	25,909	310	242
Personal, small business and other	36,456	272	132	—	36,860	180	—
Total	$ 98,883	$ 908	$ 664	$ —	$ 100,455	$ 911	$ 242
Total Citigroup[9]	$ 302,803	$ 3,296	$ 3,015	$ 434	$ 309,548	$ 1,816	$ 2,457

(1) Loans less than 30 days past due are presented as current.
(2) Includes $18 million of residential first mortgages recorded at fair value.
(3) Excludes loans guaranteed by U.S. government-sponsored agencies.
(4) Consists of residential first mortgages that are guaranteed by U.S. government-sponsored agencies that are 30–89 days past due of $0.1 billion and 90 days or more past due of $0.3 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 $783 million. Unearned income on consumer loans primarily represents unamortized origination fees and costs, premiums and discounts.

During the three months ended March 31, 2020 and 2019, the Company sold and/or reclassified to HFS $0.0 billion and $1.9 billion, respectively, of consumer loans.

Consumer Credit Scores (FICO)

The following tables provide details on the Fair Isaac Corporation (FICO) scores for Citi's U.S. consumer loan portfolio based on end-of-period receivables by year of origination. FICO scores are updated monthly for substantially all of the portfolio or, otherwise, on a quarterly basis for the remaining portfolio.

FICO score distribution in U.S. portfolio[1][2][3]	**March 31, 2020**		
In millions of dollars	**Less than 680**	**680 to 760**	**Greater than 760**
Residential first mortgages			
2020	**$ 33**	**$ 699**	**$ 1,337**
2019	**229**	**3,054**	**6,166**
2018	**314**	**1,010**	**1,754**
2017	**366**	**1,165**	**2,326**
2016	**417**	**1,823**	**4,814**
Prior	**2,247**	**5,425**	**12,131**
Total residential first mortgages	**$ 3,606**	**$ 13,176**	**$ 28,528**
Credit cards	**$ 32,912**	**$ 56,763**	**$ 44,486**
Credit cards and line-of-credit arrangements converted to term loans	—	—	—
Home equity loans (pre-reset)	**342**	**1,189**	**1,622**
Home equity loans (post-reset)	**1,491**	**2,130**	**1,869**
Total home equity loans	**$ 1,833**	**$ 3,319**	**$ 3,491**
Installment and other			
2020	**$ 28**	**$ 53**	**$ 48**
2019	**133**	**189**	**150**
2018	**122**	**173**	**105**
2017	**38**	**64**	**51**
2016	**20**	**30**	**20**
Prior	**197**	**360**	**513**
Personal, small business and other	**$ 538**	**$ 869**	**$ 887**
Total	**$ 38,889**	**$ 74,127**	**$ 77,392**

FICO Score Distribution in U.S. Portfolio

FICO score distribution in U.S. portfolio[1][2][3]	December 31, 2019		
In millions of dollars	Less than 680	680 to 760	Greater than 760
Residential first mortgages	$ 3,602	$ 13,178	$ 28,235
Credit cards	33,290	59,536	52,935
Home equity loans	1,881	3,475	3,630
Personal, small business and other	564	907	1,473
Total	$ 39,337	$ 77,096	$ 86,273

(1) The FICO bands in the tables are consistent with general industry peer presentations.

(2) Excludes loans guaranteed by U.S. government-sponsored agencies, loans subject to long-term standby commitments (LTSC) with U.S. government-sponsored agencies and loans recorded at fair value.

(3) 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 by year of origination. 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]	**March 31, 2020**		
In millions of dollars	**Less than or equal to 80%**	**> 80% but less than or equal to 100%**	**Greater than 100%**
Residential first mortgages			
2020	**$ 1,706**	**$ 363**	**$ —**
2019	**7,825**	**1,624**	**5**
2018	**2,310**	**736**	**39**
2017	**3,307**	**547**	**10**
2016	**6,851**	**208**	**5**
Prior	**19,646**	**179**	**26**
Total residential first mortgages	**$ 41,645**	**$ 3,657**	**$ 85**
Home equity loans (pre-reset)	**$ 3,034**	**$ 86**	**$ 13**
Home equity loans (post-reset)	**4,561**	**698**	**210**
Total home equity loans	**$ 7,595**	**$ 784**	**$ 223**
Total	**$ 49,240**	**$ 4,441**	**$ 308**

LTV distribution in U.S. portfolio[1][2]	December 31, 2019		
In millions of dollars	Less than or equal to 80%	> 80% but less than or equal to 100%	Greater than 100%
Residential first mortgages	$ 41,705	$ 3,302	$ 98
Home equity loans	7,934	819	235
Total	$ 49,639	$ 4,121	$ 333

(1) Excludes loans guaranteed by U.S. government-sponsored agencies, loans subject to LTSCs with U.S. government-sponsored agencies 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:

	Balance at March 31, 2020				Three Months Ended March 31,	
					2020	2019
In millions of dollars	**Recorded investment[1][2]**	**Unpaid principal balance**	**Related specific allowance[3]**	**Average carrying value[4]**	**Interest income recognized[5]**	Interest income recognized[5]
Mortgage and real estate						
Residential first mortgages	$ 1,584	$ 1,775	$ 111	$ 1,799	**$ 14**	$ 17
Home equity loans	572	800	21	612	**3**	2
Credit cards	1,913	1,928	823	1,903	**26**	26
Installment and other						
Personal, small business and other	410	442	129	599	**15**	8
Total	**$ 4,479**	**$ 4,945**	**$ 1,084**	**$ 4,913**	**$ 58**	$ 53

(1) Recorded investment in a loan includes net deferred loan fees and costs, unamortized premium or discount and direct write-downs and includes accrued interest only on credit card loans.
(2) $220 million of residential first mortgages and $176 million of home equity loans do not have a specific allowance.
(3) Included in the *Allowance for loan losses*.
(4) Average carrying value represents the average recorded investment ending balance for the last four quarters and does not include the related specific allowance.
(5) Includes amounts recognized on both an accrual and cash basis.

	Balance at December 31, 2019			
In millions of dollars	Recorded investment[1][2]	Unpaid principal balance	Related specific allowance[3]	Average carrying value[4]
Mortgage and real estate				
Residential first mortgages	$ 1,666	$ 1,838	$ 161	$ 1,925
Home equity loans	592	824	123	637
Credit cards	1,931	2,288	771	1,890
Installment and other				
Personal, small business and other	419	455	135	683
Total	$ 4,608	$ 5,405	$ 1,190	$ 5,135

(1) Recorded investment in a loan includes net deferred loan fees and costs, unamortized premium or discount and direct write-downs and includes accrued interest only on credit card loans.
(2) $405 million of residential first mortgages and $212 million of home equity loans do not have a specific allowance.
(3) Included in the *Allowance for credit losses on loans*.
(4) Average carrying value represents the average recorded investment ending balance for the last four quarters and does not include the related specific allowance.

Consumer Troubled Debt Restructurings

In millions of dollars, except number of loans modified	For the Three Months Ended March 31, 2020					
	Number of loans modified	**Post-modification recorded investment[1][2]**	**Deferred principal[3]**	**Contingent principal forgiveness[4]**	**Principal forgiveness[5]**	**Average interest rate reduction**
North America						
Residential first mortgages	**277**	**$ 44**	**$ —**	**$ —**	**$ —**	**—%**
Home equity loans	**82**	**8**	**—**	**—**	**—**	**2**
Credit cards	**67,282**	**305**	**—**	**—**	**—**	**17**
Personal, small business and other	**433**	**4**	**—**	**—**	**—**	**6**
Total[6]	**68,074**	**$ 361**	**$ —**	**$ —**	**$ —**	
International						
Residential first mortgages	**536**	**$ 14**	**$ —**	**$ —**	**$ —**	**5%**
Credit cards	**19,315**	**73**	**—**	**—**	**3**	**16**
Personal, small business and other	**7,654**	**52**	**—**	**—**	**2**	**11**
Total[6]	**27,505**	**$ 139**	**$ —**	**$ —**	**5**	

Consumer Troubled Debt Restructurings

In millions of dollars, except number of loans modified	For the Three Months Ended March 31, 2019					
	Number of loans modified	Post-modification recorded investment[1][7]	Deferred principal[3]	Contingent principal forgiveness[4]	Principal forgiveness[5]	Average interest rate reduction
North America						
Residential first mortgages	493	$ 74	$ —	$ —	$ —	—%
Home equity loans	206	21	1	—	—	2
Credit cards	72,247	305	—	—	—	18
Personal, small business and other	356	3	—	—	—	5
Total[6]	73,302	$ 403	$ 1	$ —	$ —	
International						
Residential first mortgages	725	$ 20	$ —	$ —	$ —	—%
Credit cards	18,493	75	—	—	3	16
Personal, small business and other	7,644	51	—	—	2	9
Total[6]	26,862	$ 146	$ —	$ —	$ 5	

(1) Post-modification balances include past-due amounts that are capitalized at the modification date.
(2) Post-modification balances in *North America* include $4 million of residential first mortgages and $1 million of home equity loans to borrowers who have gone through Chapter 7 bankruptcy in the three months ended March 31, 2020. 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 March 31, 2020, 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) The above tables reflect activity for restructured loans that were considered TDRs as of the end of the reporting period.
(7) Post-modification balances in *North America* include $7 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 March 31, 2019. These amounts include $4 million of residential first mortgages and $2 million of home equity loans that were newly classified as TDRs in the three months ended March 31, 2019, based on previously received OCC guidance.

The following table presents consumer TDRs that defaulted for which the payment default occurred within one year of a permanent modification. Default is defined as 60 days past due, except for classifiably managed commercial banking loans, where default is defined as 90 days past due.

	Three Months Ended March 31,	
In millions of dollars	**2020**	2019
North America		
Residential first mortgages	**$ 14**	$ 23
Home equity loans	**2**	3
Credit cards	**90**	70
Personal, small business and other	**1**	1
Total	**$ 107**	$ 97
International		
Residential first mortgages	**$ 6**	$ 3
Credit cards	**33**	38
Personal, small business and other	**17**	18
Total	**$ 56**	$ 59

Purchased Credit Deteriorated Assets

	Three Months Ended March 31, 2020		
In millions of dollars	**Credit cards**	**Mortgages[1]**	**Installment and other**
Purchase price	**$ 4**	**$ 9**	**$ —**
Allowance for credit losses at acquisition date	**4**	—	—
Discount or premium attributable to non-credit factors	—	—	—
Par value (amortized cost basis)	**$ 8**	**$ 9**	**$ —**

(1) Includes loans sold to agencies that were bought back at par due to repurchase agreements.

Corporate Loans

Corporate loans represent loans and leases managed by *ICG*. The following table presents information by corporate loan type:

In millions of dollars	**March 31, 2020**	December 31, 2019
In North America offices[1]		
Commercial and industrial	**$ 81,231**	$ 55,929
Financial institutions	**60,653**	53,922
Mortgage and real estate[2]	**55,428**	53,371
Installment and other	**30,591**	31,238
Lease financing	**988**	1,290
Total	**$ 228,891**	$ 195,750
In offices outside North America[1]		
Commercial and industrial	**$ 121,703**	$ 112,668
Financial institutions	**37,003**	40,211
Mortgage and real estate[2]	**9,639**	9,780
Installment and other	**31,728**	27,303
Lease financing	**72**	95
Governments and official institutions	**3,554**	4,128
Total	**$ 203,699**	$ 194,185
Corporate loans, net of unearned income[3]	**$ 432,590**	$ 389,935

(1) North America includes the U.S., Canada and Puerto Rico. Mexico is included in offices outside North America. The classification between offices in North America and outside North America is based on the domicile of the booking unit. The difference between the domicile of the booking unit and the domicile of the managing unit is not material.

(2) Loans secured primarily by real estate.

(3) Corporate loans are net of unearned income of ($791) million and ($814) million at March 31, 2020 and December 31, 2019, 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 $0.2 billion and $0.5 billion of corporate loans during the three months ended March 31, 2020 and 2019, respectively. The Company did not have significant purchases of corporate loans classified as held-for-investment for the three months ended March 31, 2020 or 2019.

Corporate Loan Delinquencies and Non-Accrual Details at March 31, 2020

In millions of dollars	30–89 days past due and accruing[1]	≥ 90 days past due and accruing[1]	Total past due and accruing	Total non-accrual[2]	Total current[3]	Total loans[4]
Commercial and industrial	**$ 1,166**	**$ 163**	**$ 1,329**	**$ 1,814**	**$ 197,154**	**$ 200,297**
Financial institutions	**1,178**	**51**	**1,229**	**29**	**94,748**	**96,006**
Mortgage and real estate	**591**	**24**	**615**	**204**	**64,398**	**65,217**
Lease financing	**28**	**8**	**36**	**41**	**983**	**1,060**
Other	**167**	**20**	**187**	**396**	**65,446**	**66,029**
Loans at fair value						**3,981**
Total	**$ 3,130**	**$ 266**	**$ 3,396**	**$ 2,484**	**$ 422,729**	**$ 432,590**

Corporate Loan Delinquencies and Non-Accrual Details at December 31, 2019

In millions of dollars	30–89 days past due and accruing[1]	≥ 90 days past due and accruing[1]	Total past due and accruing	Total non-accrual[2]	Total current[3]	Total loans[4]
Commercial and industrial	$ 676	$ 93	$ 769	$ 1,828	$ 164,249	$ 166,846
Financial institutions	791	3	794	50	91,008	91,852
Mortgage and real estate	534	4	538	188	62,425	63,151
Lease financing	58	9	67	41	1,277	1,385
Other	190	22	212	81	62,341	62,634
Loans at fair value						4,067
Total	$ 2,249	$ 131	$ 2,380	$ 2,188	$ 381,300	$ 389,935

(1) Corporate loans that are 90 days past due are generally classified as non-accrual. Corporate loans are considered past due when principal or interest is contractually due but unpaid.
(2) 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.
(3) Loans less than 30 days past due are presented as current.
(4) Total loans include loans at fair value, which are not included in the various delinquency columns.

Corporate Loans Credit Quality Indicators

	Recorded investment in loans[1]								
	Term loans by year of origination							Totals as of	
In millions of dollars	2020	2019	2018	2017	2016	Prior	Revolving line of credit arrangements[2]	March 31, 2020	December 31, 2019
Investment grade[3]									
Commercial and industrial[4]	$ 31,204	$ 14,056	$ 8,343	$ 6,340	$ 2,838	$ 11,737	$ 51,963	$ 126,481	$ 110,797
Financial institutions[4]	14,705	7,338	4,327	1,897	1,777	6,563	47,013	83,620	80,533
Mortgage and real estate	2,717	7,406	6,391	3,904	1,809	3,164	1,668	27,059	27,571
Other[5]	8,587	5,600	5,347	1,449	782	7,626	29,708	59,099	58,155
Total investment grade	$ 57,213	$ 34,400	$ 24,408	$ 13,590	$ 7,206	$ 29,090	$ 130,352	$ 296,259	$ 277,056
Non-investment grade[3]									
Accrual									
Commercial and industrial[4]	$ 14,634	$ 9,193	$ 5,929	$ 3,488	$ 1,400	$ 6,277	$ 30,827	$ 71,748	$ 54,220
Financial institutions[4]	4,233	3,494	580	213	67	1,305	2,466	12,358	11,269
Mortgage and real estate	258	813	1,405	845	375	490	1,292	5,478	3,811
Other[5]	1,130	1,181	771	165	175	1,199	2,933	7,554	5,734
Non-accrual									
Commercial and industrial[4]	11	81	68	155	79	431	989	1,814	1,828
Financial institutions	—	—	4	—	—	24	1	29	50
Mortgage and real estate	2	—	2	9	5	68	118	204	188
Other[5]	—	—	2	36	—	59	340	437	122
Total non-investment grade	$ 20,268	$ 14,762	$ 8,761	$ 4,911	$ 2,101	$ 9,853	$ 38,966	$ 99,622	$ 77,222
Non-rated private bank loans managed on a delinquency basis[3][6]	$ 2,032	$ 7,782	$ 3,971	$ 4,200	$ 4,831	$ 9,912	$ —	$ 32,728	$ 31,590
Loans at fair value[7]								3,981	4,067
Corporate loans, net of unearned income	$ 79,513	$ 56,944	$ 37,140	$ 22,701	$ 14,138	$ 48,855	$ 169,318	$ 432,590	$ 389,935

(1) Recorded investment in a loan includes net deferred loan fees and costs, unamortized premium or discount, less any direct write-downs.
(2) There were no revolving line of credit arrangements that converted to term loans during the quarter.
(3) Held-for-investment loans are accounted for on an amortized cost basis.
(4) Includes certain short-term loans with less than one year in tenor.
(5) Other includes installment and other, lease financing and loans to government and official institutions.
(6) Non-rated private bank loans mainly include mortgage and real estate loans to private banking clients.
(7) Loans at fair value include loans to commercial and industrial, financial institutions, mortgage and real estate and other.

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:

	March 31, 2020				Three Months Ended March 31, 2020	Three Months Ended March 31, 2019
In millions of dollars	**Recorded investment[1]**	**Unpaid principal balance**	**Related specific allowance**	**Average carrying value[2]**	**Interest income recognized**	Interest income recognized
Non-accrual corporate loans						
Commercial and industrial	**$ 1,814**	**$ 2,374**	**$ 263**	**$ 1,629**	**$ 2**	$ 14
Financial institutions	**29**	**113**	**—**	**38**	**—**	—
Mortgage and real estate	**204**	**401**	**10**	**192**	**—**	—
Lease financing	**41**	**41**	**—**	**21**	**—**	—
Other	**396**	**462**	**10**	**168**	**13**	—
Total non-accrual corporate loans	**$ 2,484**	**$ 3,391**	**$ 283**	**$ 2,048**	**$ 15**	$ 14

	December 31, 2019			
In millions of dollars	Recorded investment[1]	Unpaid principal balance	Related specific allowance	Average carrying value[2]
Non-accrual corporate loans				
Commercial and industrial	$ 1,828	$ 1,942	$ 283	$ 1,449
Financial institutions	50	120	2	63
Mortgage and real estate	188	362	10	192
Lease financing	41	41	—	8
Other	81	202	4	76
Total non-accrual corporate loans	$ 2,188	$ 2,667	$ 299	$ 1,788

	March 31, 2020		December 31, 2019	
In millions of dollars	**Recorded investment[1]**	**Related specific allowance**	Recorded investment[1]	Related specific allowance
Non-accrual corporate loans with specific allowances				
Commercial and industrial	**$ 1,060**	**$ 263**	$ 714	$ 283
Financial institutions	**—**	**—**	40	2
Mortgage and real estate	**45**	**10**	48	10
Lease financing	**—**	**—**	—	—
Other	**14**	**10**	7	4
Total non-accrual corporate loans with specific allowance	**$ 1,119**	**$ 283**	$ 809	$ 299
Non-accrual corporate loans without specific allowance				
Commercial and industrial	**$ 754**		$ 1,114	
Financial institutions	**29**		10	
Mortgage and real estate	**159**		140	
Lease financing	**41**		41	
Other	**382**		74	
Total non-accrual corporate loans without specific allowance	**$ 1,365**	**N/A**	$ 1,379	N/A

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

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

N/A Not applicable

Corporate Troubled Debt Restructurings

For the three months ended March 31, 2020:

In millions of dollars	**Carrying value of TDRs modified during the period**	**TDRs involving changes in the amount and/or timing of principal payments[1]**	**TDRs involving changes in the amount and/or timing of interest payments[2]**	**TDRs involving changes in the amount and/or timing of both principal and interest payments**
Commercial and industrial	**$ 94**	**$ —**	**$ —**	**$ 94**
Mortgage and real estate	**4**	**—**	**—**	**4**
Total	**$ 98**	**$ —**	**$ —**	**$ 98**

For the three months ended March 31, 2019:

In millions of dollars	Carrying value of TDRs modified during the period	TDRs involving changes in the amount and/or timing of principal payments[1]	TDRs involving changes in the amount and/or timing of interest payments[2]	TDRs involving changes in the amount and/or timing of both principal and interest payments
Commercial and industrial	$ 93	$ —	$ —	$ 93
Mortgage and real estate	4	—	—	4
Total	$ 97	$ —	$ —	$ 97

(1) TDRs involving changes in the amount or timing of principal payments may involve principal forgiveness or deferral of periodic and/or final principal payments. Because forgiveness of principal is rare for corporate loans, modifications typically have little to no impact on the loans' projected cash flows and thus little to no impact on the allowance established for the loans. Charge-offs for amounts deemed uncollectable may be recorded at the time of the restructuring or may have already been recorded in prior periods such that no charge-off is required at the time of the modification.

(2) TDRs involving changes in the amount or timing of interest payments may involve a below-market interest rate.

The following table presents total corporate loans modified in a TDR as well as those TDRs that defaulted and for which the payment default occurred within one year of a permanent modification. Default is defined as 60 days past due, except for classifiably managed commercial banking loans, where default is defined as 90 days past due.

In millions of dollars	**TDR balances at March 31, 2020**	**TDR loans in payment default during the three months ended March 31, 2020**	TDR balances at March 31, 2019	TDR loans in payment default during the three months ended March 31, 2019
Commercial and industrial	**$ 685**	**$ —**	$ 636	$ —
Financial institutions	**—**	**—**	13	—
Mortgage and real estate	**77**	**—**	112	—
Other	**15**	**—**	4	—
Total[1]	**$ 777**	**$ —**	$ 765	$ —

(1) 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

In millions of dollars	Three Months Ended March 31, 2020	2019
Allowance for credit losses on loans (ACLL) at beginning of period	**$ 12,783**	$ 12,315
Adjustment to opening balance for CECL adoption[1]	4,201	—
Adjusted ACLL at beginning of period	**$ 16,984**	$ 12,315
Gross credit losses on loans	**$ (2,479)**	$ (2,345)
Gross recoveries on loans[2]	**371**	397
Net credit losses on loans (NCLs)	**$ (2,108)**	$ (1,948)
NCLs	**$ 2,108**	$ 1,948
Net reserve builds (releases) for loans	**4,112**	67
Net specific reserve builds (releases) for loans	**224**	(71)
Total provision for credit losses on loans (PCLL)	**$ 6,444**	$ 1,944
Initial allowance for credit losses on newly purchased credit deteriorated assets during the period	**4**	—
Other, net (see table below)	**(483)**	18
ACLL at end of period	**$ 20,841**	$ 12,329
Allowance for credit losses on unfunded lending commitments (ACLUC) at beginning of period[3]	**$ 1,456**	$ 1,367
Adjustment to opening balance for CECL adoption[1]	**(194)**	—
Provision (release) for credit losses on unfunded lending commitments	**557**	24
Other, net	**(6)**	—
ACLUC at end of period[3]	**$ 1,813**	$ 1,391
Total allowance for credit losses on loans, leases and unfunded lending commitments	**$ 22,654**	$ 13,720

Other, net details	Three Months Ended March 31,	
Sales or transfers of various consumer loan portfolios to HFS	**$ (3)**	$ —
FX translation[4]	**(483)**	26
Other	**3**	(8)
Other, net	**$ (483)**	$ 18

(1) See Note 1 to the Consolidated Financial Statements for further discussion on the impact of Citi's adoption of CECL.
(2) Recoveries have been reduced by certain collection costs that are incurred only if collection efforts are successful.
(3) Represents additional credit loss reserves for unfunded lending commitments and letters of credit recorded in *Other liabilities* on the Consolidated Balance Sheet.
(4) Primarily related to consumer. The corporate allowance is predominantly sourced in U.S. dollars.

Allowance for Credit Losses and End-of-Period Loans

	Three Months Ended					
	March 31, 2020			March 31, 2019		
In millions of dollars	**Corporate**	**Consumer**	**Total**	Corporate	Consumer	Total
Allowance for credit losses on loans at beginning of period	**$ 2,886**	**$ 9,897**	**$ 12,783**	$ 2,811	$ 9,504	$ 12,315
Adjustment to opening balance for CECL adoption	**(721)**	**4,922**	**4,201**	—	—	—
Charge-offs	**(138)**	**(2,341)**	**(2,479)**	(100)	(2,245)	(2,345)
Recoveries	**11**	**360**	**371**	21	376	397
Replenishment of net charge-offs	**127**	**1,981**	**2,108**	79	1,869	1,948
Net reserve builds (releases)	**1,268**	**2,844**	**4,112**	4	63	67
Net specific reserve builds (releases)	**48**	**176**	**224**	(79)	8	(71)
Initial allowance for credit losses on purchased credit deteriorated assets	**—**	**4**	**4**	—	—	—
Other	**(30)**	**(453)**	**(483)**	(5)	23	18
Ending balance	**$ 3,451**	**$ 17,390**	**$ 20,841**	$ 2,731	$ 9,598	$ 12,329

	March 31, 2020			December 31, 2019		
In millions of dollars	**Corporate**	**Consumer**	**Total**	Corporate	Consumer	Total
Allowance for credit losses on loans						
Collectively evaluated	**$ 3,168**	**$ 16,296**	**$ 19,464**	$ 2,587	$ 8,706	$ 11,293
Individually evaluated	**283**	**1,084**	**1,367**	299	1,190	1,489
Purchased credit deteriorated	**—**	**10**	**10**	—	1	1
Total allowance for credit losses on loans	**$ 3,451**	**$ 17,390**	**$ 20,841**	$ 2,886	$ 9,897	$ 12,783
Loans, net of unearned income						
Collectively evaluated	**$ 426,125**	**$ 283,804**	**$ 709,929**	$ 383,828	$ 304,510	$ 688,338
Individually evaluated	**2,484**	**4,479**	**6,963**	2,040	4,892	6,932
Purchased credit deteriorated	**—**	**129**	**129**	—	128	128
Held at fair value	**3,981**	**18**	**3,999**	4,067	18	4,085
Total loans, net of unearned income	**$ 432,590**	**$ 288,430**	**$ 721,020**	$ 389,935	$ 309,548	$ 699,483

Allowance for Credit Losses on AFS and HTM Debt Securities

Citi did not have an allowance for credit losses on AFS debt securities at March 31, 2020.

Allowance for Credit Losses on HTM Debt Securities

	Three Months Ended March 31, 2020				
In millions of dollars	U.S. Treasury and federal agency	State and municipal	Foreign government	Asset-backed	Total HTM
Allowance for credit losses on HTM debt securities at beginning of period	$ —	$ —	$ —	$ —	$ —
Adjustment to opening balance for CECL adoption	—	61	4	5	70
Gross credit losses	—	—	—	—	—
Gross recoveries	—	—	—	—	—
Net credit losses	$ —	$ —	$ —	$ —	$ —
Net credit losses	$ —	$ —	$ —	$ —	$ —
Net reserve builds (releases)	—	5	—	1	6
Net specific reserve builds (releases)	—	—	—	—	—
Total provision for credit losses on HTM debt securities	$ —	$ 5	$ —	$ 1	$ 6
Other, net	$ —	$ —	$ —	$ —	$ —
Initial allowance for credit losses on newly purchased credit deteriorated assets during the period	—	—	—	—	—
Allowance for credit losses on HTM debt securities at end of period	$ —	$ 66	$ 4	$ 6	$ 76

Allowance for Credit Losses on Other Assets

	Three Months Ended March 31, 2020					
In millions of dollars	Cash and due from banks	Deposits with banks	Securities borrowed and purchased under agreements to resell	Brokerage receivables	All other assets	Total
Allowance for credit losses at beginning of period	$ —	$ —	$ —	$ —	$ —	$ —
Adjustment to opening balance for CECL adoption	6	14	2	1	3	26
Gross credit losses	—	—	—	—	—	—
Gross recoveries	—	—	—	—	—	—
Net credit losses (NCLs)	$ —	$ —	$ —	$ —	$ —	$ —
NCLs	$ —	$ —	$ —	$ —	$ —	$ —
Net reserve builds (releases)	(6)	(6)	3	(1)	6	(4)
Total provision for credit losses	$ (6)	$ (6)	$ 3	$ (1)	$ 6	$ (4)
Other, net	$ —	$ —	$ —	$ —	$ 32	$ 32
Allowance for credit losses on Other assets at end of period	$ —	$ 8	$ 5	$ —	$ 41	$ 54

15. GOODWILL AND INTANGIBLE ASSETS

Goodwill

The changes in *Goodwill* were as follows:

In millions of dollars	Global Consumer Banking	Institutional Clients Group	Total
Balance at December 31, 2019	$ 12,102	$ 10,024	$ 22,126
Foreign currency translation	(265)	(597)	(862)
Balance at March 31, 2020	**$ 11,837**	**$ 9,427**	**$ 21,264**

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.

During the three months ended March 31, 2020, Citi qualitatively assessed the current environment, including the estimated impact of the COVID-19 pandemic on macroeconomic variables and economic forecasts and how those might impact the fair value of reporting units. After consideration of the items above, the first quarter 2020 results, as well as the results of the 2019 impairment test which resulted in excess of reporting unit fair values over book values between approximately 33% to 134%, Citi determined it was not more-likely-than-not that the fair value of any reporting unit was below its book value as of March 31, 2020. For additional information regarding Citi's goodwill impairment testing process, see Notes 1 and 16 to the Consolidated Financial Statements in Citi's 2019 Annual Report on Form 10-K.

Refer to Note 1 for Citi's adoption of a new accounting standard regarding the subsequent measurement of goodwill.

Intangible Assets

The components of intangible assets were as follows:

	March 31, 2020			December 31, 2019		
In millions of dollars	Gross carrying amount	Accumulated amortization	Net carrying amount	Gross carrying amount	Accumulated amortization	Net carrying amount
Purchased credit card relationships	**$ 5,634**	**$ 4,060**	**$ 1,574**	$ 5,676	$ 4,059	$ 1,617
Credit card contract-related intangibles[1]	**3,417**	**1,138**	**2,279**	5,393	3,069	2,324
Core deposit intangibles	**42**	**42**	**—**	434	433	1
Other customer relationships	**424**	**281**	**143**	424	275	149
Present value of future profits	**27**	**24**	**3**	34	31	3
Indefinite-lived intangible assets	**191**	**—**	**191**	228	—	228
Other	**60**	**57**	**3**	82	77	5
Intangible assets (excluding MSRs)	**$ 9,795**	**$ 5,602**	**$ 4,193**	$ 12,271	$ 7,944	$ 4,327
Mortgage servicing rights (MSRs)[2]	**367**	**—**	**367**	495	—	495
Total intangible assets	**$ 10,162**	**$ 5,602**	**$ 4,560**	$ 12,766	$ 7,944	$ 4,822

(1) Primarily reflects contract-related intangibles associated with the American Airlines, The Home Depot, Costco and AT&T credit card program agreements, which represented 96% of the aggregate net carrying amount as of March 31, 2020 and December 31, 2019.

(2) For additional information on Citi's MSRs, see Note 18 to the Consolidated Financial Statements.

The changes in intangible assets were as follows:

In millions of dollars	Net carrying amount at December 31, 2019	**Acquisitions/ divestitures**	**Amortization**	**Impairments**	**FX translation and other**	**Net carrying amount at March 31, 2020**
Purchased credit card relationships[1]	$ 1,617	**$ 11**	**$ (50)**	**$ —**	**$ (4)**	**$ 1,574**
Credit card contract-related intangibles[2]	2,324	**9**	**(50)**	**—**	**(4)**	**2,279**
Core deposit intangibles	1	**—**	**—**	**—**	**(1)**	**—**
Other customer relationships	149	**—**	**(6)**	**—**	**—**	**143**
Present value of future profits	3	**—**	**—**	**—**	**—**	**3**
Indefinite-lived intangible assets	228	**—**	**—**	**—**	**(37)**	**191**
Other	5	**—**	**(2)**	**—**	**—**	**3**
Intangible assets (excluding MSRs)	$ 4,327	**$ 20**	**$ (108)**	**$ —**	**$ (46)**	**$ 4,193**
Mortgage servicing rights (MSRs)[3]	495					**367**
Total intangible assets	$ 4,822					**$ 4,560**

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

(2) Primarily reflects contract-related intangibles associated with the American Airlines, The Home Depot, Costco and AT&T credit card program agreements, which represented 96% of the aggregate net carrying amount at March 31, 2020 and December 31, 2019.

(3) For additional information on Citi's MSRs, including the rollforward for the three months ended March 31, 2020, 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 2019 Annual Report on Form 10-K.

Short-Term Borrowings

In millions of dollars	**March 31, 2020**	December 31, 2019
Commercial paper		
Bank[1]	**$ 12,157**	$ 10,155
Broker-dealer and other[2]	**6,016**	6,321
Total commercial paper	**$ 18,173**	$ 16,476
Other borrowings[3]	**36,778**	28,573
Total	**$ 54,951**	$ 45,049

(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 March 31, 2020 and December 31, 2019, collateralized short-term advances from the Federal Home Loan Banks were $23.4 billion and $17.6 billion, respectively. Additionally, the increase in Other borrowings as of March 31, 2020 is partially due to Citi's borrowings under certain U.S. government-sponsored liquidity programs. While these borrowings helped support the functioning of markets, they were not significant to Citi's overall liquidity profile.

Long-Term Debt

In millions of dollars	**March 31, 2020**	December 31, 2019
Citigroup Inc.[1]	**$ 156,461**	$ 150,477
Bank[2]	**62,444**	53,340
Broker-dealer and other[3]	**47,193**	44,943
Total	**$ 266,098**	$ 248,760

(1) Represents the parent holding company.
(2) Represents Citibank entities as well as other bank entities. At March 31, 2020 and December 31, 2019, collateralized long-term advances from the Federal Home Loan Banks were $16.0 billion and $5.5 billion, respectively.
(3) Represents broker-dealer and other non-bank subsidiaries that are consolidated into Citigroup Inc., the parent holding company. Certain Citigroup consolidated hedging activities are also included in this line.

Long-term debt outstanding includes trust preferred securities with a balance sheet carrying value of $1.7 billion at both March 31, 2020 and December 31, 2019.

The following table summarizes Citi's outstanding trust preferred securities at March 31, 2020:

						Junior subordinated debentures owned by trust		
Trust	**Issuance date**	**Securities issued**	**Liquidation value[1]**	**Coupon rate[2]**	**Common shares issued to parent**	**Amount**	**Maturity**	**Redeemable by issuer beginning**
In millions of dollars, except securities and share amounts								
Citigroup Capital III	Dec. 1996	194,053	$ 194	7.625%	6,003	$ 200	Dec. 1, 2036	Not redeemable
Citigroup Capital XIII	Sept. 2010	89,840,000	2,246	3 mo LIBOR + 637 bps	1,000	2,246	Oct. 30, 2040	Oct. 30, 2015
Citigroup Capital XVIII	Jun. 2007	99,901	124	3 mo LIBOR + 88.75 bps	50	124	Jun. 28, 2067	Jun. 28, 2017
Total obligated			**$ 2,564**			**$ 2,570**		

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. This differs from Citi's balance sheet carrying value due primarily to unamortized discount and issuance costs.
(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 March 31, 2020

In millions of dollars	**Net unrealized gains (losses) on debt securities**	**Debt valuation adjustment (DVA)[1]**	**Cash flow hedges[2]**	**Benefit plans[3]**	**Foreign currency translation adjustment (CTA), net of hedges[4]**	**Excluded component of fair value hedges[5]**	**Accumulated other comprehensive income (loss)**
Balance, December 31, 2019	$ (265)	$ (944)	$ 123	$ (6,809)	$ (28,391)	$ (32)	$ (36,318)
Other comprehensive income before reclassifications	3,456	3,116	1,898	(344)	(4,109)	27	4,044
Increase (decrease) due to amounts reclassified from AOCI	(328)	24	(1)	58	—	—	(247)
Change, net of taxes	$ 3,128	$ 3,140	$ 1,897	$ (286)	$ (4,109)	$ 27	$ 3,797
Balance at March 31, 2020	**$ 2,863**	**$ 2,196**	**$ 2,020**	**$ (7,095)**	**$ (32,500)**	**$ (5)**	**$ (32,521)**

Three Months Ended March 31, 2019

In millions of dollars	Net unrealized gains (losses) on investment securities	Debt valuation adjustment (DVA)[1]	Cash flow hedges[2]	Benefit plans[3]	Foreign currency translation adjustment (CTA), net of hedges[4]	Excluded component of fair value hedges[5]	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	1,226	(575)	186	(110)	58	18	803
Increase (decrease) due to amounts reclassified from AOCI	(91)	4	100	46	—	—	59
Change, net of taxes	$ 1,135	$ (571)	$ 286	$ (64)	$ 58	$ 18	$ 862
Balance at March 31, 2019	$ (1,115)	$ (379)	$ (442)	$ (6,321)	$ (28,012)	$ (39)	$ (36,308)

(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 2019 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 Mexican peso, Brazilian real, Australian dollar, South Korean won and Chilean peso against the U.S. dollar and changes in related tax effects and hedges for the three months ended March 31, 2020. Primarily reflects the movements in (by order of impact) the Mexican peso, Chilean peso, Chinese yuan and Russian ruble against the U.S. dollar and changes in related tax effects and hedges for the three months ended March 31, 2019. 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.

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

Three Months Ended March 31, 2020

In millions of dollars	**Pretax**	**Tax effect**	**After-tax**
Balance, December 31, 2019	$ (42,772)	$ 6,454	$ (36,318)
Change in net unrealized gains (losses) on debt securities	4,121	(993)	3,128
Debt valuation adjustment (DVA)	4,188	(1,048)	3,140
Cash flow hedges	2,484	(587)	1,897
Benefit plans	(418)	132	(286)
Foreign currency translation adjustment	(4,055)	(54)	(4,109)
Excluded component of fair value hedges	33	(6)	27
Change	$ 6,353	$ (2,556)	$ 3,797
Balance at March 31, 2020	**$ (36,419)**	**$ 3,898**	**$ (32,521)**

Three Months Ended March 31, 2019

In millions of dollars	Pretax	Tax effect[(1)]	After-tax
Balance, December 31, 2018	$ (44,082)	$ 6,912	$ (37,170)
Change in net unrealized gains (losses) on debt securities	1,500	(365)	1,135
Debt valuation adjustment (DVA)	(725)	154	(571)
Cash flow hedges	378	(92)	286
Benefit plans	(68)	4	(64)
Foreign currency translation adjustment	69	(11)	58
Excluded component of fair value hedges	24	(6)	18
Change	$ 1,178	$ (316)	$ 862
Balance, March 31, 2019	**$ (42,904)**	**$ 6,596**	**$ (36,308)**

(1) Includes the impact of ASU 2018-02, which transferred amounts from *AOCI* to *Retained earnings*. For additional information, see Note 19 to the Consolidated Financial Statements in Citi's 2019 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	
	Three Months Ended March 31,	
In millions of dollars	**2020**	2019
Realized (gains) losses on sales of investments	**$ (432)**	$ (130)
Gross impairment losses	**—**	3
Subtotal, pretax	**$ (432)**	$ (127)
Tax effect	**104**	36
Net realized (gains) losses on investments after-tax[1]	**$ (328)**	$ (91)
Realized DVA (gains) losses on fair value option liabilities, pretax	**$ 32**	$ 5
Tax effect	**(8)**	(1)
Net realized debt valuation adjustment, after-tax	**$ 24**	$ 4
Interest rate contracts	**$ (3)**	$ 130
Foreign exchange contracts	**1**	2
Subtotal, pretax	**$ (2)**	$ 132
Tax effect	**1**	(32)
Amortization of cash flow hedges, after-tax[2]	**$ (1)**	$ 100
Amortization of unrecognized:		
Prior service cost (benefit)	**$ (3)**	$ (4)
Net actuarial loss	**79**	65
Curtailment/settlement impact[3]	**—**	—
Subtotal, pretax	**$ 76**	$ 61
Tax effect	**(18)**	(15)
Amortization of benefit plans, after-tax[3]	**$ 58**	$ 46
Excluded component of fair value hedges, pretax	**$ —**	$ —
Tax effect	**—**	—
Excluded component of fair value hedges, after-tax	**$ —**	$ —
Foreign currency translation adjustment	**$ —**	$ —
Tax effect	**—**	—
Foreign currency translation adjustment	**$ —**	$ —
Total amounts reclassified out of *AOCI*, pretax	**$ (326)**	$ 71
Total tax effect	**79**	(12)
Total amounts reclassified out of *AOCI*, after-tax	**$ (247)**	$ 59

(1) 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.
(2) See Note 19 to the Consolidated Financial Statements for additional details.
(3) See Note 8 to the Consolidated Financial Statements for additional details.

18. SECURITIZATIONS AND VARIABLE INTEREST ENTITIES

For additional information regarding Citi's use of special purpose entities (SPEs) and variable interest entities (VIEs), see Note 21 to the Consolidated Financial Statements in Citi's 2019 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 March 31, 2020							
				Maximum exposure to loss in significant unconsolidated VIEs[1]				
				Funded exposures[2]		Unfunded exposures		
In millions of dollars	Total involvement with SPE assets	Consolidated VIE/SPE assets	Significant unconsolidated VIE assets[3]	Debt investments	Equity investments	Funding commitments	Guarantees and derivatives	Total
Credit card securitizations	$ 37,612	$ 37,612	$ —	$ —	$ —	$ —	$ —	$ —
Mortgage securitizations[4]								
U.S. agency-sponsored	109,728	—	109,728	2,000	—	—	65	2,065
Non-agency-sponsored	37,140	941	36,199	1,054	—	—	1	1,055
Citi-administered asset-backed commercial paper conduits	19,386	19,386	—	—	—	—	—	—
Collateralized loan obligations (CLOs)	17,453	—	17,453	3,918	—	—	—	3,918
Asset-based financing	207,817	5,569	202,248	24,935	1,154	9,863	—	35,952
Municipal securities tender option bond trusts (TOBs)	6,129	1,134	4,995	4	—	3,125	—	3,129
Municipal investments	20,383	—	20,383	2,662	4,221	3,030	—	9,913
Client intermediation	1,430	1,371	59	4	—	—	—	4
Investment funds	539	121	418	1	—	16	—	17
Other	62	2	60	—	—	60	—	60
Total	$ 457,679	$ 66,136	$ 391,543	$ 34,578	$ 5,375	$ 16,094	$ 66	$ 56,113

	As of December 31, 2019							
				Maximum exposure to loss in significant unconsolidated VIEs[1]				
				Funded exposures[2]		Unfunded exposures		
In millions of dollars	Total involvement with SPE assets	Consolidated VIE/SPE assets	Significant unconsolidated VIE assets[3]	Debt investments	Equity investments	Funding commitments	Guarantees and derivatives	Total
Credit card securitizations	$ 43,534	$ 43,534	$ —	$ —	$ —	$ —	$ —	$ —
Mortgage securitizations[4]								
U.S. agency-sponsored	117,374	—	117,374	2,671	—	—	72	2,743
Non-agency-sponsored	39,608	1,187	38,421	876	—	—	1	877
Citi-administered asset-backed commercial paper conduits	15,622	15,622	—	—	—	—	—	—
Collateralized loan obligations (CLOs)	17,395	—	17,395	4,199	—	—	—	4,199
Asset-based financing	196,728	6,139	190,589	23,756	1,151	9,524	—	34,431
Municipal securities tender option bond trusts (TOBs)	6,950	1,458	5,492	4	—	3,544	—	3,548
Municipal investments	20,312	—	20,312	2,636	4,274	3,034	—	9,944
Client intermediation	1,455	1,391	64	4	—	—	—	4
Investment funds	827	174	653	5	—	16	1	22
Other	352	1	351	169	—	39	—	208
Total	$ 460,157	$ 69,506	$ 390,651	$ 34,320	$ 5,425	$ 16,157	$ 74	$ 55,976

(1) The definition of maximum exposure to loss is included in the text that follows this table.
(2) Included on Citigroup's March 31, 2020 and December 31, 2019 Consolidated Balance Sheet.
(3) A significant unconsolidated VIE is an entity in which the Company has any variable interest or continuing involvement considered to be significant, regardless of the likelihood of loss.
(4) Citigroup mortgage securitizations also include agency and non-agency (private label) re-securitization activities. These SPEs are not consolidated. See "Re-securitizations" below for further discussion.

The previous tables do not include:

- certain venture capital investments made by some of the Company's private equity subsidiaries, as the Company accounts for these investments in accordance with the Investment Company Audit Guide (codified in ASC 946);
- certain investment funds for which the Company provides investment management services and personal estate trusts for which the Company provides administrative, trustee and/or investment management services;
- certain third-party sponsored private equity funds to which the Company provides secured credit facilities. The Company has no decision-making power and does not consolidate these funds, some of which may meet the definition of a VIE. The Company's maximum exposure to loss is generally limited to a loan or lending-related commitment (for more information on these positions, see Notes 14 and 26 to the Consolidated Financial Statements);
- 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 $6 billion and $6 billion at March 31, 2020 and December 31, 2019, respectively;
- 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, cross-currency swaps or where the Company is the purchaser of credit protection under a credit default swap or total return swap where the Company pays the total return on certain assets to the SPE). Receivables under such arrangements are not included in the maximum exposure amounts.

Funding Commitments for Significant Unconsolidated VIEs—Liquidity Facilities and Loan Commitments

The following table presents the notional amount of liquidity facilities and loan commitments that are classified as funding commitments in the VIE tables above:

	March 31, 2020		December 31, 2019	
In millions of dollars	**Liquidity facilities**	**Loan/equity commitments**	Liquidity facilities	Loan/equity commitments
Asset-based financing	**$ —**	**$ 9,863**	$ —	$ 9,524
Municipal securities tender option bond trusts (TOBs)	**3,125**	**—**	3,544	—
Municipal investments	**—**	**3,030**	—	3,034
Investment funds	**—**	**16**	—	16
Other	**—**	**60**	—	39
Total funding commitments	**$ 3,125**	**$ 12,969**	$ 3,544	$ 12,613

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	**March 31, 2020**	December 31, 2019
Cash	**$ —**	$ —
Trading account assets	**2.0**	2.6
Investments	**9.7**	9.9
Total loans, net of allowance	**27.8**	26.7
Other	**0.5**	0.5
Total assets	**$ 40.0**	$ 39.7

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	**March 31, 2020**	December 31, 2019
Ownership interests in principal amount of trust credit card receivables		
Sold to investors via trust-issued securities	**$ 19.7**	$ 19.7
Retained by Citigroup as trust-issued securities	**5.4**	6.2
Retained by Citigroup via non-certificated interests	**14.6**	17.8
Total	**$ 39.7**	$ 43.7

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

	Three Months Ended March 31,	
In billions of dollars	**2020**	2019
Proceeds from new securitizations	**$ —**	$ —
Pay down of maturing notes	**—**	(2.5)

Master Trust Liabilities (at Par Value)

The weighted average maturity of the third-party term notes issued by the Master Trust was 2.8 years as of March 31, 2020 and 3.1 years as of December 31, 2019.

In billions of dollars	**Mar. 31, 2020**	Dec. 31, 2019
Term notes issued to third parties	**$ 18.2**	$ 18.2
Term notes retained by Citigroup affiliates	**3.5**	4.3
Total Master Trust liabilities	**$ 21.7**	$ 22.5

Omni Trust Liabilities (at Par Value)

The weighted average maturity of the third-party term notes issued by the Omni Trust was 1.4 years as of March 31, 2020 and 1.6 years as of December 31, 2019.

In billions of dollars	**Mar. 31, 2020**	Dec. 31, 2019
Term notes issued to third parties	**$ 1.5**	$ 1.5
Term notes retained by Citigroup affiliates	**1.9**	1.9
Total Omni Trust liabilities	**$ 3.4**	$ 3.4

Mortgage Securitizations

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

	Three Months Ended March 31,			
	2020		2019	
In billions of dollars	**U.S. agency-sponsored mortgages**	**Non-agency-sponsored mortgages[1]**	U.S. agency-sponsored mortgages	Non-agency-sponsored mortgages
Principal securitized	**$ 2.0**	**$ 1.6**	$ 1.0	$ 2.7
Proceeds from new securitizations	**2.1**	**2.5**	1.0	2.7

Note: Excludes re-securitization transactions.

(1) The principal securitized and proceeds from new securitizations in 2020 include $0.2 billion related to personal loan securitizations.

Gains recognized on the securitization of U.S. agency-sponsored mortgages were $3 million for the three months ended March 31, 2020. For the three months ended March 31, 2020, gains recognized on the securitization of non-agency sponsored mortgages were $39 million.

There were no gains recognized on the securitization of U.S. agency-sponsored mortgages for the three months ended March 31, 2019. Gains recognized on the securitization of non-agency sponsored mortgages were $17 million for the three months ended March 31, 2019.

	March 31, 2020			December 31, 2019		
		Non-agency-sponsored mortgages[1]			Non-agency-sponsored mortgages[1]	
In millions of dollars	**U.S. agency-sponsored mortgages**	**Senior interests[3]**	**Subordinated interests**	U.S. agency-sponsored mortgages	Senior interests	Subordinated interests
Carrying value of retained interests[2]	**$ 349**	**$ 902**	**$ 101**	$ 491	$ 748	$ 102

(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 and 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 $127 million related to personal loan securitizations at March 31, 2020.

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 March 31, 2020		
		Non-agency-sponsored mortgages[1]	
	U.S. agency-sponsored mortgages	Senior interests	Subordinated interests
Weighted average discount rate	**8.5%**	**1.3%**	**—%**
Weighted average constant prepayment rate	**25.7%**	**—%**	**—%**
Weighted average anticipated net credit losses[2]	**NM**	**1.6%**	**—%**
Weighted average life	**5.2 years**	**4.2 years**	**NM**

	Three Months Ended March 31, 2019		
		Non-agency-sponsored mortgages[1]	
	U.S. agency-sponsored mortgages	Senior interests	Subordinated interests
Weighted average discount rate	6.6%	3.6%	7.1%
Weighted average constant prepayment rate	14.1%	6.0%	6.0%
Weighted average anticipated net credit losses[2]	NM	5.0%	3.5%
Weighted average life	6.1 years	7.6 years	19.4 years

(1) Disclosure of non-agency-sponsored mortgages as senior and subordinated interests is indicative of the interests' position in the capital structure of the securitization.

(2) Anticipated net credit losses represent estimated loss severity associated with defaulted mortgage loans underlying the mortgage securitizations disclosed above. Anticipated net credit losses, in this instance, do not represent total credit losses incurred to date, nor do they represent credit losses expected on retained interests in mortgage securitizations.

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

The interests retained by the Company range from highly rated and/or senior in the capital structure to unrated and/or residual interests. Key assumptions used in measuring the fair value of retained interests in securitizations of mortgage receivables at period end were as follows:

	March 31, 2020		
		Non-agency-sponsored mortgages[1]	
	U.S. agency-sponsored mortgages	Senior interests	Subordinated interests
Weighted average discount rate	**6.2%**	**8.9%**	**4.4%**
Weighted average constant prepayment rate	**20.6%**	**2.7%**	**5.1%**
Weighted average anticipated net credit losses[2]	**NM**	**1.1%**	**1.4%**
Weighted average life	**4.6 years**	**6.8 years**	**NM**

	December 31, 2019		
		Non-agency-sponsored mortgages[1]	
	U.S. agency-sponsored mortgages	Senior interests	Subordinated interests
Weighted average discount rate	9.3%	3.6%	4.6%
Weighted average constant prepayment rate	12.9%	10.5%	7.6%
Weighted average anticipated net credit losses[2]	NM	3.9%	2.8%
Weighted average life	6.6 years	3.0 years	11.4 years

(1) Disclosure of non-agency-sponsored mortgages as senior and subordinated interests is indicative of the interests' position in the capital structure of the securitization.

(2) Anticipated net credit losses represent estimated loss severity associated with defaulted mortgage loans underlying the mortgage securitizations disclosed above. Anticipated net credit losses, in this instance, do not represent total credit losses incurred to date, nor do they represent credit losses expected on retained interests in mortgage securitizations.

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

The 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.

	March 31, 2020		
		Non-agency-sponsored mortgages	
In millions of dollars	U.S. agency-sponsored mortgages	Senior interests	Subordinated interests
Discount rate			
Adverse change of 10%	**$ (9)**	**$ (1)**	**$ (1)**
Adverse change of 20%	**(17)**	**(1)**	**(2)**
Constant prepayment rate			
Adverse change of 10%	**(23)**	**—**	**—**
Adverse change of 20%	**(43)**	**—**	**—**
Anticipated net credit losses			
Adverse change of 10%	**NM**	**—**	**—**
Adverse change of 20%	**NM**	**—**	**(1)**

	December 31, 2019		
		Non-agency-sponsored mortgages	
In millions of dollars	U.S. agency-sponsored mortgages	Senior interests	Subordinated interests
Discount rate			
Adverse change of 10%	$ (18)	$ —	$ (1)
Adverse change of 20%	(35)	(1)	(1)
Constant prepayment rate			
Adverse change of 10%	(18)	—	—
Adverse change of 20%	(35)	—	—
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:

	Securitized assets		**90 days past due**		**Liquidation losses** **Three Months Ended March 31,**	
In billions of dollars, except liquidation losses in millions	**Mar. 31, 2020**	Dec. 31, 2019	**Mar. 31, 2020**	Dec. 31, 2019	**2020**	2019
Securitized assets						
Residential mortgages[1]	**$ 11.8**	$ 11.7	**$ 0.3**	$ 0.4	**$ 11**	$ 11
Commercial and other	**20.5**	22.3	**—**	—	**—**	—
Total	**$ 32.3**	$ 34.0	**$ 0.3**	$ 0.4	**$ 11**	$ 11

(1) Securitized assets include $0.3 billion of personal loan securitizations as of March 31, 2020.

Mortgage Servicing Rights (MSRs)

The fair value of Citi's capitalized MSRs was $367 million and $551 million at March 31, 2020 and 2019, respectively. The MSRs correspond to principal loan balances of $59 billion and $61 billion as of March 31, 2020 and 2019, respectively. The following table summarizes the changes in capitalized MSRs:

	Three Months Ended March 31,	
In millions of dollars	**2020**	2019
Balance, beginning of year	**$ 495**	$ 584
Originations	**32**	12
Changes in fair value of MSRs due to changes in inputs and assumptions	**(143)**	(27)
Other changes[1]	**(17)**	(18)
Sales of MSRs	**—**	—
Balance, as of March 31	**$ 367**	$ 551

(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:

	Three Months Ended March 31,	
In millions of dollars	**2020**	2019
Servicing fees	**$ 39**	$ 41
Late fees	**2**	2
Ancillary fees	**—**	1
Total MSR fees	**$ 41**	$ 44

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 three months ended March 31, 2020 and 2019. These securities are backed by either residential or commercial mortgages and are often structured on behalf of clients.

As of March 31, 2020 and December 31, 2019, Citi held no retained interests in private label re-securitization transactions structured by Citi.

The Company also re-securitizes U.S. government-agency guaranteed mortgage-backed (agency) securities. During the three months ended March 31, 2020, Citi transferred agency securities with a fair value of approximately $7.4 billion to re-securitization entities compared to approximately $7.6 billion for the three months ended March 31, 2019.

As of March 31, 2020, the fair value of Citi-retained interests in agency re-securitization transactions structured by Citi totaled approximately $1.6 billion (including $631.0 million related to re-securitization transactions executed in 2020) compared to $2.2 billion as of December 31, 2019 (including $1.3 billion related to re-securitization transactions executed in 2019), which is recorded in *Trading account assets*. The original fair values of agency re-securitization transactions in which Citi holds a retained interest as of March 31, 2020 and December 31, 2019 were approximately $65.8 billion and $73.5 billion, respectively.

As of March 31, 2020 and December 31, 2019, the Company did not consolidate any private label or agency re-securitization entities.

Citi-Administered Asset-Backed Commercial Paper Conduits

At March 31, 2020 and December 31, 2019, the commercial paper conduits administered by Citi had approximately $19.4 billion and $15.6 billion of purchased assets outstanding, respectively, and had incremental funding commitments with clients of approximately $14.2 billion and $16.3 billion, respectively.

Substantially all of the funding of the conduits is in the form of short-term commercial paper. At March 31, 2020 and December 31, 2019, the weighted average remaining lives of the commercial paper issued by the conduits were approximately 43 and 49 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 $1.8 billion and $1.4 billion as of March 31, 2020 and December 31, 2019, 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 March 31, 2020 and December 31, 2019, the Company owned $7.6 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 months ended March 31, 2020 and 2019. The following table summarizes selected retained interests related to Citigroup CLOs:

In millions of dollars	**Mar. 31, 2020**	Dec. 31, 2019
Carrying value of retained interests	**$ 1,060**	$ 1,404

All of Citi's retained interests were held-to-maturity securities as of March 31, 2020 and December 31, 2019.

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.

	March 31, 2020	
In millions of dollars	**Total unconsolidated VIE assets**	**Maximum exposure to unconsolidated VIEs**
Type		
Commercial and other real estate	**$ 28,469**	**$ 6,980**
Corporate loans	**10,502**	**7,808**
Other (including investment funds, airlines and shipping)	**163,277**	**21,164**
Total	**$ 202,248**	**$ 35,952**

	December 31, 2019	
In millions of dollars	Total unconsolidated VIE assets	Maximum exposure to unconsolidated VIEs
Type		
Commercial and other real estate	$ 31,377	$ 7,489
Corporate loans	7,088	5,802
Other (including investment funds, airlines and shipping)	152,124	21,140
Total	$ 190,589	$ 34,431

Municipal Securities Tender Option Bond (TOB) Trusts

At March 31, 2020 and December 31, 2019, none of the municipal bonds owned by non-customer TOB trusts were subject to a credit guarantee provided by the Company.

At March 31, 2020 and December 31, 2019, liquidity agreements provided with respect to customer TOB trusts totaled $3.1 billion and $3.5 billion, respectively, of which $1.5 billion and $1.6 billion, respectively, were offset by reimbursement agreements. For the remaining exposure related to TOB transactions, where the residual owned by the customer was at least 25% of the bond value at the inception of the transaction, no reimbursement agreement was executed.

The Company also provides other liquidity agreements or letters of credit to customer-sponsored municipal investment funds, which are not variable interest entities, and municipality-related issuers that totaled $6.3 billion and $7.0 billion as of March 31, 2020 and December 31, 2019, 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 2019 Annual Report on Form 10-K.

Information pertaining to Citigroup's derivatives 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. Citi's derivative exposure arises primarily from market fluctuations (i.e., market risk), counterparty failure (i.e., credit risk) and/or periods of high volatility or financial stress (i.e., liquidity risk), as well as any market valuation adjustments that may be required on the transactions. Moreover, notional amounts do not reflect the netting of offsetting trades. For example, if Citi enters into a receive-fixed interest rate swap with $100 million notional, and offsets this risk with an identical but opposite pay-fixed position with a different counterparty, $200 million in derivative notionals is reported, although these offsetting positions may result in de minimis overall market risk.

In addition, aggregate derivative notional amounts can fluctuate from period to period in the normal course of business based on Citi's market share, levels of client activity and other factors.

Derivative Notionals

In millions of dollars	Hedging instruments under ASC 815		Trading derivative instruments	
	March 31, 2020	December 31, 2019	**March 31, 2020**	December 31, 2019
Interest rate contracts				
Swaps	**$ 311,333**	$ 318,089	**$ 18,935,609**	$ 17,063,272
Futures and forwards	**—**	—	**4,691,885**	3,636,658
Written options	**—**	—	**1,791,782**	2,114,511
Purchased options	**—**	—	**1,605,080**	1,857,770
Total interest rate contracts	**$ 311,333**	$ 318,089	**$ 27,024,356**	$ 24,672,211
Foreign exchange contracts				
Swaps	**$ 65,358**	$ 63,104	**$ 6,414,190**	$ 6,063,853
Futures, forwards and spot	**38,597**	38,275	**4,806,697**	3,979,188
Written options	**116**	80	**1,209,072**	908,061
Purchased options	**45**	80	**1,233,661**	959,149
Total foreign exchange contracts	**$ 104,116**	$ 101,539	**$ 13,663,620**	$ 11,910,251
Equity contracts				
Swaps	**$ —**	$ —	**$ 168,224**	$ 197,893
Futures and forwards	**—**	—	**60,692**	66,705
Written options	**—**	—	**534,464**	560,571
Purchased options	**—**	—	**399,929**	422,393
Total equity contracts	**$ —**	$ —	**$ 1,163,309**	$ 1,247,562
Commodity and other contracts				
Swaps	**$ —**	$ —	**$ 74,616**	$ 69,445
Futures and forwards	**894**	1,195	**141,378**	137,192
Written options	**—**	—	**91,874**	91,587
Purchased options	**—**	—	**89,609**	86,631
Total commodity and other contracts	**$ 894**	$ 1,195	**$ 397,477**	$ 384,855
Credit derivatives[(1)]				
Protection sold	**$ —**	$ —	**$ 624,063**	$ 603,387
Protection purchased	**—**	—	**695,218**	703,926
Total credit derivatives	**$ —**	$ —	**$ 1,319,281**	$ 1,307,313
Total derivative notionals	**$ 416,343**	$ 420,823	**$ 43,568,043**	$ 39,522,192

(1) 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 March 31, 2020 and December 31, 2019. 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 $300 billion and $180 billion as of March 31, 2020 and December 31, 2019, 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 has occurred and a legal opinion supporting enforceability of the netting and collateral rights has been obtained.

Derivative Mark-to-Market (MTM) Receivables/Payables

In millions of dollars at March 31, 2020	Derivatives classified in Trading account assets/liabilities[1][2]	
Derivatives instruments designated as ASC 815 hedges	**Assets**	**Liabilities**
Over-the-counter	**$ 1,860**	**$ 259**
Cleared	**422**	**262**
Interest rate contracts	**$ 2,282**	**$ 521**
Over-the-counter	**$ 2,410**	**$ 1,778**
Cleared	**—**	**50**
Foreign exchange contracts	**$ 2,410**	**$ 1,828**
Total derivatives instruments designated as ASC 815 hedges	**$ 4,692**	**$ 2,349**
Derivatives instruments not designated as ASC 815 hedges		
Over-the-counter	**$ 245,048**	**$ 224,637**
Cleared	**11,055**	**10,607**
Exchange traded	**117**	**144**
Interest rate contracts	**$ 256,220**	**$ 235,388**
Over-the-counter	**$ 198,530**	**$ 201,720**
Cleared	**1,649**	**1,832**
Exchange traded	**11**	**13**
Foreign exchange contracts	**$ 200,190**	**$ 203,565**
Over-the-counter	**$ 27,103**	**$ 28,388**
Cleared	**1**	**32**
Exchange traded	**30,565**	**32,910**
Equity contracts	**$ 57,669**	**$ 61,330**
Over-the-counter	**$ 21,059**	**$ 24,669**
Exchange traded	**2,005**	**1,941**
Commodity and other contracts	**$ 23,064**	**$ 26,610**
Over-the-counter	**$ 15,606**	**$ 14,127**
Cleared	**875**	**1,046**
Credit derivatives	**$ 16,481**	**$ 15,173**
Total derivatives instruments not designated as ASC 815 hedges	**$ 553,624**	**$ 542,066**
Total derivatives	**$ 558,316**	**$ 544,415**
Cash collateral paid/received[3]	**$ 28,991**	**$ 17,023**
Less: Netting agreements[4]	**(424,832)**	**(424,832)**
Less: Netting cash collateral received/paid[5]	**(65,236)**	**(58,787)**
Net receivables/payables included on the Consolidated Balance Sheet[6]	**$ 97,239**	**$ 77,819**
Additional amounts subject to an enforceable master netting agreement, but not offset on the Consolidated Balance Sheet		
Less: Cash collateral received/paid	**$ (1,897)**	**$ (245)**
Less: Non-cash collateral received/paid	**(11,852)**	**(16,896)**
Total net receivables/payables[6]	**$ 83,490**	**$ 60,678**

(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 $87,778 million and $82,259 million of gross cash collateral paid and received, respectively. Of the gross cash collateral paid, $58,787 million was used to offset trading derivative liabilities. Of the gross cash collateral received, $65,236 million was used to offset trading derivative assets.

(4) Represents the netting of balances with the same counterparty under enforceable netting agreements. Approximately $404 billion, $2 billion and $19 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 counterparties 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 $8 billion of derivative asset and $6 billion of derivative liability fair values not subject to enforceable master netting agreements, respectively.

In millions of dollars at December 31, 2019	Derivatives classified in Trading account assets/liabilities[1][2]	
Derivatives instruments designated as ASC 815 hedges	**Assets**	**Liabilities**
Over-the-counter	$ 1,682	$ 143
Cleared	41	111
Interest rate contracts	$ 1,723	$ 254
Over-the-counter	$ 1,304	$ 908
Cleared	—	2
Foreign exchange contracts	$ 1,304	$ 910
Total derivatives instruments designated as ASC 815 hedges	$ 3,027	$ 1,164
Derivatives instruments not designated as ASC 815 hedges		
Over-the-counter	$ 189,892	$ 169,749
Cleared	5,896	7,472
Exchange traded	157	180
Interest rate contracts	$ 195,945	$ 177,401
Over-the-counter	$ 105,401	$ 108,807
Cleared	862	1,015
Exchange traded	3	—
Foreign exchange contracts	$ 106,266	$ 109,822
Over-the-counter	$ 21,311	$ 22,411
Exchange traded	7,160	8,075
Equity contracts	$ 28,471	$ 30,486
Over-the-counter	$ 13,582	$ 16,773
Exchange traded	630	542
Commodity and other contracts	$ 14,212	$ 17,315
Over-the-counter	$ 8,896	$ 8,975
Cleared	1,513	1,763
Credit derivatives	$ 10,409	$ 10,738
Total derivatives instruments not designated as ASC 815 hedges	$ 355,303	$ 345,762
Total derivatives	$ 358,330	$ 346,926
Cash collateral paid/received[3]	$ 17,926	$ 14,391
Less: Netting agreements[4]	(274,970)	(274,970)
Less: Netting cash collateral received/paid[5]	(44,353)	(38,919)
Net receivables/payables included on the Consolidated Balance Sheet[6]	$ 56,933	$ 47,428
Additional amounts subject to an enforceable master netting agreement, but not offset on the Consolidated Balance Sheet		
Less: Cash collateral received/paid	$ (861)	$ (128)
Less: Non-cash collateral received/paid	(13,143)	(7,308)
Total net receivables/payables[6]	$ 42,929	$ 39,992

(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 $56,845 million and $58,744 million of gross cash collateral paid and received, respectively. Of the gross cash collateral paid, $38,919 million was used to offset trading derivative liabilities. Of the gross cash collateral received, $44,353 million was used to offset trading derivative assets.
(4) Represents the netting of balances with the same counterparty under enforceable netting agreements. Approximately $262 billion, $6 billion and $7 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 counterparties 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 $7 billion of derivative asset and $6 billion of derivative liability fair values not subject to enforceable master netting agreements, respectively.

For the three months ended March 31, 2020 and 2019, 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	
	Three Months Ended March 31,	
In millions of dollars	**2020**	2019
Interest rate contracts	**$ 155**	$ 27
Foreign exchange	**24**	(58)
Total	**$ 179**	$ (31)

Fair Value Hedges

Hedging of Benchmark Interest Rate Risk

Citigroup's fair value hedges are primarily hedges of fixed-rate long-term debt or assets, such as available-for-sale debt securities or loans.

For qualifying fair value hedges of interest rate risk, the changes in the fair value of the derivative and the change in the fair value of the hedged item attributable to the hedged risk 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 prepayable 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. As of March 31, 2020, there were no active designations of last-of-layer hedges.

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 inventories. 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 it is generally reflected directly in earnings over the life of the hedge. Citi also excludes changes in forward rates from the assessment of hedge effectiveness and records it in *Other comprehensive income.*

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

	Gains (losses) on fair value hedges[1]			
	Three Months Ended March 31,			
	2020		2019	
In millions of dollars	**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	**$ —**	**$ 6,847**	$ —	$ 963
Foreign exchange hedges	**(1,911)**	**—**	168	—
Commodity hedges	**290**	**—**	70	—
Total gain (loss) on the hedging derivatives included in assessment of the effectiveness of fair value hedges	**$ (1,621)**	**$ 6,847**	$ 238	$ 963
Gain (loss) on the hedged item in designated and qualifying fair value hedges				
Interest rate hedges	**$ —**	**$ (6,815)**	$ —	$ (879)
Foreign exchange hedges	**1,911**	**—**	(168)	—
Commodity hedges	**(290)**	**—**	(70)	—
Total gain (loss) on the hedged item in designated and qualifying fair value hedges	**$ 1,621**	**$ (6,815)**	$ (238)	$ (879)
Net gain (loss) on the hedging derivatives excluded from assessment of the effectiveness of fair value hedges				
Interest rate hedges	**$ —**	**$ (5)**	$ —	$ —
Foreign exchange hedges[2]	**(58)**	**—**	(3)	—
Commodity hedges	**(25)**	**—**	18	—
Total net gain (loss) on the hedging derivatives excluded from assessment of the effectiveness of fair value hedges	**$ (83)**	**$ (5)**	$ 15	$ —

(1) Gain (loss) amounts for interest rate risk hedges 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.

(2) 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 $33 million and $24 million for the three months ended March 31, 2020 and 2019, 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. This cumulative hedge basis adjustment becomes part of the carrying value of 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 March 31, 2020 and December 31, 2019, along with the cumulative hedge basis adjustments included in the carrying value of those hedged assets and liabilities, that would reverse through earnings in future periods.

In millions of dollars

Balance sheet line item in which hedged item is recorded	Carrying amount of hedged asset/ liability	Cumulative fair value hedging adjustment increasing (decreasing) the carrying amount	
		Active	De-designated
As of March 31, 2020			
Debt securities AFS[1][3]	**$ 94,548**	**$ (130)**	**$ 617**
Long-term debt	**167,336**	**8,586**	**3,719**
As of December 31, 2019			
Debt securities AFS[2][3]	$ 94,659	$ (114)	$ 743
Long-term debt	157,387	2,334	3,445

(1) These amounts include a cumulative basis adjustment of $134 million for de-designated hedges as of March 31, 2020 related to certain prepayable financial assets previously designated as the hedged item in a fair value hedge using the last-of-layer approach. There are no active hedges under the last-of-layer approach as of March 31, 2020.

(2) These amounts include a cumulative basis adjustment of $(8) million for active hedges and $157 million for de-designated hedges as of December 31, 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 approximately $605 million as the hedged amount (from a closed portfolio of prepayable financial assets with a carrying value of $20 billion as of December 31, 2019) in a last-of-layer hedging relationship, which commenced in the first quarter of 2019.

(3) Carrying amount represents the amortized cost.

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 March 31, 2020 is approximately $803 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.

	Three Months Ended March 31,	
In millions of dollars	**2020**	2019
Amount of gain (loss) recognized in *AOCI* on derivatives		
Interest rate contracts	**$ 2,497**	$ 254
Foreign exchange contracts	**(11)**	(8)
Total gain (loss) recognized in *AOCI*	**$ 2,486**	$ 246

Amount of gain (loss) reclassified from *AOCI* to earnings[(1)]	**Other revenue**	**Net interest revenue**	Other revenue	Net interest revenue
Interest rate contracts	**$ —**	**$ 3**	$ —	$ (130)
Foreign exchange contracts	**(1)**	**—**	(2)	—
Total gain (loss) reclassified from *AOCI* into earnings	**$ (1)**	**$ 3**	$ (2)	$ (130)
Net pretax change in cash flow hedges included within *AOCI*		**$ 2,484**		$ 378

(1) 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 *Foreign currency translation adjustment* within *AOCI*, related to net investment hedges, was $2,160 million and $(164) million for the three months ended March 31, 2020 and 2019, respectively.

Credit Derivatives

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

	Fair values		Notionals	
In millions of dollars at March 31, 2020	Receivable[1]	Payable[2]	Protection purchased	Protection sold
By industry of counterparty				
Banks	**$ 5,665**	**$ 5,633**	**$ 162,933**	**$ 167,923**
Broker-dealers	**3,400**	**2,947**	**63,281**	**63,382**
Non-financial	**140**	**82**	**4,223**	**1,825**
Insurance and other financial institutions	**7,276**	**6,511**	**464,781**	**390,933**
Total by industry of counterparty	**$ 16,481**	**$ 15,173**	**$ 695,218**	**$ 624,063**
By instrument				
Credit default swaps and options	**$ 14,555**	**$ 13,459**	**$ 679,118**	**$ 618,108**
Total return swaps and other	**1,926**	**1,714**	**16,100**	**5,955**
Total by instrument	**$ 16,481**	**$ 15,173**	**$ 695,218**	**$ 624,063**
By rating of reference entity				
Investment grade	**$ 5,708**	**$ 5,243**	**$ 542,640**	**$ 481,482**
Non-investment grade	**10,773**	**9,930**	**152,578**	**142,581**
Total by rating of reference entity	**$ 16,481**	**$ 15,173**	**$ 695,218**	**$ 624,063**
By maturity				
Within 1 year	**$ 2,913**	**$ 2,752**	**$ 170,955**	**$ 148,981**
From 1 to 5 years	**9,195**	**8,467**	**429,874**	**391,944**
After 5 years	**4,373**	**3,954**	**94,389**	**83,138**
Total by maturity	**$ 16,481**	**$ 15,173**	**$ 695,218**	**$ 624,063**

(1) The fair value amount receivable is composed of $13,355 million under protection purchased and $3,126 million under protection sold.
(2) The fair value amount payable is composed of $4,088 million under protection purchased and $11,805 million under protection sold.

In millions of dollars at December 31, 2019	Fair values		Notionals	
	Receivable[1]	Payable[2]	Protection purchased	Protection sold
By industry of counterparty				
Banks	$ 4,017	$ 4,102	$ 172,461	$ 169,546
Broker-dealers	1,724	1,528	54,843	53,846
Non-financial	92	76	2,601	1,968
Insurance and other financial institutions	4,576	5,032	474,021	378,027
Total by industry of counterparty	$ 10,409	$ 10,738	$ 703,926	$ 603,387
By instrument				
Credit default swaps and options	$ 9,759	$ 9,791	$ 685,643	$ 593,850
Total return swaps and other	650	947	18,283	9,537
Total by instrument	$ 10,409	$ 10,738	$ 703,926	$ 603,387
By rating of reference entity				
Investment grade	$ 4,579	$ 4,578	$ 560,806	$ 470,778
Non-investment grade	5,830	6,160	143,120	132,609
Total by rating of reference entity	$ 10,409	$ 10,738	$ 703,926	$ 603,387
By maturity				
Within 1 year	$ 1,806	$ 2,181	$ 231,135	$ 176,188
From 1 to 5 years	7,275	7,265	414,237	379,915
After 5 years	1,328	1,292	58,554	47,284
Total by maturity	$ 10,409	$ 10,738	$ 703,926	$ 603,387

(1) The fair value amount receivable is composed of $3,415 million under protection purchased and $6,994 under protection sold.
(2) The fair value amount payable is composed of $7,793 million under protection purchased and $2,945 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 March 31, 2020 and December 31, 2019 was $34 billion and $30 billion, respectively. The Company posted $29 billion and $28 billion as collateral for this exposure in the normal course of business as of March 31, 2020 and December 31, 2019, 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 March 31, 2020, the Company could be required to post an additional $1.0 billion as either collateral or settlement of the derivative transactions. In addition, the Company could be required to segregate with third-party custodians collateral previously received from existing derivative counterparties in the amount of $0.2 billion upon the single notch downgrade, resulting in aggregate cash obligations and collateral requirements of approximately $1.2 billion.

Derivatives Accompanied by Financial Asset Transfers

For transfers of financial assets accounted for as a sale by the Company and for which the Company has retained substantially all of the economic exposure to the transferred asset through a total return swap executed with the same counterparty in contemplation of the initial sale (and still outstanding), both the asset amounts derecognized and the gross cash proceeds received as of the date of derecognition were $2.4 billion and $5.8 billion as of March 31, 2020 and December 31, 2019, respectively.

At March 31, 2020, the fair value of these previously derecognized assets was $2.4 billion. The fair value of the total return swaps as of March 31, 2020 was $56 million recorded as gross derivative assets and $115 million recorded as gross derivative liabilities. At December 31, 2019, the fair value of these previously derecognized assets was $5.9 billion, and the fair value of the total return swaps was $117 million recorded as gross derivative assets and $43 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 2019 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 March 31, 2020 and December 31, 2019:

	Credit and funding valuation adjustments contra-liability (contra-asset)	
In millions of dollars	**March 31, 2020**	December 31, 2019
Counterparty CVA	**$ (1,513)**	$ (705)
Asset FVA	**(1,479)**	(530)
Citigroup (own-credit) CVA	**835**	341
Liability FVA	**409**	72
Total CVA—derivative instruments	**$ (1,748)**	$ (822)

The table below summarizes pretax gains (losses) related to changes in CVA on derivative instruments, net of hedges, FVA on derivatives and debt valuation adjustments (DVA) on Citi's own fair value option (FVO) liabilities for the periods indicated:

	Credit/funding/debt valuation adjustments gain (loss)	
	Three Months Ended March 31,	
In millions of dollars	**2020**	2019
Counterparty CVA	**$ (283)**	$ 74
Asset FVA	**(1,053)**	20
Own-credit CVA	**533**	(92)
Liability FVA	**337**	(48)
Total CVA—derivative instruments	**$ (466)**	$ (46)
DVA related to own FVO liabilities[(1)]	**$ 4,188**	$ (725)
Total CVA and DVA	**$ 3,722**	$ (771)

(1) See Notes 1 and 17 to the Consolidated Financial Statements in Citi's 2019 Annual Report on Form 10-K.

Fair Value Hierarchy

ASC 820-10 specifies a hierarchy of inputs based on whether the inputs are observable or unobservable. Observable inputs are developed using market data and reflect market participant assumptions, while unobservable inputs reflect the Company's market assumptions. These two types of inputs have created the following fair value hierarchy:

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

As required under the fair value hierarchy, the Company considers relevant and observable market inputs in its valuations where possible. The frequency of transactions, the size of the bid-ask spread and the amount of adjustment necessary when comparing similar transactions are all factors in determining the relevance of observed prices in those markets.

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 March 31, 2020 and December 31, 2019. 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 March 31, 2020	Level 1	Level 2	Level 3	Gross inventory	Netting[1]	Net balance
Assets						
Securities borrowed and purchased under agreements to resell	$ —	$ 270,056	$ 300	$ 270,356	$ (114,719)	$ 155,637
Trading non-derivative assets						
Trading mortgage-backed securities						
U.S. government-sponsored agency guaranteed	—	46,727	85	46,812	—	46,812
Residential	—	712	304	1,016	—	1,016
Commercial	—	2,464	44	2,508	—	2,508
Total trading mortgage-backed securities	$ —	$ 49,903	$ 433	$ 50,336	$ —	$ 50,336
U.S. Treasury and federal agency securities	$ 56,087	$ 7,810	$ —	$ 63,897	$ —	$ 63,897
State and municipal	—	3,131	92	3,223	—	3,223
Foreign government	61,440	18,003	39	79,482	—	79,482
Corporate	1,240	17,618	412	19,270	—	19,270
Equity securities	27,678	8,356	143	36,177	—	36,177
Asset-backed securities	—	1,898	1,561	3,459	—	3,459
Other trading assets[2]	75	11,203	639	11,917	—	11,917
Total trading non-derivative assets	$ 146,520	$ 117,922	$ 3,319	$ 267,761	$ —	$ 267,761
Trading derivatives						
Interest rate contracts	$ 163	$ 254,826	$ 3,513	$ 258,502		
Foreign exchange contracts	1	201,879	720	202,600		
Equity contracts	65	57,008	596	57,669		
Commodity contracts	—	21,827	1,237	23,064		
Credit derivatives	—	14,872	1,609	16,481		
Total trading derivatives	$ 229	$ 550,412	$ 7,675	$ 558,316		
Cash collateral paid[3]				$ 28,991		
Netting agreements					$ (424,832)	
Netting of cash collateral received					(65,236)	
Total trading derivatives	$ 229	$ 550,412	$ 7,675	$ 587,307	$ (490,068)	$ 97,239
Investments						
Mortgage-backed securities						
U.S. government-sponsored agency guaranteed	$ —	$ 43,506	$ 47	$ 43,553	$ —	$ 43,553
Residential	—	752	—	752	—	752
Commercial	—	68	—	68	—	68
Total investment mortgage-backed securities	$ —	$ 44,326	$ 47	$ 44,373	$ —	$ 44,373
U.S. Treasury and federal agency securities	$ 121,159	$ 4,103	$ —	$ 125,262	$ —	$ 125,262
State and municipal	—	4,778	687	5,465	—	5,465
Foreign government	75,363	41,779	225	117,367	—	117,367
Corporate	6,696	4,263	238	11,197	—	11,197
Marketable equity securities	329	353	—	682	—	682
Asset-backed securities	—	450	16	466	—	466
Other debt securities	—	4,089	—	4,089	—	4,089
Non-marketable equity securities[4]	—	26	354	380	—	380
Total investments	$ 203,547	$ 104,167	$ 1,567	$ 309,281	$ —	$ 309,281

Table continues on the next page.

In millions of dollars at March 31, 2020	Level 1	Level 2	Level 3	Gross inventory	Netting[1]	Net balance
Loans	$ —	$ 3,462	$ 537	$ 3,999	$ —	$ 3,999
Mortgage servicing rights	—	—	367	367	—	367
Non-trading derivatives and other financial assets measured on a recurring basis	$ 3,512	$ 11,151	$ —	$ 14,663	$ —	$ 14,663
Total assets	$ 353,808	$ 1,057,170	$ 13,765	$1,453,734	$ (604,787)	$ 848,947
Total as a percentage of gross assets[5]	24.8%	74.2%	1.0%			
Liabilities						
Interest-bearing deposits	$ —	$ 2,156	$ 491	$ 2,647	$ —	$ 2,647
Securities loaned and sold under agreements to repurchase	—	171,238	730	171,968	(109,234)	62,734
Trading account liabilities						
Securities sold, not yet purchased	73,734	11,029	1,334	86,097	—	86,097
Other trading liabilities	—	79	—	79	—	79
Total trading liabilities	$ 73,734	$ 11,108	$ 1,334	$ 86,176	$ —	$ 86,176
Trading derivatives						
Interest rate contracts	$ 144	$ 234,007	$ 1,758	$ 235,909		
Foreign exchange contracts	—	204,675	718	205,393		
Equity contracts	37	58,861	2,432	61,330		
Commodity contracts	—	24,831	1,779	26,610		
Credit derivatives	—	14,380	793	15,173		
Total trading derivatives	$ 181	$ 536,754	$ 7,480	$ 544,415		
Cash collateral received[6]				$ 17,023		
Netting agreements					$ (424,832)	
Netting of cash collateral paid					(58,787)	
Total trading derivatives	$ 181	$ 536,754	$ 7,480	$ 561,438	$ (483,619)	$ 77,819
Short-term borrowings	$ —	$ 8,312	$ 52	$ 8,364	$ —	$ 8,364
Long-term debt	—	34,779	18,135	52,914	—	52,914
Total non-trading derivatives and other financial liabilities measured on a recurring basis	$ 4,222	$ 117	$ —	$ 4,339	$ —	$ 4,339
Total liabilities	$ 78,137	$ 764,464	$ 28,222	$ 887,846	$ (592,853)	$ 294,993
Total as a percentage of gross liabilities[5]	9.0%	87.8%	3.2%			

(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 $87,778 million gross cash collateral paid, of which $58,787 million was used to offset trading derivative liabilities.

(4) Amounts exclude $0.2 billion of investments measured at 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 $82,259 million of gross cash collateral received, of which $65,236 million was used to offset trading derivative assets.

Fair Value Levels

In millions of dollars at December 31, 2019	Level 1	Level 2	Level 3	Gross inventory	Netting[1]	Net balance
Assets						
Securities borrowed and purchased under agreements to resell	$ —	$ 254,253	$ 303	$ 254,556	$ (101,363)	$153,193
Trading non-derivative assets						
Trading mortgage-backed securities						
U.S. government-sponsored agency guaranteed	—	27,661	10	27,671	—	27,671
Residential	—	573	123	696	—	696
Commercial	—	1,632	61	1,693	—	1,693
Total trading mortgage-backed securities	$ —	$ 29,866	$ 194	$ 30,060	$ —	$ 30,060
U.S. Treasury and federal agency securities	$ 26,159	$ 3,736	$ —	$ 29,895	$ —	$ 29,895
State and municipal	—	2,573	64	2,637	—	2,637
Foreign government	50,948	20,326	52	71,326	—	71,326
Corporate	1,332	17,246	313	18,891	—	18,891
Equity securities	41,663	9,878	100	51,641	—	51,641
Asset-backed securities	—	1,539	1,177	2,716	—	2,716
Other trading assets[2]	74	11,412	555	12,041	—	12,041
Total trading non-derivative assets	$ 120,176	$ 96,576	$ 2,455	$ 219,207	$ —	$219,207
Trading derivatives						
Interest rate contracts	$ 7	$ 196,493	$ 1,168	$ 197,668		
Foreign exchange contracts	1	107,022	547	107,570		
Equity contracts	83	28,148	240	28,471		
Commodity contracts	—	13,498	714	14,212		
Credit derivatives	—	9,960	449	10,409		
Total trading derivatives	$ 91	$ 355,121	$ 3,118	$ 358,330		
Cash collateral paid[3]				$ 17,926		
Netting agreements					$ (274,970)	
Netting of cash collateral received					(44,353)	
Total trading derivatives	$ 91	$ 355,121	$ 3,118	$ 376,256	$ (319,323)	$ 56,933
Investments						
Mortgage-backed securities						
U.S. government-sponsored agency guaranteed	$ —	$ 35,198	$ 32	$ 35,230	$ —	$ 35,230
Residential	—	793	—	793	—	793
Commercial	—	74	—	74	—	74
Total investment mortgage-backed securities	$ —	$ 36,065	$ 32	$ 36,097	$ —	$ 36,097
U.S. Treasury and federal agency securities	$ 106,103	$ 5,315	$ —	$ 111,418	$ —	$111,418
State and municipal	—	4,355	623	4,978	—	4,978
Foreign government	69,957	41,196	96	111,249	—	111,249
Corporate	5,150	6,076	45	11,271	—	11,271
Marketable equity securities	87	371	—	458	—	458
Asset-backed securities	—	500	22	522	—	522
Other debt securities	—	4,730	—	4,730	—	4,730
Non-marketable equity securities[4]	—	93	441	534	—	534
Total investments	$ 181,297	$ 98,701	$ 1,259	$ 281,257	$ —	$281,257

Table continues on the next page.

In millions of dollars at December 31, 2019	Level 1	Level 2	Level 3	Gross inventory	Netting[2]	Net balance
Loans	$ —	$ 3,683	$ 402	$ 4,085	$ —	$ 4,085
Mortgage servicing rights	—	—	495	495	—	495
Non-trading derivatives and other financial assets measured on a recurring basis	$ 5,628	$ 7,201	$ 1	$ 12,830	$ —	$ 12,830
Total assets	$ 307,192	$ 815,535	$ 8,033	$1,148,686	$ (420,686)	$728,000
Total as a percentage of gross assets[5]	27.2%	72.1%	0.7%			
Liabilities						
Interest-bearing deposits	$ —	$ 2,104	$ 215	$ 2,319	$ —	$ 2,319
Securities loaned and sold under agreements to repurchase	—	111,567	757	112,324	(71,673)	40,651
Trading account liabilities						
Securities sold, not yet purchased	60,429	11,965	48	72,442	—	72,442
Other trading liabilities	—	24	—	24	—	24
Total trading liabilities	$ 60,429	$ 11,989	$ 48	$ 72,466	$ —	$ 72,466
Trading account derivatives						
Interest rate contracts	$ 8	$ 176,480	$ 1,167	$ 177,655		
Foreign exchange contracts	—	110,180	552	110,732		
Equity contracts	144	28,506	1,836	30,486		
Commodity contracts	—	16,542	773	17,315		
Credit derivatives	—	10,233	505	10,738		
Total trading derivatives	$ 152	$ 341,941	$ 4,833	$ 346,926		
Cash collateral received[6]				$ 14,391		
Netting agreements					$ (274,970)	
Netting of cash collateral paid					(38,919)	
Total trading derivatives	$ 152	$ 341,941	$ 4,833	$ 361,317	$ (313,889)	$ 47,428
Short-term borrowings	$ —	$ 4,933	$ 13	$ 4,946	$ —	$ 4,946
Long-term debt	—	38,614	17,169	55,783	—	55,783
Non-trading derivatives and other financial liabilities measured on a recurring basis	$ 6,280	$ 63	$ —	$ 6,343	$ —	$ 6,343
Total liabilities	$ 66,861	$ 511,211	$ 23,035	$ 615,498	$ (385,562)	$229,936
Total as a percentage of gross liabilities[5]	11.1%	85.0%	3.8%			

(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 $56,845 million of gross cash collateral paid, of which $38,919 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 $58,744 million of gross cash collateral received, of which $44,353 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 months ended March 31, 2020 and 2019. The gains and losses presented below include changes in the fair value related to both observable and unobservable inputs.

The Company often hedges positions with offsetting positions that are classified in a different level. For example, the gains and losses for assets and liabilities in the Level 3 category presented in the tables below do not reflect the effect of offsetting losses and gains on hedging instruments that may be classified in the Level 1 or Level 2 categories. In addition, the Company hedges items classified in the Level 3 category with instruments also classified in Level 3 of the fair value hierarchy. The hedged items and related hedges are presented gross in the following tables:

Level 3 Fair Value Rollforward

In millions of dollars	Dec. 31, 2019	Net realized/unrealized gains/losses incl. in		Transfers		Purchases	Issuances	Sales	Settlements	Mar, 31 2020	Unrealized gains/ losses still held[3]
		Principal transactions	Other[1][2]	into Level 3	out of Level 3						
Assets											
Securities borrowed and purchased under agreements to resell	$ 303	$ (20)	$ —	$ —	$ —	$ 66	$ —	$ —	$ (49)	$ 300	$ 3
Trading non-derivative assets											
Trading mortgage-backed securities											
U.S. government-sponsored agency guaranteed	10	(75)	—	12	(3)	141	—	—	—	85	4
Residential	123	(8)	—	60	(4)	178	—	(45)	—	304	(11)
Commercial	61	—	—	3	(3)	27	—	(44)	—	44	(1)
Total trading mortgage-backed securities	$ 194	$ (83)	$ —	$ 75	$ (10)	$ 346	$ —	$ (89)	$ —	$ 433	$ (8)
U.S. Treasury and federal agency securities	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —
State and municipal	64	2	—	10	(2)	21	—	(3)	—	92	—
Foreign government	52	(85)	—	—	—	86	—	(14)	—	39	70
Corporate	313	302	—	22	8	215	—	(448)	—	412	246
Marketable equity securities	100	—	—	28	(3)	32	—	(14)	—	143	1
Asset-backed securities	1,177	(169)	—	239	(4)	468	—	(150)	—	1,561	(307)
Other trading assets	555	193	—	28	(137)	105	8	(103)	(10)	639	195
Total trading non-derivative assets	$ 2,455	$ 160	$ —	$ 402	$ (148)	$ 1,273	$ 8	$ (821)	$ (10)	$ 3,319	$ 197
Trading derivatives, net[4]											
Interest rate contracts	$ 1	$ 351	$ —	$ 1,383	$ (22)	$ 1	$ 56	$ 13	$ (28)	$ 1,755	$ 314
Foreign exchange contracts	(5)	(15)	—	(25)	9	44	—	(8)	2	2	19
Equity contracts	(1,596)	(210)	—	(287)	224	3	—	(1)	31	(1,836)	(223)
Commodity contracts	(59)	(459)	—	38	(56)	46	—	(34)	(18)	(542)	(441)
Credit derivatives	(56)	946	—	154	(286)	—	—	—	58	816	946
Total trading derivatives, net[4]	$ (1,715)	$ 613	$ —	$ 1,263	$ (131)	$ 94	$ 56	$ (30)	$ 45	$ 195	$ 615

Table continues on the next page.

In millions of dollars	Dec. 31, 2019	Net realized/unrealized gains/losses incl. in		Transfers		Purchases	Issuances	Sales	Settlements	Mar. 31, 2020	Unrealized gains/losses still held[3]
		Principal transactions	Other[1][2]	into Level 3	out of Level 3						
Investments											
Mortgage-backed securities											
U.S. government-sponsored agency guaranteed	$ 32	$ —	$ 14	$ —	$ 1	$ —	$ —	$ —	$ —	$ 47	$ 34
Residential	—	—	—	—	—	—	—	—	—	—	—
Commercial	—	—	—	—	—	—	—	—	—	—	—
Total investment mortgage-backed securities	$ 32	$ —	$ 14	$ —	$ 1	$ —	$ —	$ —	$ —	$ 47	$ 34
U.S. Treasury and federal agency securities	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —
State and municipal	623	—	(31)	138	—	—	—	(43)	—	687	(9)
Foreign government	96	—	(2)	27	—	147	—	(43)	—	225	(16)
Corporate	45	—	(8)	49	—	152	—	—	—	238	—
Marketable equity securities	—	—	—	—	—	—	—	—	—	—	—
Asset-backed securities	22	—	5	—	—	—	—	(11)	—	16	—
Other debt securities	—	—	—	—	—	—	—	—	—	—	—
Non-marketable equity securities	441	—	(74)	—	—	—	—	(3)	(10)	354	(76)
Total investments	$ 1,259	$ —	$ (96)	$ 214	$ 1	$ 299	$ —	$ (100)	$ (10)	$ 1,567	$ (67)
Loans	$ 402	$ —	$ (79)	$ 217	$ (1)	$ —	$ —	$ —	$ (2)	$ 537	$ (127)
Mortgage servicing rights	495	—	(143)	—	—	—	32	—	(17)	367	(133)
Other financial assets measured on a recurring basis	1	—	—	—	—	—	—	(1)	—	—	—
Liabilities											
Interest-bearing deposits	$ 215	$ —	$ (6)	$ 278	$ —	$ —	$ —	$ —	$ (8)	$ 491	$ —
Securities loaned and sold under agreements to repurchase	757	27	—	—	—	—	—	—	—	730	(33)
Trading account liabilities											
Securities sold, not yet purchased	48	(101)	—	1,208	(10)	—	9	—	(22)	1,334	(240)
Other trading liabilities	—	—	—	—	—	—	—	—	—	—	—
Short-term borrowings	13	10	—	11	—	—	38	—	—	52	10
Long-term debt	17,169	1,951	—	2,051	(1,491)	—	3,340	—	(983)	18,135	1,167
Other financial liabilities measured on a recurring basis	—	—	—	—	—	—	2	—	(2)	—	—

(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 March 31, 2020.

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

In millions of dollars	Dec. 31, 2018	Net realized/unrealized gains (losses) incl. in		Transfers		Purchases	Issuances	Sales	Settlements	Mar. 31, 2019	Unrealized gains (losses) still held[3]
		Principal transactions	Other[1][2]	into Level 3	out of Level 3						
Assets											
Securities borrowed and purchased under agreements to resell	$ 115	$ (4)	$ —	$ (4)	$ 3	$ 45	$ —	$ —	$ (89)	$ 66	$ (2)
Trading non-derivative assets											
Trading mortgage-backed securities											
U.S. government-sponsored agency guaranteed	156	—	—	—	(25)	48	—	(25)	—	154	3
Residential	268	1	—	5	(31)	69	—	(184)	—	128	10
Commercial	77	2	—	2	(1)	24	—	(35)	—	69	1
Total trading mortgage-backed securities	$ 501	$ 3	$ —	$ 7	$ (57)	$ 141	$ —	$ (244)	$ —	$ 351	$ 14
U.S. Treasury and federal agency securities	$ 1	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ (1)	$ —	$ —
State and municipal	200	(1)	—	—	(19)	1	—	(3)	—	178	—
Foreign government	31	(1)	—	9	—	3	—	(3)	—	39	1
Corporate	360	90	—	21	(26)	69	(33)	(103)	—	378	(35)
Marketable equity securities	153	(10)	—	1	(11)	9	—	(15)	—	127	14
Asset-backed securities	1,484	(26)	—	7	(32)	221	—	(225)	—	1,429	38
Other trading assets	818	5	—	13	(32)	340	4	(102)	(4)	1,042	(20)
Total trading non-derivative assets	$ 3,548	$ 60	$ —	$ 58	$ (177)	$ 784	$ (29)	$ (695)	$ (5)	$ 3,544	$ 12
Trading derivatives, net[4]											
Interest rate contracts	$ (154)	$ (51)	$ —	$ (15)	$ 27	$ 6	$ 12	$ —	$ 59	$ (116)	$ (60)
Foreign exchange contracts	(6)	60	—	(15)	15	3	—	(4)	(7)	46	28
Equity contracts	(784)	(294)	—	(154)	9	(1)	(59)	2	(64)	(1,345)	(222)
Commodity contracts	(18)	280	—	(3)	10	54	—	(34)	15	304	300
Credit derivatives	61	(319)	—	(18)	232	—	—	—	78	34	(320)
Total trading derivatives, net[4]	$ (901)	$ (324)	$ —	$ (205)	$ 293	$ 62	$ (47)	$ (36)	$ 81	$ (1,077)	$ (274)
Investments											
Mortgage-backed securities											
U.S. government-sponsored agency guaranteed	$ 32	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ 32	$ (2)
Residential	—	—	—	—	—	—	—	—	—	—	—
Commercial	—	—	—	—	—	—	—	—	—	—	—
Total investment mortgage-backed securities	$ 32	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ 32	$ (2)
U.S. Treasury and federal agency securities	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —
State and municipal	708	—	52	3	—	185	—	(38)	—	910	44
Foreign government	68	—	(4)	—	—	39	—	(32)	—	71	(1)
Corporate	156	—	—	—	(94)	—	—	(2)	—	60	—
Marketable equity securities	—	—	—	—	—	—	—	—	—	—	—
Asset-backed securities	187	—	(2)	94	—	550	—	(23)	—	806	(4)
Other debt securities	—	—	—	—	—	—	—	—	—	—	—
Non-marketable equity securities	586	—	22	—	—	4	—	(86)	(21)	505	(11)
Total investments	$ 1,737	$ —	$ 68	$ 97	$ (94)	$ 778	$ —	$ (181)	$ (21)	$ 2,384	$ 26

In millions of dollars	Dec. 31, 2018	Net realized/unrealized gains (losses) incl. in: Principal transactions	Net realized/unrealized gains (losses) incl. in: Other[1][2]	Transfers: into Level 3	Transfers: out of Level 3	Purchases	Issuances	Sales	Settlements	Mar. 31, 2019	Unrealized gains (losses) still held[3]
Loans	$ 277	$ —	$ 45	$ 125	$ (70)	$ 6	$ —	$ (10)	$ —	$ 373	$ 45
Mortgage servicing rights	584	—	(27)	—	—	—	12	—	(18)	551	(25)
Other financial assets measured on a recurring basis	—	—	16	—	—	—	(2)	(4)	(10)	—	12
Liabilities											
Interest-bearing deposits	$ 495	$ —	$ (10)	$ 1	$ (4)	$ —	$ 674	$ —	$ (129)	$ 1,047	$ (157)
Securities loaned and sold under agreements to repurchase	983	4	—	(1)	4	—	—	1	58	1,041	(2)
Trading account liabilities											
Securities sold, not yet purchased	586	124	—	1	(441)	—	—	—	(7)	15	13
Other trading liabilities	—	—	—	—	—	—	—	—	—	—	—
Short-term borrowings	37	23	—	9	(6)	—	153	—	—	170	18
Long-term debt	12,570	(407)	—	877	(1,601)	—	5,950	(3)	(4,466)	13,734	(1,001)
Other financial liabilities measured on a recurring basis	—	—	—	—	—	—	—	—	—	—	—

(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 March 31, 2019.
(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, 2019 to March 31, 2020:

- Transfers of *Interest rate contracts* of $1.4 billion from Level 2 to Level 3 due to interest rate option volatility becoming an unobservable and/or significant input relative to the overall valuation of inflation and other interest rate derivatives.
- Transfers of *Securities sold, not purchased* of $1.2 billion from Level 2 to Level 3, mainly related to a structured debt product where unobservable credit spreads widened, causing the value of the embedded credit derivative feature to become significant relative to the total value of the instrument.
- Transfers of *Long-term debt* of $2.1 billion from Level 2 to Level 3, resulting from interest rate option volatility inputs becoming unobservable and/or significant relative to the overall valuation of certain structured long-term debt products. In other instances, market changes have resulted in unobservable volatility becoming an insignificant input to the overall valuation of the instrument (e.g., when an option becomes deep-in or deep-out of the money). This has resulted in $1.5 billion of certain structured long-term debt products being transferred from Level 3 to Level 2.

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

- Transfers of *Long-term debt* of $0.9 billion from Level 2 to Level 3, and of $1.6 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 March 31, 2020	**Fair value[1]** *(in millions)*	**Methodology**	**Input**	**Low[2][3]**	**High[2][3]**	**Weighted average[4]**
Assets						
Securities borrowed and purchased under agreements to resell	**$ 300**	Model-based	Credit spread	**15 bps**	**15 bps**	**15 bps**
			Interest rate	**0.15 %**	**1.87%**	**1.51%**
Mortgage-backed securities	**$ 328**	Price-based	Price	**$ 43**	**$ 121**	**$ 90**
	115	Yield analysis	Yield	**1.30 %**	**12.44%**	**4.81%**
State and municipal, foreign government, corporate and other debt securities	**$ 1,334**	Price-based	Price	**$ 34**	**$ 1,014**	**$ 88**
	672	Model-based	Credit spread	**35 bps**	**295 bps**	**210 bps**
Marketable equity securities[5]	**$ 93**	Price-based	Price	**$ —**	**$ 28,483**	**$ 1,051**
	50	Model-based	WAL	**1.24 years**	**1.24 years**	**1.24 years**
			Recovery *(in millions)*	**$ 5,450**	**$ 5,450**	**$ 5,450**
Asset-backed securities	**$ 958**	Price-based	Price	**$ 1**	**$ 100**	**$ 52**
	610	Yield analysis	Yield	**3.72 %**	**25.26%**	**11.37%**
Non-marketable equities	**$ 240**	Comparables analysis	Price	**$ 3**	**$ 1,513**	**$ 805**
	88	Price-based	Appraised value *(in thousands)*	**$ 571**	**$ 25,002**	**$ 10,799**
			Revenue multiple	**1.80x**	**20.50x**	**5.34x**
			PE ratio	**9.60x**	**23.80x**	**15.48x**
			Discount to price	**— %**	**10.00%**	**57.00%**
			Price to book ratio	**0.60x**	**1.60x**	**0.96x**
Derivatives—gross[6]						
Interest rate contracts (gross)	**$ 5,028**	Model-based	Inflation volatility	**0.22 %**	**2.93%**	**0.81%**
			IR normal volatility	**0.25 %**	**1.15%**	**0.58%**
Foreign exchange contracts (gross)	**$ 1,438**	Model-based	FX volatility	**7.85 %**	**27.91%**	**12.62%**
			Credit spread	**60 bps**	**661 bps**	**283 bps**
			IR normal volatility	**0.22 %**	**1.15%**	**0.60%**
			IR-FX correlation	**40.00 %**	**60.00%**	**50.00%**
			IR-IR correlation	**(51.00)%**	**40.00%**	**32.65%**
			Interest rate	**0.78 %**	**58.26%**	**13.77%**
Equity contracts (gross)[7]	**$ 3,011**	Model-based	Forward price	**61.52 %**	**107.02%**	**92.93%**
			Equity volatility	**4.89 %**	**61.94%**	**28.54%**
Commodity and other contracts (gross)	**$ 3,015**	Model-based	Forward price	**33.94 %**	**583.93%**	**116.44%**
			Commodity correlation	**(41.42)%**	**90.86%**	**55.61%**

As of March 31, 2020	**Fair value[1] *(in millions)***	**Methodology**	**Input**	**Low[2][3]**	**High[2][3]**	**Weighted average[4]**
			Commodity volatility	**0.65 %**	**138.96%**	**29.38%**
Credit derivatives (gross)	**$ 1,985**	Model-based	Credit correlation	**25.00 %**	**90.00%**	**44.94%**
	417	Price-based	Credit spread	**17 bps**	**710 bps**	**170 bps**
			Recovery rate	**1.00 %**	**65.00%**	**36.93%**
			Upfront points	**2.50 %**	**108.63%**	**65.28%**
Loans and leases	**$ 495**	Model-based	Equity volatility	**24.01 %**	**177.87%**	**66.18%**
			Credit spread	**34 bps**	**576 bps**	**189 bps**
Mortgage servicing rights	**$ 290**	Cash flow	Yield	**2.45 %**	**12.00%**	**6.56%**
	77	Model-based	WAL	**2.94 years**	**5.97 years**	**4.6 years**
Liabilities						
Interest-bearing deposits	**$ 491**	Model-based	IR normal volatility	**0.35 %**	**1.15%**	**0.59%**
Securities loaned and sold under agreement to repurchase	**$ 730**	Model-based	Interest rate	**0.15 %**	**1.84%**	**1.01%**
Trading account liabilities						
Securities sold, not yet purchased	**$ 1,165**	Model-based	Credit spread	**505 bps**	**1,100 bps**	**747 bps**
	155	Price-based	Price	**$ —**	**$ 7,038**	**$ 107**
Short-term borrowings and long-term debt	**$ 18,260**	Model-based	IR normal volatility	**0.22 %**	**1.15%**	**0.56%**
			Forward price	**33.94 %**	**583.93%**	**92.99%**

As of December 31, 2019	Fair value[1] *(in millions)*	Methodology	Input	Low[2][3]	High[2][3]	Weighted average[4]
Assets						
Securities borrowed and purchased under agreements to resell	$ 303	Model-based	Credit spread	15 bps	15 bps	15 bps
			Interest rate	1.59 %	3.67%	2.72 %
Mortgage-backed securities	$ 196	Price-based	Price	$ 36	$ 505	$ 97
	22	Model-based				
State and municipal, foreign government, corporate and other debt securities	$ 880	Model-based	Price	$ —	$ 1,238	$ 90
	677	Price-based	Credit spread	35 bps	295 bps	209 bps
Marketable equity securities[5]	$ 70	Price-based	Price	$ —	$ 38,500	$ 2,979
	30	Model-based	WAL	1.48 years	1.48 years	1.48 years
			Recovery *(in millions)*	$ 5,450	$ 5,450	$ 5,450
Asset-backed securities	$ 812	Price-based	Price	$ 4	$ 103	$ 60
	368	Yield analysis	Yield	0.61 %	23.38%	8.88 %
Non-marketable equities	$ 316	Comparables analysis	EBITDA multiples	7.00x	17.95x	10.34x
	97	Price-based	Appraised value *(in thousands)*	$ 397	$ 33,246	$ 8,446
			Price	$ 3	$ 2,019	$ 1,020
			PE ratio	14.70x	28.70x	20.54x
			Price to book ratio	1.50x	3.00x	1.88x
			Discount to price	— %	10.00%	2.32 %
Derivatives—gross[6]						
Interest rate contracts (gross)	$ 2,196	Model-based	Inflation volatility	0.21 %	2.74%	0.79 %
			Mean reversion	1.00 %	20.00%	10.50 %
			IR normal volatility	0.09 %	0.66%	0.53 %

As of December 31, 2019	Fair value[1] *(in millions)*	Methodology	Input	Low[2][3]	High[2][3]	Weighted average[4]
Foreign exchange contracts (gross)	$ 1,099	Model-based	FX volatility	1.27 %	12.16%	9.17 %
			IR normal volatility	0.27 %	0.66%	0.58 %
			FX rate	37.39 %	586.84%	80.64 %
			Interest rate	2.72 %	56.14%	13.11 %
			IR-IR correlation	(51.00)%	40.00%	32.00 %
			IR-FX correlation	40.00 %	60.00%	50.00 %
Equity contracts (gross)[7]	$ 2,076	Model-based	Equity volatility	3.16 %	52.80%	28.43 %
			Forward price	62.60 %	112.69%	98.46 %
			WAL	1.48 years	1.48 years	1.48 years
			Recovery *(in millions)*	$ 5,450	$ 5,450	$ 5,450
Commodity and other contracts (gross)	$ 1,487	Model-based	Forward price	37.62 %	362.57%	119.32 %
			Commodity volatility	5.25 %	93.63%	23.55 %
			Commodity correlation	(39.65)%	87.81%	41.80 %
Credit derivatives (gross)	$ 613	Model-based	Credit spread	8 bps	283 bps	80 bps
	341	Price-based	Upfront points	2.59 %	99.94%	59.41 %
			Price	$ 12	$ 100	$ 87
			Credit correlation	25.00 %	87.00%	48.57 %
			Recovery rate	20.00 %	65.00%	48.00 %
Loans and leases	$ 378	Model-based	Credit spread	9 bps	52 bps	48 bps
			Equity volatility	32.00 %	32.00%	32.00 %
Mortgage servicing rights	$ 418	Cash flow	Yield	1.78 %	12.00%	9.49 %
	77	Model-based	WAL	4.07 years	8.13 years	6.61 years
Liabilities						
Interest-bearing deposits	$ 215	Model-based	Mean reversion	1.00 %	20.00%	10.50 %
			Forward price	97.59 %	111.06%	102.96 %
Securities loaned and sold under agreements to repurchase	$ 757	Model-based	Interest rate	1.59 %	2.38%	1.95 %
Trading account liabilities						
Securities sold, not yet purchased	$ 46	Price-based	Price	$ —	$ 866	$ 96
Short-term borrowings and long-term debt	$ 17,182	Model-based	Mean reversion	1.00 %	20.00%	10.50 %
			IR normal volatility	0.09 %	0.66%	0.46 %
			Forward price	37.62 %	362.57%	97.52 %
			Equity-IR Correlation	15.00 %	44.00%	32.66 %

(1) The fair value amounts presented in these tables represent the primary valuation technique or techniques for each class of assets or liabilities.
(2) Some inputs are shown as zero due to rounding.
(3) When the low and high inputs are the same, there is either a constant input applied to all positions, or the methodology involving the input applies to only one large position.
(4) Weighted averages are calculated based on the fair values of the instruments.
(5) For equity securities, the price inputs are expressed on an absolute basis, not as a percentage of the notional amount.
(6) Both trading and non-trading account derivatives—assets and liabilities—are presented on a gross absolute value basis.
(7) 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-for-sale 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	**Fair value**	**Level 2**	**Level 3**
March 31, 2020			
Loans HFS[1]	**$ 4,951**	**$ 781**	**$ 4,170**
Other real estate owned	**15**	**8**	**7**
Loans[2]	**759**	**553**	**206**
Non-marketable equity securities measured using the measurement alternative	**308**	**308**	**—**
Total assets at fair value on a nonrecurring basis	**$ 6,033**	**$ 1,650**	**$ 4,383**

In millions of dollars	**Fair value**	**Level 2**	**Level 3**
December 31, 2019			
Loans HFS[1]	$ 4,579	$ 3,249	$ 1,330
Other real estate owned	20	6	14
Loans[2]	344	93	251
Non-marketable equity securities measured using the measurement alternative	249	249	—
Total assets at fair value on a nonrecurring basis	$ 5,192	$ 3,597	$ 1,595

(1) Net of fair value amounts on the unfunded portion of loans HFS recognized as *Other liabilities* on the Consolidated Balance Sheet.
(2) Represents impaired loans held for investment whose carrying amount is based on the fair value of the underlying collateral less costs to sell, primarily real estate.

Valuation Techniques and Inputs for Level 3 Nonrecurring Fair Value Measurements

The following 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 March 31, 2020	**Fair value[1] *(in millions)***	**Methodology**	**Input**	**Low[2]**	**High**	**Weighted average[3]**
Loans held-for-sale	**$ 4,107**	Price-based	Price	**$ 80**	**$ 100**	**$ 95**
Other real estate owned	**$ 7**	Recovery analysis	Appraised value[4]	**$ 187,166**	**$ 2,333,138**	**$ 2,019,646**
Loans[5]	**$ 146**	Recovery analysis	Recovery rate	**—%**	**100.00%**	**59.77%**
	28	Price based	Cost of capital	**0.10%**	**100.00%**	**56.50%**
			Appraised value	**$ 17,521,218**	**$ 43,646,426**	**$ 30,583,822**

As of December 31, 2019	Fair value[1] *(in millions)*	Methodology	Input	Low[2]	High	Weighted average[3]
Loans held-for-sale	$ 1,320	Price-based	Price	$ 86	$ 100	$ 99
Other real estate owned	$ 11	Price-based	Appraised value[4]	$ 2,297,358	$ 8,394,102	$ 5,615,884
	5	Recovery analysis				
Loans[6]	$ 100	Recovery analysis	Recovery rate	0.57%	100.00%	64.78%
	54	Cash flow	Price	$ 2	$ 54	$ 27
	47	Price-based	Cost of capital	0.10%	100.00%	54.84%
	29	Price-based	Appraised value[4]	$ 17,521,218	$ 43,646,426	$ 30,583,822

(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 March 31,	
In millions of dollars	**2020**	2019
Loans HFS	**$ (391)**	$ (2)
Other real estate owned	**—**	1
Loans[1]	**(44)**	(27)
Non-marketable equity securities measured using the measurement alternative	**22**	61
Total nonrecurring fair value gains (losses)	**$ (413)**	$ 33

(1) Represents loans held for investment whose carrying amount is based on the fair value of the underlying collateral, primarily real estate.

Estimated Fair Value of Financial Instruments Not Carried at Fair Value

The following table presents the carrying value and fair value of Citigroup's financial instruments that are not carried at fair value. The table below therefore excludes items measured at fair value on a recurring basis presented in the tables above.

	March 31, 2020		Estimated fair value		
In billions of dollars	Carrying value	Estimated fair value	Level 1	Level 2	Level 3
Assets					
Investments	**$ 88.7**	**$ 90.0**	**$ 1.6**	**$ 86.2**	**$ 2.2**
Securities borrowed and purchased under agreements to resell	**106.9**	**106.9**	**—**	**106.9**	**—**
Loans[1][2]	**695.1**	**711.2**	**—**	**—**	**711.2**
Other financial assets[2][3]	**386.9**	**386.9**	**269.6**	**16.3**	**101.0**
Liabilities					
Deposits	**$ 1,182.3**	**$ 1,182.3**	**$ —**	**$ 978.4**	**$ 203.9**
Securities loaned and sold under agreements to repurchase	**159.6**	**159.6**	**—**	**159.6**	**—**
Long-term debt[4]	**213.2**	**214.8**	**—**	**185.0**	**29.8**
Other financial liabilities[5]	**145.6**	**145.6**	**—**	**19.8**	**125.8**

	December 31, 2019		Estimated fair value		
In billions of dollars	Carrying value	Estimated fair value	Level 1	Level 2	Level 3
Assets					
Investments	$ 86.4	$ 87.8	$ 1.9	$ 83.8	$ 2.1
Securities borrowed and purchased under agreements to resell	98.1	98.1	—	98.1	—
Loans[1][2]	681.2	677.7	—	4.7	673.0
Other financial assets[2][3]	262.4	262.4	177.6	16.3	68.5
Liabilities					
Deposits	$ 1,068.3	$ 1,066.7	$ —	$ 875.5	$ 191.2
Securities loaned and sold under agreements to repurchase	125.7	125.7	—	125.7	—
Long-term debt[4]	193.0	203.8	—	187.3	16.5
Other financial liabilities[5]	110.2	110.2	—	37.5	72.7

(1) The carrying value of loans is net of the *Allowance for loan losses* of $20.8 billion for March 31, 2020 and $12.8 billion for December 31, 2019. In addition, the carrying values exclude $1.1 billion and $1.4 billion of lease finance receivables at March 31, 2020 and December 31, 2019, respectively.

(2) Includes items measured at fair value on a nonrecurring basis.

(3) Includes cash and due from banks, deposits with banks, brokerage receivables, reinsurance recoverables and other financial instruments included in *Other assets* on the Consolidated Balance Sheet, for all of which the carrying value is a reasonable estimate of fair value.

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

(5) 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.

The estimated fair values of the Company's corporate unfunded lending commitments at March 31, 2020 and December 31, 2019 were liabilities of $10.4 billion and $5.1 billion, respectively, substantially all of which are classified as Level 3. The Company does not estimate the fair values of consumer unfunded lending commitments, which are generally cancellable by providing notice to the borrower.

21. FAIR VALUE ELECTIONS

The Company may elect to report most financial instruments and certain other items at fair value on an instrument-by-instrument basis with changes in fair value reported in earnings, other than DVA (see below). The election is made upon the initial recognition of an eligible financial asset, financial liability or firm commitment or when certain specified reconsideration events occur. The fair value election may not otherwise be revoked once an election is made. The changes in fair value are recorded in current earnings, other than DVA, which is 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 (MSRs). 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 March 31,	
In millions of dollars	**2020**	2019
Assets		
Securities borrowed and purchased under agreements to resell	**$ 92**	$ 29
Trading account assets	**(834)**	167
Investments	**—**	—
Loans		
Certain corporate loans	**(863)**	(133)
Certain consumer loans	**1**	—
Total loans	**$ (862)**	$ (133)
Other assets		
MSRs	**$ (143)**	$ (27)
Certain mortgage loans HFS[(1)]	**62**	16
Total other assets	**$ (81)**	$ (11)
Total assets	**$ (1,685)**	$ 52
Liabilities		
Interest-bearing deposits	**$ 112**	$ (91)
Securities loaned and sold under agreements to repurchase	**(288)**	35
Trading account liabilities	**(61)**	11
Short-term borrowings[(2)]	**1,256**	(175)
Long-term debt[(2)]	**7,365**	(2,681)
Total liabilities	**$ 8,384**	$ (2,901)

(1) Includes gains (losses) associated with interest rate lock commitments for those loans that have been originated and elected under the fair value option.
(2) 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. 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*.

Among other variables, the fair value of liabilities for which the fair value option has been elected (other than non-recourse debt 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 non-derivative liabilities due to such changes in the Company's own credit spread (or instrument-specific credit risk) were a gain of $4,188 million and a loss of $725 million for the three months ended March 31, 2020 and 2019, 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 Uncollateralized 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 uncollateralized short-term borrowings held primarily by broker-dealer entities in the United States, the 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:

	March 31, 2020		December 31, 2019	
In millions of dollars	**Trading assets**	**Loans**	Trading assets	Loans
Carrying amount reported on the Consolidated Balance Sheet	**$ 9,228**	**$ 3,999**	$ 8,320	$ 4,086
Aggregate unpaid principal balance in excess of (less than) fair value	**1,012**	**593**	410	315
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, $1,068 million and $1,062 million of unfunded commitments related to certain credit products selected for fair value accounting were outstanding as of March 31, 2020 and December 31, 2019, 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 three months ended March 31, 2020 and 2019 due to instrument-specific credit risk totaled to a loss of $(83) million and a gain of $18 million, respectively.

Certain Investments in Unallocated Precious Metals

Citigroup invests in unallocated precious metals accounts (gold, silver, platinum and palladium) as part of its commodity and foreign currency trading activities or to economically hedge certain exposures from issuing structured liabilities. Under ASC 815, the investment is bifurcated into a debt host contract and a commodity forward derivative instrument. Citigroup elects the fair value option for the debt host contract, and reports the debt host contract within *Trading account assets* on the Company's Consolidated Balance Sheet. The total carrying amount of debt host contracts across unallocated precious metals accounts was approximately $0.4 billion and $0.2 billion at March 31, 2020 and December 31, 2019, 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 March 31, 2020, there were approximately $10.5 billion and $8.1 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	**March 31, 2020**	December 31, 2019
Carrying amount reported on the Consolidated Balance Sheet	**$ 1,109**	$ 1,254
Aggregate fair value in excess of (less than) unpaid principal balance	**54**	(31)
Balance of non-accrual loans or loans more than 90 days past due	**—**	1
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 three months ended March 31, 2020 and 2019 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	**March 31, 2020**	December 31, 2019
Interest rate linked	**$ 22.0**	$ 22.9
Foreign exchange linked	**0.7**	0.9
Equity linked	**18.9**	21.7
Commodity linked	**1.7**	1.8
Credit linked	**2.2**	2.4
Total	**$ 45.5**	$ 49.7

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 are 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 are 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	**March 31, 2020**	December 31, 2019
Carrying amount reported on the Consolidated Balance Sheet	**$ 52,914**	$ 55,783
Aggregate unpaid principal balance in excess of (less than) fair value	**2,130**	(2,967)

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

In millions of dollars	**March 31, 2020**	December 31, 2019
Carrying amount reported on the Consolidated Balance Sheet	**$ 8,364**	$ 4,946
Aggregate unpaid principal balance in excess of (less than) fair value	**666**	1,411

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 2019 Annual Report on Form 10-K.

The following tables present information about Citi's guarantees at March 31, 2020 and December 31, 2019:

	Maximum potential amount of future payments			
In billions of dollars at March 31, 2020	**Expire within 1 year**	**Expire after 1 year**	**Total amount outstanding**	**Carrying value** *(in millions of dollars)*
Financial standby letters of credit	**$ 29.3**	**$ 57.3**	**$ 86.6**	**$ 147**
Performance guarantees	**6.5**	**5.6**	**12.1**	**23**
Derivative instruments considered to be guarantees	**22.3**	**51.7**	**74.0**	**2,660**
Loans sold with recourse	**—**	**1.2**	**1.2**	**7**
Securities lending indemnifications[1]	**107.8**	**—**	**107.8**	**—**
Credit card merchant processing[1][2]	**84.2**	**—**	**84.2**	**—**
Credit card arrangements with partners	**0.2**	**0.4**	**0.6**	**7**
Custody indemnifications and other	**—**	**28.6**	**28.6**	**40**
Total	**$ 250.3**	**$ 144.8**	**$ 395.1**	**$ 2,884**

	Maximum potential amount of future payments			
In billions of dollars at December 31, 2019	Expire within 1 year	Expire after 1 year	Total amount outstanding	Carrying value *(in millions of dollars)*
Financial standby letters of credit	$ 31.9	$ 62.4	$ 94.3	$ 140
Performance guarantees	6.9	5.5	12.4	21
Derivative instruments considered to be guarantees	35.2	60.8	96.0	474
Loans sold with recourse	—	1.2	1.2	7
Securities lending indemnifications[1]	87.8	—	87.8	—
Credit card merchant processing[1][2]	91.6	—	91.6	—
Credit card arrangements with partners	0.2	0.4	0.6	23
Custody indemnifications and other	—	33.7	33.7	41
Total	$ 253.6	$ 164.0	$ 417.6	$ 706

(1) The carrying values of securities lending indemnifications and credit card merchant processing were not material for either period presented, as the probability of potential liabilities arising from these guarantees is minimal.

(2) At March 31, 2020 and December 31, 2019, this maximum potential exposure was estimated to be $84 billion and $92 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 agencies and, to a lesser extent, private investors. The repurchase reserve was approximately $32 million and $37 million at March 31, 2020 and December 31, 2019, 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 March 31, 2020 and December 31, 2019, the actual and estimated losses incurred and the carrying value of Citi's obligations related to these programs were immaterial.

Value-Transfer Networks (Including Exchanges and Clearing Houses) (VTNs)

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 certain narrow cases, to the full pro rata share. The maximum exposure is difficult to estimate as this would require an assessment of claims that have not yet occurred; however, 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 March 31, 2020 or December 31, 2019 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 GE's 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 was approximately $8.6 billion as of March 31, 2020 and December 31, 2019. 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 its insolvency or the failure of UFLIC to perform under its reinsurance contract or GE to perform under the capital maintenance agreement, 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 March 31, 2020 and December 31, 2019 related to this indemnification. However, if both events become reasonably possible (meaning more than remote but less than probable), Citi will be required to estimate and disclose a reasonably possible loss or range of loss to the extent that such an estimate could be made. In addition, if both events become probable, Citi will be required to accrue for such liability in accordance with applicable accounting principles.

Citi continues to closely monitor its potential exposure under this indemnification obligation, given GE's 2018 LTC and other charges and the September 2019 AM Best credit ratings downgrade for the Genworth subsidiaries.

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 $18.1 billion and $13.3 billion as of March 31, 2020 and December 31, 2019, respectively.

Variation margin due from clients to the respective CCP, or from the CCP to clients, reflects changes in the value of the client's derivative contracts for each trading day. As a clearing member, Citi is exposed to the risk of non-performance by clients (e.g., failure of a client to post variation margin to the CCP for negative changes in the value of the client's derivative contracts). In the event of non-performance by a client, Citi would move to close out the client's positions. The CCP would typically utilize initial margin posted by the client and held by the CCP, with any remaining shortfalls required to be paid by Citi as clearing member. Citi generally holds incremental cash or securities margin posted by the client, which would typically be expected to be sufficient to mitigate Citi's credit risk in the event the client fails to perform.

As required by ASC 860-30-25-5, securities collateral posted by clients is not recognized on Citi's Consolidated Balance Sheet.

Carrying Value—Guarantees and Indemnifications

At March 31, 2020 and December 31, 2019, the total carrying amounts of the liabilities related to the guarantees and indemnifications included in the tables above amounted to approximately $2.9 billion and $0.7 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 $46.2 billion and $46.7 billion at March 31, 2020 and December 31, 2019, respectively. Securities and other marketable assets held as collateral amounted to $80.1 billion and $58.6 billion at March 31, 2020 and December 31, 2019, respectively. The majority of collateral is held to reimburse losses realized under securities lending indemnifications. In addition, letters of credit in favor of Citi held as collateral amounted to $3.6 billion and $4.4 billion at March 31, 2020 and December 31, 2019, 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 on 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.

	Maximum potential amount of future payments			
In billions of dollars at March 31, 2020	**Investment grade**	**Non-investment grade**	**Not rated**	**Total**
Financial standby letters of credit	**$ 59.8**	**$ 13.8**	**$ 13.0**	**$ 86.6**
Performance guarantees	**9.3**	**2.3**	**0.5**	**12.1**
Derivative instruments deemed to be guarantees	**—**	**—**	**74.0**	**74.0**
Loans sold with recourse	**—**	**—**	**1.2**	**1.2**
Securities lending indemnifications	**—**	**—**	**107.8**	**107.8**
Credit card merchant processing	**—**	**—**	**84.2**	**84.2**
Credit card arrangements with partners	**—**	**—**	**0.6**	**0.6**
Custody indemnifications and other	**16.3**	**12.3**	**—**	**28.6**
Total	**$ 85.4**	**$ 28.4**	**$ 281.3**	**$ 395.1**

	Maximum potential amount of future payments			
In billions of dollars at December 31, 2019	Investment grade	Non-investment grade	Not rated	Total
Financial standby letters of credit	$ 66.4	$ 12.5	$ 15.4	$ 94.3
Performance guarantees	9.7	2.3	0.4	12.4
Derivative instruments deemed to be guarantees	—	—	96.0	96.0
Loans sold with recourse	—	—	1.2	1.2
Securities lending indemnifications	—	—	87.8	87.8
Credit card merchant processing	—	—	91.6	91.6
Credit card arrangements with partners	—	—	0.6	0.6
Custody indemnifications and other	21.3	12.4	—	33.7
Total	$ 97.4	$ 27.2	$ 293.0	$ 417.6

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 weighted-average remaining lease term of approximately six years as of March 31, 2020. The operating lease ROU asset and lease liability were $2.9 billion and $3.2 billion, respectively, as of March 31, 2020, compared to an operating lease ROU asset of $3.1 billion and lease liability of $3.3 billion as of December 31, 2019. The Company recognizes fixed lease costs on a straight-line basis throughout the lease term in the Consolidated Statement of Income. In addition, variable lease costs are recognized in the period in which the obligation for those payments is incurred.

Credit Commitments and Lines of Credit

The table below summarizes Citigroup's credit commitments:

In millions of dollars	U.S.	Outside of U.S.	March 31, 2020	December 31, 2019
Commercial and similar letters of credit	**$ 717**	**$ 3,899**	**$ 4,616**	$ 4,533
One- to four-family residential mortgages	**2,862**	**1,887**	**4,749**	3,721
Revolving open-end loans secured by one- to four-family residential properties	**9,220**	**1,199**	**10,419**	10,799
Commercial real estate, construction and land development	**8,801**	**2,589**	**11,390**	12,981
Credit card lines	**621,188**	**95,362**	**716,550**	708,023
Commercial and other consumer loan commitments	**183,973**	**101,712**	**285,685**	324,359
Other commitments and contingencies	**1,825**	**1,460**	**3,285**	1,948
Total	**$ 828,586**	**$ 208,108**	**$ 1,036,694**	$ 1,066,364

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 March 31, 2020 and December 31, 2019, Citigroup had approximately $67.8 billion and $34.0 billion of unsettled reverse repurchase and securities borrowing agreements, and approximately $59.6 billion and $38.7 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	March 31, 2020	December 31, 2019
Cash and due from banks	**$ 2,978**	$ 3,758
Deposits with banks, net of allowance	**10,723**	26,493
Total	**$ 13,701**	$ 30,251

In response to the COVID-19 pandemic, the Federal Reserve Bank and certain other central banks eased regulations related to minimum required cash deposited with central banks. This resulted in a decrease in Citigroup's restricted cash amount at March 31, 2020.

23. CONTINGENCIES

The following information supplements and amends, as applicable, the disclosure in Note 27 to the Consolidated Financial Statements in Citi's 2019 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 or in Note 27 to the Consolidated Financial Statements in Citi's 2019 Annual Report on Form 10-K, 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 March 31, 2020, Citigroup's estimate of the reasonably possible unaccrued loss for these matters was materially unchanged from the estimate of approximately $1.3 billion in the aggregate as of December 31, 2019.

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 any litigation, regulatory, and tax matters disclosed herein, see Note 27 to the Consolidated Financial Statements in Citi's 2019 Annual Report on Form 10-K.

Foreign Exchange Matters

Regulatory Actions: As previously reported, in May 2015, Citigroup pled guilty to a violation of federal antitrust law, and in January 2017, the United States District Court for the District of Connecticut sentenced Citicorp to a three-year term of probation, which ended in January 2020. Additional information concerning this action is publicly available in court filings under the docket number 3:15-cr-78 (D. Conn.).

Interbank Offered Rates-Related Litigation and Other Matters

Antitrust and Other Litigation: On March 2, 2020, in IN RE LIBOR-BASED FINANCIAL INSTRUMENTS ANTITRUST LITIGATION, the court granted preliminary approval of a settlement among Citigroup, Citibank, Citigroup Global Markets Inc. (CGMI), and a class of purchasers of exchange-traded Eurodollar futures and options. 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 March 26, 2020, in IN RE ICE LIBOR ANTITRUST LITIGATION, the court granted Citigroup and the other defendants' motion to dismiss the action for failure to state a claim. Additional information concerning this action is publicly available in court filings under the docket number 19 Civ. 439 (S.D.N.Y.) (Daniels, J.).

Interest Rate and Credit Default Swap Matters

Antitrust and Other Litigation: On April 3, 2020, in TERA GROUP, INC., ET AL. v. CITIGROUP INC., ET AL., defendants filed a motion to dismiss plaintiffs' amended complaint. Additional information concerning this action is publicly available in court filings under the docket number 17-CV-4302 (S.D.N.Y.) (Sullivan, J.).

Sovereign Securities Matters

Antitrust and Other Litigation: On March 25, 2020, in IN RE SSA BONDS ANTITRUST LITIGATION, the court granted defendants' motion to dismiss the second amended consolidated class action complaint related to the supranational, subsovereign, and agency (SSA) bond market with prejudice.

On February 19, 2020, in MANCINELLI, ET AL. v. BANK OF AMERICA, ET AL., the court granted plaintiffs' motion to dismiss the action. Additional information

concerning this action is publicly available in court filings under the docket number CV-17-586082-00CP (Ont. S.C.J.).

On February 3, 2020, in IN RE GSE BONDS ANTITRUST LITIGATION, the court granted preliminary approval of a settlement with CGMI and 11 other defendants. 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.).

On February 21, 2020, in IN RE MEXICAN GOVERNMENT BONDS ANTITRUST LITIGATION, Citibanamex and other defendants moved to dismiss the amended complaint. Additional information concerning this action is publicly available in court filings under the docket number 18-cv-2830 (S.D.N.Y.) (Oetken, J.).

On April 1, 2020, the Louisiana Asset Management Pool filed an action against CGMI and other defendants, captioned LOUISIANA ASSET MANAGEMENT POOL v. BANK OF AMERICA CORPORATION, ET AL., in the United States District Court for the Eastern District of Louisiana. Plaintiff alleges that defendants conspired to manipulate the market for bonds issued by U.S. government-sponsored agencies. Plaintiff asserts claims against defendants for violations of the Sherman Act and Louisiana state law, and seeks treble damages, injunctive relief, and state law remedies. Additional information concerning this action is publicly available in court filings under the docket number 20 Civ. 1095 (E.D. La.) (Guidry, J.).

Transaction Tax Matters

Citigroup and Citibank are engaged in litigation or examinations with non-U.S. tax authorities, including in India and Germany, concerning the payment of transaction taxes and other non-income tax matters.

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 months ended March 31, 2020 and 2019, Condensed Consolidating Balance Sheet as of March 31, 2020 and December 31, 2019 and Condensed Consolidating Statement of Cash Flows for the three months ended March 31, 2020 and 2019 for Citigroup Inc., the parent holding company (Citigroup parent company), CGMHI, other Citigroup subsidiaries and eliminations and total consolidating adjustments. “Other Citigroup subsidiaries and eliminations” includes all other subsidiaries of Citigroup, intercompany eliminations and income (loss) from discontinued operations. “Consolidating adjustments” includes Citigroup parent company elimination of distributed and undistributed income of subsidiaries and investment in subsidiaries.

These Condensed Consolidating Financial Statements have been prepared and presented in accordance with SEC Regulation S-X Rule 3-10, “Financial Statements of Guarantors and Issuers of Guaranteed Securities Registered or Being Registered.”

These Condensed Consolidating Financial Statements are presented for purposes of additional analysis, but should be considered in relation to the Consolidated Financial Statements of Citigroup taken as a whole.

Condensed Consolidating Statements of Income and Comprehensive Income

	Three Months Ended March 31, 2020				
In millions of dollars	Citigroup parent company	CGMHI	Other Citigroup subsidiaries and eliminations	Consolidating adjustments	Citigroup consolidated
Revenues					
Dividends from subsidiaries	$ 105	$ —	$ —	$ (105)	$ —
Interest revenue	—	1,903	15,236	—	17,139
Interest revenue—intercompany	1,144	341	(1,485)	—	—
Interest expense	1,143	1,141	3,363	—	5,647
Interest expense—intercompany	248	782	(1,030)	—	—
Net interest revenue	$ (247)	$ 321	$ 11,418	$ —	$ 11,492
Commissions and fees	$ —	$ 1,550	$ 1,471	$ —	$ 3,021
Commissions and fees—intercompany	(19)	164	(145)	—	—
Principal transactions	(672)	6,254	(321)	—	5,261
Principal transactions—intercompany	502	(4,391)	3,889	—	—
Other income	80	49	828	—	957
Other income—intercompany	(70)	13	57	—	—
Total non-interest revenues	$ (179)	$ 3,639	$ 5,779	$ —	$ 9,239
Total revenues, net of interest expense	$ (321)	$ 3,960	$ 17,197	$ (105)	$ 20,731
Provisions for credit losses and for benefits and claims	$ —	$ (1)	$ 7,028	$ —	$ 7,027
Operating expenses					
Compensation and benefits	$ 28	$ 1,296	$ 4,330	$ —	$ 5,654
Compensation and benefits—intercompany	74	—	(74)	—	—
Other operating	23	598	4,319	—	4,940
Other operating—intercompany	4	482	(486)	—	—
Total operating expenses	$ 129	$ 2,376	$ 8,089	$ —	$ 10,594
Equity in undistributed income of subsidiaries	$ 2,368	$ —	$ —	$ (2,368)	$ —
Income (loss) from continuing operations before income taxes	$ 1,918	$ 1,585	$ 2,080	$ (2,473)	$ 3,110
Provision (benefit) for income taxes	(604)	337	843	—	576
Income (loss) from continuing operations	$ 2,522	$ 1,248	$ 1,237	$ (2,473)	$ 2,534
Income (loss) from discontinued operations, net of taxes	—	—	(18)	—	(18)
Net income before attribution of noncontrolling interests	$ 2,522	$ 1,248	$ 1,219	$ (2,473)	$ 2,516
Noncontrolling interests	—	—	(6)	—	(6)
Net income (loss)	$ 2,522	$ 1,248	$ 1,225	$ (2,473)	$ 2,522
Comprehensive income					
Add: Other comprehensive income (loss)	$ 3,797	$ 1,757	$ 1,179	$ (2,936)	$ 3,797
Total Citigroup comprehensive income (loss)	$ 6,319	$ 3,005	$ 2,404	$ (5,409)	$ 6,319
Add: Other comprehensive income attributable to noncontrolling interests	$ —	$ —	$ (51)	$ —	$ (51)
Add: Net income attributable to noncontrolling interests	—	—	(6)	—	(6)
Total comprehensive income (loss)	$ 6,319	$ 3,005	$ 2,347	$ (5,409)	$ 6,262

Condensed Consolidating Statements of Income and Comprehensive Income

	Three Months Ended March 31, 2019				
In millions of dollars	Citigroup parent company	CGMHI	Other Citigroup subsidiaries and eliminations	Consolidating adjustments	Citigroup consolidated
Revenues					
Dividends from subsidiaries	$ 9,167	$ —	$ —	$ (9,167)	$ —
Interest revenue	—	2,572	16,504	—	19,076
Interest revenue—intercompany	1,325	503	(1,828)	—	—
Interest expense	1,271	1,824	4,222	—	7,317
Interest expense—intercompany	312	1,075	(1,387)	—	—
Net interest revenue	$ (258)	$ 176	$ 11,841	$ —	$ 11,759
Commissions and fees	$ —	$ 1,307	$ 1,619	$ —	$ 2,926
Commissions and fees—intercompany	(1)	121	(120)	—	—
Principal transactions	(825)	(1,034)	4,663	—	2,804
Principal transactions—intercompany	447	2,036	(2,483)	—	—
Other income	319	99	669	—	1,087
Other income—intercompany	(34)	42	(8)	—	—
Total non-interest revenues	$ (94)	$ 2,571	$ 4,340	$ —	$ 6,817
Total revenues, net of interest expense	$ 8,815	$ 2,747	$ 16,181	$ (9,167)	$ 18,576
Provisions for credit losses and for benefits and claims	$ —	$ —	$ 1,980	$ —	$ 1,980
Operating expenses					
Compensation and benefits	$ 33	$ 1,284	$ 4,341	$ —	$ 5,658
Compensation and benefits—intercompany	26	—	(26)	—	—
Other operating	5	553	4,368	—	4,926
Other operating—intercompany	5	582	(587)	—	—
Total operating expenses	$ 69	$ 2,419	$ 8,096	$ —	$ 10,584
Equity in undistributed income of subsidiaries	$ (4,203)	$ —	$ —	$ 4,203	$ —
Income (loss) from continuing operations before income taxes	$ 4,543	$ 328	$ 6,105	$ (4,964)	$ 6,012
Provision (benefit) for income taxes	(167)	140	1,302	—	1,275
Income (loss) from continuing operations	$ 4,710	$ 188	$ 4,803	$ (4,964)	$ 4,737
Income (loss) from discontinued operations, net of taxes	—	—	(2)	—	(2)
Net income (loss) before attribution of noncontrolling interests	$ 4,710	$ 188	$ 4,801	$ (4,964)	$ 4,735
Noncontrolling interests	—	—	25	—	25
Net income (loss)	$ 4,710	$ 188	$ 4,776	$ (4,964)	$ 4,710
Comprehensive income					
Add: Other comprehensive income (loss)	$ 862	$ (289)	$ 999	$ (710)	$ 862
Total Citigroup comprehensive income (loss)	$ 5,572	$ (101)	$ 5,775	$ (5,674)	$ 5,572
Add: Other comprehensive income attributable to noncontrolling interests	$ —	$ —	$ (13)	$ —	$ (13)
Add: Net income attributable to noncontrolling interests	—	—	25	—	25
Total comprehensive income (loss)	$ 5,572	$ (101)	$ 5,787	$ (5,674)	$ 5,584

Condensed Consolidating Balance Sheet

In millions of dollars	March 31, 2020				
	Citigroup parent company	CGMHI	Other Citigroup subsidiaries and eliminations	Consolidating adjustments	Citigroup consolidated
Assets					
Cash and due from banks	$ —	$ 616	$ 23,139	$ —	$ 23,755
Cash and due from banks—intercompany	15	3,909	(3,924)	—	—
Deposits with banks, net of allowance	—	6,581	255,584	—	262,165
Deposits with banks—intercompany	3,000	8,392	(11,392)	—	—
Securities borrowed and purchased under resale agreements	—	200,718	61,818	—	262,536
Securities borrowed and purchased under resale agreements—intercompany	—	24,686	(24,686)	—	—
Trading account assets	329	212,464	152,207	—	365,000
Trading account assets—intercompany	167	6,045	(6,212)	—	—
Investments, net of allowance	1	508	398,374	—	398,883
Loans, net of unearned income	—	1,722	719,298	—	721,020
Loans, net of unearned income—intercompany	—	—	—	—	—
Allowance for credit losses on loans (ACLL)	—	—	(20,841)	—	(20,841)
Total loans, net	$ —	$ 1,722	$ 698,457	$ —	$ 700,179
Advances to subsidiaries	$ 142,560	$ —	$ (142,560)	$ —	$ —
Investments in subsidiaries	204,662	—	—	(204,662)	—
Other assets, net of allowance[1]	12,152	84,877	110,223	—	207,252
Other assets—intercompany	3,451	50,312	(53,763)	—	—
Total assets	$ 366,337	$ 600,830	$ 1,457,265	$ (204,662)	$ 2,219,770
Liabilities and equity					
Deposits	$ —	$ —	$ 1,184,911	$ —	$ 1,184,911
Deposits—intercompany	—	—	—	—	—
Securities loaned and sold under repurchase agreements	—	201,631	20,693	—	222,324
Securities loaned and sold under repurchase agreements—intercompany	—	29,764	(29,764)	—	—
Trading account liabilities	—	104,146	59,849	—	163,995
Trading account liabilities—intercompany	445	5,421	(5,866)	—	—
Short-term borrowings	28	13,997	40,926	—	54,951
Short-term borrowings—intercompany	—	25,563	(25,563)	—	—
Long-term debt	156,461	37,118	72,519	—	266,098
Long-term debt—intercompany	—	65,945	(65,945)	—	—
Advances from subsidiaries	13,996	—	(13,996)	—	—
Other liabilities, including allowance	3,001	71,096	60,412	—	134,509
Other liabilities—intercompany	75	10,464	(10,539)	—	—
Stockholders' equity	192,331	35,685	169,628	(204,662)	192,982
Total liabilities and equity	$ 366,337	$ 600,830	$ 1,457,265	$ (204,662)	$ 2,219,770

(1) *Other assets* for Citigroup parent company at March 31, 2020 included $43.3 billion of placements to Citibank and its branches, of which $38.1 billion had a remaining term of less than 30 days.

Condensed Consolidating Balance Sheet

In millions of dollars	December 31, 2019				
	Citigroup parent company	CGMHI	Other Citigroup subsidiaries and eliminations	Consolidating adjustments	Citigroup consolidated
Assets					
Cash and due from banks	$ —	$ 586	$ 23,381	$ —	$ 23,967
Cash and due from banks—intercompany	21	5,095	(5,116)	—	—
Deposits with banks	—	4,050	165,902	—	169,952
Deposits with banks—intercompany	3,000	6,710	(9,710)	—	—
Securities borrowed and purchased under resale agreements	—	195,537	55,785	—	251,322
Securities borrowed and purchased under resale agreements—intercompany	—	21,446	(21,446)	—	—
Trading account assets	286	152,115	123,739	—	276,140
Trading account assets—intercompany	426	5,858	(6,284)	—	—
Investments, net of allowance	1	541	368,021	—	368,563
Loans, net of unearned income	—	2,497	696,986	—	699,483
Loans, net of unearned income—intercompany	—	—	—	—	—
Allowance for credit losses on loans (ACLL)	—	—	(12,783)	—	(12,783)
Total loans, net	$ —	$ 2,497	$ 684,203	$ —	$ 686,700
Advances to subsidiaries	$ 144,587	$ —	$ (144,587)	$ —	$ —
Investments in subsidiaries	202,116	—	—	(202,116)	—
Other assets, net of allowance[(1)]	12,377	54,784	107,353	—	174,514
Other assets—intercompany	2,799	45,588	(48,387)	—	—
Total assets	$ 365,613	$ 494,807	$ 1,292,854	$ (202,116)	$ 1,951,158
Liabilities and equity					
Deposits	$ —	$ —	$ 1,070,590	$ —	$ 1,070,590
Deposits—intercompany	—	—	—	—	—
Securities loaned and sold under repurchase agreements	—	145,473	20,866	—	166,339
Securities loaned and sold under repurchase agreements—intercompany	—	36,581	(36,581)	—	—
Trading account liabilities	1	80,100	39,793	—	119,894
Trading account liabilities—intercompany	379	5,109	(5,488)	—	—
Short-term borrowings	66	11,096	33,887	—	45,049
Short-term borrowings—intercompany	—	17,129	(17,129)	—	—
Long-term debt	150,477	39,578	58,705	—	248,760
Long-term debt—intercompany	—	66,791	(66,791)	—	—
Advances from subsidiaries	20,503	—	(20,503)	—	—
Other liabilities, including allowance	937	51,777	53,866	—	106,580
Other liabilities—intercompany	8	8,414	(8,422)	—	—
Stockholders' equity	193,242	32,759	170,061	(202,116)	193,946
Total liabilities and equity	$ 365,613	$ 494,807	$ 1,292,854	$ (202,116)	$ 1,951,158

(1) *Other assets* for Citigroup parent company at December 31, 2019 included $35.1 billion of placements to Citibank and its branches, of which $24.9 billion had a remaining term of less than 30 days.

Condensed Consolidating Statement of Cash Flows

	Three Months Ended March 31, 2020				
In millions of dollars	Citigroup parent company	CGMHI	Other Citigroup subsidiaries and eliminations	Consolidating adjustments	Citigroup consolidated
Net cash provided by (used in) operating activities of continuing operations	**$ 4,334**	**$ (38,869)**	**$ 9,002**	**$ —**	**$ (25,533)**
Cash flows from investing activities of continuing operations					
Purchases of investments	**$ —**	**$ —**	**$ (108,658)**	**$ —**	**$ (108,658)**
Proceeds from sales of investments	**—**	**—**	**44,399**	**—**	**44,399**
Proceeds from maturities of investments	**—**	**—**	**29,203**	**—**	**29,203**
Change in loans	**—**	**—**	**(26,743)**	**—**	**(26,743)**
Proceeds from sales and securitizations of loans	**—**	**—**	**596**	**—**	**596**
Change in securities borrowed and purchased under agreements to resell	**—**	**(8,421)**	**(2,793)**	**—**	**(11,214)**
Changes in investments and advances—intercompany	**1,121**	**(9,442)**	**8,321**	**—**	**—**
Other investing activities	**—**	**—**	**(440)**	**—**	**(440)**
Net cash provided by (used in) investing activities of continuing operations	**$ 1,121**	**$ (17,863)**	**$ (56,115)**	**$ —**	**$ (72,857)**
Cash flows from financing activities of continuing operations					
Dividends paid	**$ (1,365)**	**$ —**	**$ —**	**$ —**	**$ (1,365)**
Issuance of preferred stock	**1,500**	**—**	**—**	**—**	**1,500**
Redemption of preferred stock	**(1,500)**	**—**	**—**	**—**	**(1,500)**
Treasury stock acquired	**(2,925)**	**—**	**—**	**—**	**(2,925)**
Proceeds (repayments) from issuance of long-term debt, net	**5,742**	**72**	**10,032**	**—**	**15,846**
Proceeds (repayments) from issuance of long-term debt—intercompany, net		**554**	**(554)**	**—**	**—**
Change in deposits	**—**	**—**	**114,321**	**—**	**114,321**
Change in securities loaned and sold under agreements to repurchase	**—**	**49,341**	**6,644**	**—**	**55,985**
Change in short-term borrowings	**—**	**2,901**	**7,001**	**—**	**9,902**
Net change in short-term borrowings and other advances—intercompany	**(6,507)**	**7,040**	**(533)**	**—**	**—**
Capital contributions from (to) parent	**—**	**—**	**—**	**—**	**—**
Other financing activities	**(406)**	**(119)**	**119**	**—**	**(406)**
Net cash provided by (used in) financing activities of continuing operations	**$ (5,461)**	**$ 59,789**	**$ 137,030**	**$ —**	**$ 191,358**
Effect of exchange rate changes on cash and due from banks	**$ —**	**$ —**	**$ (967)**	**$ —**	**$ (967)**
Change in cash and due from banks and deposits with banks	**$ (6)**	**$ 3,057**	**$ 88,950**	**$ —**	**$ 92,001**
Cash and due from banks and deposits with banks at beginning of period	**3,021**	**16,441**	**174,457**	**—**	**193,919**
Cash and due from banks and deposits with banks at end of period	**$ 3,015**	**$ 19,498**	**$ 263,407**	**$ —**	**$ 285,920**
Cash and due from banks	**$ 15**	**$ 4,525**	**$ 19,215**	**$ —**	**$ 23,755**
Deposits with banks, net of allowance	**3,000**	**14,973**	**244,192**	**—**	**262,165**
Cash and due from banks and deposits with banks at end of period	**$ 3,015**	**$ 19,498**	**$ 263,407**	**$ —**	**$ 285,920**
Supplemental disclosure of cash flow information for continuing operations					
Cash paid during the period for income taxes	**$ 16**	**$ 78**	**$ 1,347**	**$ —**	**$ 1,441**
Cash paid during the period for interest	**998**	**1,983**	**2,443**	**—**	**5,424**
Non-cash investing activities					
Transfers to loans HFS from loans	**$ —**	**$ —**	**$ 224**	**$ —**	**$ 224**

Condensed Consolidating Statement of Cash Flows

	Three Months Ended March 31, 2019				
In millions of dollars	Citigroup parent company	CGMHI	Other Citigroup subsidiaries and eliminations	Consolidating adjustments	Citigroup consolidated
Net cash provided by (used in) operating activities of continuing operations	$ 10,950	$ (30,786)	$ (17,780)	$ —	$ (37,616)
Cash flows from investing activities of continuing operations					
Purchases of investments	$ —	$ —	$ (69,673)	$ —	$ (69,673)
Proceeds from sales of investments	—	—	31,436	—	31,436
Proceeds from maturities of investments	—	—	47,363	—	47,363
Change in loans	—	—	(892)	—	(892)
Proceeds from sales and securitizations of loans	—	—	2,062	—	2,062
Proceeds from significant disposals	—	—	—	—	—
Change in securities borrowed and purchased under agreements to resell	—	6,748	(559)	—	6,189
Changes in investments and advances—intercompany	(106)	(6,636)	6,742	—	—
Other investing activities	—	(17)	(425)	—	(442)
Net cash provided by (used in) investing activities of continuing operations	$ (106)	$ 95	$ 16,054	$ —	$ 16,043
Cash flows from financing activities of continuing operations					
Dividends paid	$ (1,320)	$ —	$ —	$ —	$ (1,320)
Redemption of preferred stock	(480)	—	—	—	(480)
Treasury stock acquired	(4,055)	—	—	—	(4,055)
Proceeds (repayments) from issuance of long-term debt, net	5,199	5,576	(1,791)	—	8,984
Proceeds (repayments) from issuance of long-term debt—intercompany, net	—	(1,295)	1,295	—	—
Change in deposits	—	—	17,186	—	17,186
Change in securities loaned and sold under agreements to repurchase	—	15,217	(2,613)	—	12,604
Change in short-term borrowings	—	2,829	4,147	—	6,976
Net change in short-term borrowings and other advances—intercompany	(9,838)	9,125	713	—	—
Other financing activities	(358)	—	—	—	(358)
Net cash provided by (used in) financing activities of continuing operations	$ (10,852)	$ 31,452	$ 18,937	$ —	$ 39,537
Effect of exchange rate changes on cash and due from banks	$ —	$ —	$ (176)	$ —	$ (176)
Change in cash and due from banks and deposits with banks	$ (8)	$ 761	$ 17,035	$ —	$ 17,788
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	$ 3,012	$ 16,438	$ 186,443	$ —	$ 205,893
Cash and due from banks	$ 12	$ 4,916	$ 19,520	$ —	$ 24,448
Deposits with banks, net of allowance	3,000	11,522	166,923	—	181,445
Cash and due from banks and deposits with banks at end of period	$ 3,012	$ 16,438	$ 186,443	$ —	$ 205,893
Supplemental disclosure of cash flow information for continuing operations					
Cash paid (received) during the period for income taxes	$ 306	$ 57	$ 962	$ —	$ 1,325
Cash paid during the period for interest	956	2,694	3,281	—	6,931
Non-cash investing activities					
Transfers to loans HFS from loans	$ —	$ —	$ 2,000	$ —	$ 2,000

UNREGISTERED SALES OF EQUITY SECURITIES, REPURCHASES OF EQUITY SECURITIES AND DIVIDENDS

Unregistered Sales of Equity Securities

None.

Equity Security Repurchases[1]

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
January 2020			
Open market repurchases[2]	**14.1**	**$ 78.86**	**$ 5,745**
Employee transactions[3]	**—**	**—**	**N/A**
February 2020			
Open market repurchases[2]	**16.3**	**74.60**	**4,531**
Employee transactions[3]	**—**	**—**	**N/A**
March 2020			
Open market repurchases[2]	**10.3**	**57.87**	**3,930**
Employee transactions[3]	**—**	**—**	**N/A**
Total for 1Q20 and remaining program balance as of March 31, 2020	**40.7**	**$ 71.83**	**$ 3,930**

(1) As previously announced, on March 15, 2020, Citi joined other major U.S. banks in suspending stock repurchases in light of the COVID-19 pandemic. Through March 31, 2020, Citi returned approximately $57.4 billion in capital over the past three Comprehensive Capital Analysis and Review (CCAR) cycles, including $2.9 billion in stock during the first quarter of 2020. Citi had been approved to return roughly $62.3 billion in capital over the three-year CCAR period ending June 30, 2020. There is no change to Citi's dividend policy.

(2) Represents repurchases under the $17.1 billion 2019 common stock repurchase program (2019 Repurchase Program) that was approved by Citigroup's Board of Directors and announced on June 27, 2019. The 2019 Repurchase Program was part of the planned capital actions included by Citi as part of the 2019 CCAR. Shares repurchased under the 2019 Repurchase Program were added to treasury stock. The 2019 Repurchase Program expires on June 30, 2020.

(3) 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 the results of the CCAR process required by the Federal Reserve Board and the supervisory stress tests required under the Dodd-Frank Act. For additional information regarding Citi's capital planning and stress testing, see "Capital Resources—Current Regulatory Capital Standards—Stress Testing Component of Capital Planning" and "Risk Factors—Strategic Risks" in Citi's 2019 Annual Report on Form 10-K. For additional information regarding recent changes to CCAR resulting from the Federal Reserve Board's Stress Capital Buffer final rule, see "Capital Resources—Regulatory Capital Standards Developments" above. 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 2019 Annual Report on Form 10-K.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on the 4th day of May, 2020.

CITIGROUP INC.
(Registrant)

By /s/ Mark A. L. Mason
Mark A. L. Mason
Chief Financial Officer
(Principal Financial Officer)

By /s/ Jeffrey R. Walsh
Jeffrey R. Walsh
Interim Controller and Chief Accounting Officer
(Principal Accounting Officer)

EXHIBIT INDEX

Exhibit Number		Description of Exhibit
3.01+		Restated Certificate of Incorporation of Citigroup, as amended, as in effect on the date hereof.
10.01*		Citigroup 2019 Stock Incentive Plan (as amended and restated as of April 21, 2020), incorporated by reference to the Company's Form 8-K filed April 24, 2020 (File No. 1-09924).
10.02*+		The Retirement Plan for Specified Non-United States International Staff of Citibank, N.A. and Participating Companies as Amended and Restated Effective January 1, 2000 (with amendments through December 31, 2008).
10.03*+		Francisco Fernandez-De-Ybarra Employment Agreement, dated as of August 2, 2007 and as amended as of August 28, 2019.
10.04*+		Form of Citigroup Inc. DCAP Agreement (for awards granted on February 13, 2020 and future years).
31.01+		Certification of principal executive officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.02+		Certification of principal financial officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.01+		Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
99.01+		List of 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 Citigroup for the quarter ended March 31, 2020, filed on May 4, 2020, 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		See the cover page of this Quarterly Report on Form 10-Q, formatted in Inline XBRL.

The total amount of securities authorized pursuant to any instrument defining rights of holders of long-term debt of the Company does not exceed 10% of the total assets of the Company and its consolidated subsidiaries. The Company will furnish copies of any such instrument to the SEC upon request.

* Denotes a management contract or compensatory plan or arrangement.
+ Filed herewith.