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 September 30, 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**
	(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 September 30, 2020: 2,081,959,678

Available on the web at www.citigroup.com

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OVERVIEW

This Quarterly Report on Form 10-Q should be read in conjunction with Citigroup's Annual Report on Form 10-K for the year ended December 31, 2019 (2019 Annual Report on Form 10-K) and Citigroup's Quarterly Reports on Form 10-Q for the quarter ended March 31, 2020 (First Quarter of 2020 Form 10-Q) and for the quarter ended June 30, 2020 (Second Quarter of 2020 Form 10-Q).

Additional information about Citigroup is available on Citi's website at www.citigroup.com. Citigroup's annual reports on Form 10-K, quarterly reports on Form 10-Q and proxy statements, as well as other filings with the U.S. Securities and Exchange Commission (SEC), are available free of charge through Citi's website by clicking on the "Investors" 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.*

CITIGROUP SEGMENTS

Global Consumer Banking (GCB)

- **North America**
- **Latin America**[(1)]
- **Asia**[(2)]

Consisting of:

- **Retail banking and wealth management, including**
  - Residential real estate
  - Small business banking
- **Citi-branded cards** in all regions
- **Citi retail services** in North America

Institutional Clients Group (ICG)

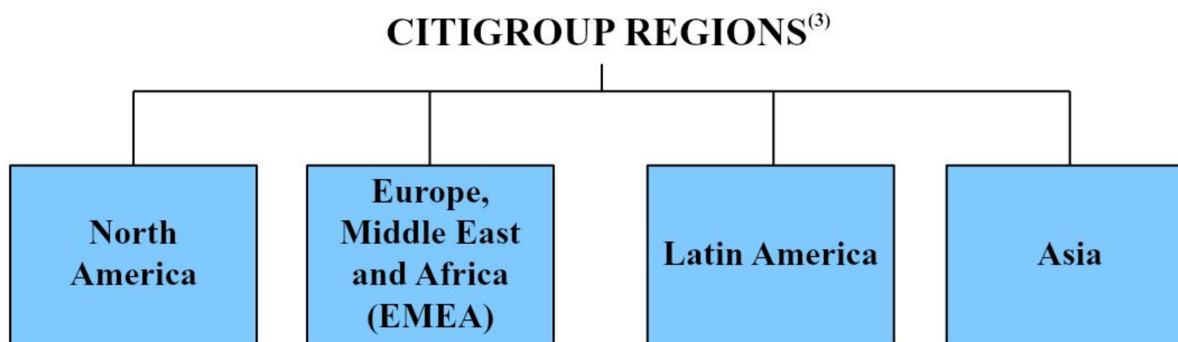
- **Banking**
  - Investment banking
  - Treasury and trade solutions
  - Corporate lending
  - Private bank
- **Markets and securities services**
  - Fixed income markets
  - Equity markets
  - Securities services

Corporate/ Other

- **Corporate Treasury**
- **Operations and technology**
- **Global staff functions and other corporate expenses**
- **Legacy non-core assets:**
  - Consumer loans
  - Certain portfolios of securities, loans and other assets
- **Discontinued operations**

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

CITIGROUP REGIONS[(3)]



(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

Third Quarter of 2020—Results Reflected Solid Performance and Continued Financial Strength and Operational Resilience Despite a Challenging Macroeconomic Environment

As described further throughout this Executive Summary, during the third quarter of 2020, Citi demonstrated solid performance and continued financial strength and operational resilience, despite continued weakness in economic conditions during the quarter due to the COVID-19 pandemic:

- Citi's revenues were impacted by the challenging environment, declining 7% from the prior-year period, as strong performance in fixed income markets, investment banking, equity markets and the private bank in *Institutional Clients Group (ICG)* was more than offset by lower revenues in *Global Consumer Banking (GCB)*, reflecting declines across all regions, and lower revenues in *Corporate/Other*.
- Citi's results included a $400 million civil money penalty, recorded in expenses in *Corporate/Other*, in connection with a consent order Citibank entered into with the Office of the Comptroller of the Currency (for additional information, see below). Citi's expenses also reflected continued investments in infrastructure, risk management and controls.
- Citi's cost of credit increased 8%, meaningfully lower relative to the first half of 2020, as an increase in *ICG*'s allowance for credit losses (ACL) was partially offset by decreases in *GCB* and *Corporate/Other*.
- Citi had broad-based deposit growth across *ICG* and *GCB*, reflecting strong client engagement, as well as an elevated level of liquidity in the financial system, while also strengthening Citi's available liquidity.
- Citi returned $1.1 billion of capital to its common shareholders in the form of dividends.
- Citi continued to support its employees, customers and clients as well as the broader economy during this challenging time (see "COVID-19 Pandemic Overview" below), while maintaining a strong balance sheet.

The economic outlook for the remainder of 2020 has been lowered, and continued uncertainties around the pandemic, including, among others, the duration and severity of the economic and public health impacts, have created a more volatile operating environment that will likely continue to negatively impact Citi's businesses and results in the near term.

For a discussion of risks and uncertainties related to the pandemic, see "COVID-19 Pandemic 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 as well as each respective business's results of operations and "Managing Global Risk" and "Risk Factors" in Citi's 2019 Annual Report on Form 10-K.

On October 7, 2020, the Board of Governors of the Federal Reserve System (Federal Reserve Board) and the Office of the Comptroller of the Currency (OCC) issued consent orders with Citigroup and Citibank, respectively. The consent orders require that Citigroup and Citibank submit acceptable plans to the Federal Reserve Board and the OCC, on various timelines, relating principally to various aspects of risk management, compliance, data quality management and governance, and internal controls. Citibank also entered into a consent order with the OCC to pay the $400 million civil money penalty. Citi is committed to thoroughly addressing the matters identified by the consent orders, as an essential part of Citi's broader efforts to enhance its infrastructure, governance and processes. Citi has centralized its program management and is making the strengthening of its risk and control environment a further priority for the Company. Citi is focused on committing all of the necessary resources for this multi-year transformation, while continuing to serve its customers and clients. For additional information regarding the consent orders, see Citi's Current Report on Form 8-K filed with the SEC on October 7, 2020.

Third Quarter of 2020 Results Summary

Citigroup

Citigroup reported net income of $3.2 billion, or $1.40 per share, compared to net income of $4.9 billion, or $2.07 per share, in the prior-year period. Net income declined 34%, driven by the lower revenues, the higher expenses, higher credit costs and a higher effective tax rate. Citigroup's effective tax rate was 20% in the current quarter compared to 18% in the prior-year period, reflecting the impact of the non-deductible civil money penalty this quarter. Earnings per share decreased 32%, primarily driven by the decline in net income.

Citigroup revenues of $17.3 billion decreased 7% from the prior-year period, primarily reflecting the lower revenues in *GCB* and *Corporate/Other*, partially offset by higher revenues in *ICG*.

Citigroup's end-of-period loans decreased 4% from the prior-year period to $667 billion. Excluding the impact of foreign currency translation into U.S. dollars for reporting purposes (FX translation), Citigroup's end-of-period loans also declined 4%, driven by a 3% aggregate decline in *GCB* and *ICG*, reflecting a higher level of repayments in *GCB* and *ICG*, reduced drawdowns in *ICG* and lower spend activity in *GCB*. Citigroup's end-of-period deposits increased 16% to $1.3 trillion, as reported and excluding the impact of FX translation, primarily driven by 17% growth in *GCB* and 16% growth in *ICG*. (Citi's results of operations excluding the impact of FX translation are non-GAAP financial measures.)

Expenses
Citigroup operating expenses of $11.0 billion increased 5% versus the prior-year period, as the civil money penalty, investments in infrastructure, risk management and controls, higher compensation and pandemic-related expenses more than offset efficiency savings and reductions in marketing and other discretionary spending. Year-over-year, *GCB* operating expenses declined 3%, while *ICG* expenses increased 3% and *Corporate/Other* expenses increased to $969 million compared to $485 million in the prior-year period.

Cost of Credit
Citi's total provisions for credit losses and for benefits and claims of $2.3 billion increased 8% from the prior-year period, largely reflecting the increase in *ICG*'s ACL reserves, partially offset by the decreases in *GCB* and *Corporate/Other*. Citi's ACL build was $0.3 billion, primarily reflecting the impact of continued uncertainty surrounding the macroeconomic outlook, partially offset by lower volumes in *GCB* and the ACL release in *Corporate/Othe*r, as well as the impact of a change in estimate effected by a change in accounting principle for third-party collection costs in international *GCB*. For further information on the drivers of Citi's ACL build, see "Significant Accounting Policies and Significant Estimates—Allowance for Credit Losses" below.

Net credit losses of $1.9 billion were largely unchanged. Consumer net credit losses of $1.6 billion decreased 12%, primarily reflecting lower loan volumes given higher payment rates and lower spending activity, as well as the benefits of relief programs. Corporate net credit losses increased from $110 million to $325 million, primarily driven by write-offs across various sectors, and were largely offset by the release of previously established ACL reserves.

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

Capital
Citigroup's Common Equity Tier 1 Capital ratio was 11.8% as of September 30, 2020, based on the Basel III Advanced Approaches framework for determining risk-weighted assets, compared to 11.6% as of September 30, 2019, based on the Basel III Standardized Approach for determining risk-weighted assets. The increase in the ratio primarily reflected net income.

Citigroup's Supplementary Leverage ratio was 6.8% as of September 30, 2020, compared to 6.3% as of September 30, 2019. The increase was primarily driven by a decrease in Total Leverage Exposure reflecting the benefit of temporary relief granted by the Federal Reserve Board. For additional information on Citi's capital ratios and related components, see "Capital Resources" below.

Global Consumer Banking
GCB net income of $1.1 billion declined 30% from the prior-year period. Excluding the impact of FX translation, net income declined 29%, reflecting lower revenues, partially offset by lower cost of credit and lower expenses. *GCB* operating expenses of $4.2 billion decreased 3%. Excluding the impact of FX translation, expenses decreased 2%, as lower volume-related expenses, reductions in marketing and other discretionary spending and efficiency savings were partially offset by increases in pandemic-related expenses.

GCB revenues of $7.2 billion decreased 13%. Excluding the impact of FX translation, revenues decreased 12%, as strong deposit growth and momentum in *Asia* wealth management were more than offset by lower card volumes and the impact of lower interest rates across all regions, reflecting the continued impact from the pandemic.

North America GCB revenues of $4.5 billion decreased 13%, with lower revenues across Citi-branded cards, Citi retail services and retail banking. Citi-branded cards revenues of $2.1 billion decreased 12%, reflecting lower purchase sales and higher payment rates driving lower average loans. Citi retail services revenues of $1.4 billion decreased 21%, reflecting lower average loans as well as higher partner payments. Retail banking revenues of $1.1 billion decreased 2%, as the benefit of stronger deposit volumes and an improvement in mortgage revenues were more than offset by lower deposit spreads.

North America GCB average deposits of $182 billion increased 19% year-over-year, average retail banking loans of $53 billion increased 10% year-over-year and assets under management of $73 billion increased 7%. Average Citi-branded card loans of $81 billion decreased 10% and Citi-branded card purchase sales of $86 billion decreased 9%, driven by reduced customer activity related to the pandemic. The decline in average Citi-branded cards loans was also due to higher payment rates. Average Citi retail services loans of $45 billion decreased 10% and Citi retail services purchase sales of $20 billion decreased 8%, both driven by reduced customer activity. For additional information on the results of operations of *North America GCB* for the third 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 $2.6 billion declined 15% versus the prior-year period. Excluding the impact of FX translation, international *GCB* revenues declined 12%, largely reflecting the impact of the pandemic. On this basis, *Latin America GCB* revenues decreased 10%, driven by lower average loans and lower interest rates, partially offset by strong deposit growth. *Asia GCB* revenues decreased 13%, as lower card purchase sales and lower interest rates were partially offset by strong investment revenues. For additional information on the results of operations of *Latin America GCB* and *Asia GCB* for the third 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 $138 billion increased 13%, average retail banking loans of

$72 billion increased 3%, assets under management of $126 billion increased 6%, average card loans of $21 billion decreased 11% and card purchase sales of $22 billion decreased 18%, all excluding the impact of FX translation.

Institutional Clients Group

ICG net income of $2.9 billion decreased 10%, as the revenue growth was more than offset by higher cost of credit and higher expenses. *ICG* operating expenses increased 3% to $5.8 billion, largely driven by continued investments in infrastructure, risk management and controls, as well as higher compensation costs.

ICG revenues of $10.4 billion increased 5%, reflecting a 16% increase in *Markets and securities services* revenues, partially offset by a 4% decline in *Banking* revenues. The decrease in *Banking* revenues included the impact of $124 million of losses on loan hedges related to corporate lending and the private bank, compared to losses of $33 million related to corporate lending in the prior-year period.

Banking revenues of $5.3 billion (excluding the impact of losses on loan hedges) decreased 2%, as increases in investment banking and the private bank were more than offset by declines in treasury and trade solutions and corporate lending. Investment banking revenues of $1.4 billion increased 13%, reflecting solid growth in capital markets, particularly in equity underwriting. Advisory revenues decreased 41% to $163 million, while equity underwriting revenues increased 96% to $484 million and debt underwriting revenues increased 5% to $740 million.

Treasury and trade solutions revenues of $2.4 billion declined 6%, and 4% 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 and reduced commercial card spend. Private bank revenues of $938 million increased 8% (excluding gain (loss) on loan hedges), driven by increased capital markets activity and improved managed investments revenues, as well as higher lending and deposit volumes, partially offset by lower deposit spreads. Corporate lending revenues of $414 million declined 39%. Excluding the impact of losses on loan hedges, corporate lending revenues of $538 million declined 25%, as higher loan volumes were more than offset by lower spreads.

Markets and securities services revenues of $5.2 billion increased 16%. Fixed income markets revenues of $3.8 billion increased 18%, driven by strong performance across spread products and commodities. Equity markets revenues of $875 million increased 15%, as solid performance in cash equities and derivatives was partially offset by lower revenues in prime finance. Securities services revenues of $631 million decreased 5%, and 4% excluding the impact of FX translation, as higher deposit volumes were more than offset by lower spreads. For additional information on the results of operations of *ICG* for the third quarter of 2020, see "*Institutional Clients Group*" below.

Corporate/Other

Corporate/Other net loss was $723 million in the third quarter of 2020, compared to net income of $191 million in the prior-year period, reflecting the lower revenues and increased expenses, partially offset by a larger ACL release on the legacy portfolio. Operating expenses of $969 million increased significantly, as the wind-down of legacy assets was more than offset by the civil money penalty, investments in infrastructure, risk management and controls and incremental costs associated with the pandemic. *Corporate/Other* revenues of $(224) million compared to $434 million in the prior-year period, reflecting the wind-down of legacy assets, the impact of lower rates and marks on securities. For additional information on the results of operations of *Corporate/Other* for the third quarter of 2020, see "*Corporate/Other*" below.

COVID-19 PANDEMIC 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. 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 pandemic. Citi had builds to its allowance for credit losses (ACL) of approximately $10.8 billion during the first nine months of 2020, bringing its ACL to approximately $28.9 billion at September 30, 2020, with an allowance for credit losses on loans (ACLL) reserve ratio of 4.00% on funded loans. For additional information, see "Covid-19 Pandemic Overview—Impact of CECL on Citi's Allowance for Credit Losses" below.

Despite these impacts, Citi has remained well positioned from a capital and liquidity perspective and has maintained strong business operations. At September 30, 2020, Citi had a Common Equity Tier 1 Capital ratio of 11.8%, a Supplementary Leverage ratio of 6.8% and a Liquidity Coverage ratio of 118%, each well above regulatory minimums, with approximately $965 billion of available liquidity resources (see "Capital Resources" and "Managing Global Risk—Liquidity Risk" below).

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. For additional information on Citi's pandemic response and other pandemic-related information, see Citi's First and Second Quarters 2020 Forms 10-Q.

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

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 the public 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.

Citi Employees

- The majority of Citi employees—nearly two-thirds—around the world are working remotely.
- Citi is pursuing a slow and measured reentry in some locations where local conditions permit, beginning with only a small number of colleagues.
- Citi's response teams are consulting with health experts and following local government guidelines in determining the safest return to the office for each location.
- Citi has reconfigured its sites and implemented new protocols to make work environments as safe as possible in offices, branches and ATMs.
- Citi is providing additional health and well-being resources for colleagues, plus enhanced flexibility and paid time off for colleagues impacted by COVID-19.
- The company continues to monitor the situation as it evolves and will review and update operations as needed.

Citi Communities

In addition to Citi's core business activities, the Company is supporting those immediately impacted by this crisis through philanthropic efforts around the world. Citi and the Citi Foundation have committed more than $100 million to date in support of COVID-19-related community relief and economic recovery efforts globally. These contributions include over $4 million raised through an employee donation matching program to further global relief efforts—the "Double the Good" employee donation campaign. Having exceeded the $2 million goal in donations, Citi is donating $500,000 to each of the four organizations selected by Citi's regions to address unique challenges: United Nations Development Programme (Asia Pacific), International Rescue Committee (Europe, Middle East and Africa), the International Organization for Migration (Latin America) and Direct Relief (North America).

Citi Consumer Loan Relief Programs

As previously disclosed, Citi was one of the first banks in the U.S. to announce assistance measures for pandemic-impacted consumer customers. Citi has offered a wide array of programs globally for different types of products, providing short- and medium-term relief to customers as a result of the pandemic. The relief has primarily been in the form of payment deferrals and fee waivers. These consumer relief programs have mainly been provided to *GCB* customers, with a small portion of customers reported within *Corporate/Other*. For further information on Citi's measures to support its customers and clients in response to the pandemic, see "COVID-19 Overview" in the First and Second Quarters of 2020 Forms 10-Q.

The table below provides information on the number of loan modifications, the associated enrollment and outstanding balances as of September 30, 2020, for Citi's pandemic-related relief programs, excluding troubled debt restructurings (for additional information, see "Troubled Debt Restructuring (TDR) Relief" below).

In millions of dollars, except number of loans modified	For the Three Months Ended September 30, 2020		For the Nine Months Ended September 30, 2020		As of September 30, 2020		
	Number of loans modified	Enrollment balance[1]	Number of loans modified	Enrollment balance[2]	EOP balance[3]	% of total loan portfolio[4]	Program details
North America							
Credit cards	445,974	$ 1,382	2,355,572	$ 8,322	$ 921	1 %	Waivers on late fees and deferral of minimum payments for two to four payment cycles
Residential first mortgages	877	266	8,333	3,453	2,220	5	Extending existing payment deferral options and suspending foreclosures into the fourth quarter of 2020
Home equity loans	582	50	5,005	600	439	6	Extending existing payment deferral options
Personal, small business and other	2,524	27	21,041	309	12	—	Waivers on fees including non-Citi ATM fees and monthly service fees as well as minimum payment deferrals for up to six months
Total *North America*	**449,957**	**$ 1,725**	**2,389,951**	**$ 12,684**	**$ 3,592**	**2 %**	
International							
Asia							
Credit cards	100,334	$ 161	1,151,790	$ 2,136	$ 219	1 %	Payment deferrals for up to one to six months, interest and fee waivers and reductions in minimum due payments; balance conversion programs
Residential first mortgages	602	106	44,737	3,642	721	2	Payment deferrals for up to 12 months, interest and fee waivers and reductions in minimum due payments
Personal, small business and other	8,096	61	200,297	1,661	248	1	Payment deferrals for up to three months for revolving products and overdrafts or up to 12 months for installment loans, interest and fee waivers, and reductions in minimum due payments
Latin America							
Credit cards	—	—	641,038	1,136	17	—	Minimum payment deferrals for up to six months
Residential first mortgages	3,836	61	26,251	852	237	6	Installment payment deferral for up to six months to be recovered as a balloon payment at the end of the loan
Personal, small business and other	—	—	184,966	1,451	912	17	Installment payment deferral for up to six months, temporary interest rate reductions
Total international	**112,868**	**$ 389**	**2,249,079**	**$ 10,878**	**$ 2,354**	**3 %**	
Total consumer	**562,825**	**$ 2,114**	**4,639,030**	**$ 23,562**	**$ 5,946**	**2 %**	

(1) Enrollment balances represent the aggregate amounts enrolled during the third quarter of 2020.
(2) Enrollment balances represent the aggregate amounts enrolled during the nine months ended September 30, 2020.
(3) Total outstanding balance on loans enrolled in consumer relief programs as of September 30, 2020. Reserves for these loans are calculated in accordance with the CECL standard.
(4) The percentage denominator is the total ending-period loans balance for the respective product and region as of September 30, 2020.

As set forth in the table above, during the third quarter of 2020, consumer relief programs, excluding TDRs, had approximately 0.6 million of loan modifications, with associated enrollment balances of approximately $2.1 billion. For the nine months ended September 30, 2020, Citi's consumer relief programs had approximately 4.6 million of loan modifications with approximately $23.6 billion of associated enrollment balances, excluding TDRs. Approximately $5.9 billion of loans under the consumer loan relief programs were outstanding as of September 30, 2020,

representing approximately 2% of Citi's total consumer loan balance.

Citi's *North America* credit card programs had the largest number of loan modifications. As these credit card relief programs were introduced during the first half of 2020, and offered a deferral of minimum payments for two to four payment cycles, most customers rolled off the programs. By the end of the third quarter, approximately 89% of credit card customers had rolled off these programs, of which approximately 86% have continued to make payments. As of September 30, 2020, Citi had approximately $0.9 billion of loan balances outstanding under the credit card relief programs. For customers enrolled in mortgage forbearance programs, Citi's subservicer offered payment deferrals for up to 12 months, and by the end of the third quarter, approximately 23% of mortgage customers had rolled off the program, of which approximately 88% have continued to make payments. As of September 30, 2020, Citi had approximately $2.2 billion of mortgage loan balances outstanding. As of September 30, 2020, Citi had approximately $3.6 billion of loan balances outstanding under its consumer relief programs in *North America*.

In *Asia*, approximately 91% of customers had rolled off the consumer relief programs as of September 30, 2020, of which approximately 94% have continued to make payments. As of September 30, 2020, Citi had approximately $1.2 billion of loan balances outstanding under *Asia* consumer relief programs.

In Mexico, approximately 93% of customers had rolled off the consumer relief programs as of September 30, 2020, of which approximately 90% have continued to make payments. As of September 30, 2020, Citi had approximately $1.2 billion of loan balances outstanding under Mexico consumer relief programs.

Citi Corporate Loan Relief Programs

Citi has modified the contractual terms of corporate loans to certain borrowers impacted by the pandemic, primarily commercial banking (small business) and private bank customers. These modifications consist primarily of deferrals in the payment of principal and/or interest that Citi has provided during the second and third quarters of 2020 in response to borrower requests, as well as those provided pursuant to government-mandated relief programs.

The table below shows Citi's outstanding corporate loan modifications, excluding TDRs. Approximately $1.4 billion of the $8.2 billion presented below relates to modifications provided in the third quarter.

	September 30, 2020		
In millions of dollars	**Total credit exposure**	**Funded**	**Unfunded**
Corporate loans	**$ 6,127**	**$ 5,305**	**$ 822**
Private bank loans	**2,117**	**2,105**	**12**
Total corporate	**$ 8,244**	**$ 7,410**	**$ 834**

Citi's Management of COVID-19 Pandemic Risks

Citi's dedicated continuity of business and crisis management groups are managing Citi's protocols in response to the pandemic. Among other things, the 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. For additional information about Citi's management of pandemic-related risks, see Citi's First Quarter of 2020 Form 10-Q.

For the remainder of 2020, Citi expects that overall revenues, including *GCB*, *ICG* and *Corporate/Other* revenues, will likely continue to be adversely impacted by the lower interest rate environment. *GCB* and *ICG* revenues will also be affected by the challenging macroeconomic and market conditions, including the effects related to the severity and duration of the pandemic as well as the responses of governments, customers and clients. In particular, each *GCB* region is expected to continue to experience the adverse impacts from the pandemic on customer activity, including lower card purchase sales and loan volumes, while *Latin America GCB* is also likely to continue to experience a more pronounced impact from macroeconomic weakness in Mexico. Citi also expects that *ICG Markets* and investment banking revenues will continue to reflect overall market conditions, including a normalization of business trends compared to the first nine months of 2020 and a seasonal decline in the fourth quarter.

In addition, Citi expects to incur higher expenses, as it continues to accelerate its investments in infrastructure, risk management and controls, including its efforts to improve the risk and control environment, as well as to comply with the consent orders (see "Executive Summary" above). Citi's expenses will also be impacted by uncertainties related to the pandemic, including its continued efforts to protect and support employees and to support customers and clients digitally.

Moreover, in the near term, Citi expects to experience net credit losses similar to the third quarter of 2020, although this may vary by business and region and is dependent on future macroeconomic conditions. If Citi's third quarter of 2020 macroeconomic forecast assumptions are realized, the Company does not expect additional reserve builds on its existing portfolios (for additional information, see "Significant Accounting Policies and Significant Estimates" below); however, the overall level of reserves remains dependent on the evolving economic and public health environments relative to this forecast, as well as new lending volumes. For additional information about significant risks to Citi from the pandemic, see "Risk Factors" below.

Citi's Allowance for Credit Losses (ACL)

The table below shows the impact of Citi's adoption of CECL as of January 1, 2020 and the ACL during the first, second and third quarters of 2020. For information on the drivers of Citi's ACL build in the third quarter, see "Significant Accounting Policies and Significant Estimates—Allowance for Credit Losses" below. For additional information on Citi's accounting policy on accounting for credit losses under CECL, see Note 14 to the Consolidated Financial Statements and Note 1 in Citi's First Quarter of 2020 Form 10-Q.

	Allowance for credit losses (ACL)											
In millions of dollars	**Balance Dec. 31, 2019**	**CECL transition impact**	**1Q20 build**	**1Q20 FX/ Other**	**Balance Mar. 31, 2020**	**2Q20 build**	**2Q20 FX/ Other**	**Balance Jun. 30, 2020**	**3Q20 build/ (release)**	**3Q20 FX/ Other**	**Balance Sept. 30, 2020**	**ACLL/EOP loans Sept. 30, 2020[1]**
Cards[1]	$ 8,419	$ 4,456	$ 2,420	$ (215)	$ 15,080	$ 1,572	$ 50	$ 16,702	**$ (21)**	**$ 56**	**$ 16,737**	**11.42 %**
All other *GCB*	1,200	566	413	(217)	1,962	388	36	2,386	**(67)**	**52**	**2,371**	
Global Consumer Banking	$ 9,619	$ 5,022	$ 2,833	$ (432)	$ 17,042	$ 1,960	$ 86	$ 19,088	**$ (88)**	**$ 108**	**$ 19,108**	**7.01 %**
Institutional Clients Group	2,886	(717)	1,316	(34)	3,451	3,370	3	6,824	**106**	**8**	**6,938**	**1.82**
Corporate/ Other	278	(104)	187	(13)	348	160	—	508	**(128)**	**—**	**380**	
Allowance for credit losses on loans (ACLL)	**$ 12,783**	**$ 4,201**	**$ 4,336**	**$ (479)**	**$ 20,841**	**$ 5,490**	**$ 89**	**$ 26,420**	**$ (110)**	**$ 116**	**$ 26,426**	**4.00 %**
Allowance for credit losses on unfunded lending commitments	1,456	(194)	557	(6)	1,813	113	(67)	1,859	**424**	**16**	**2,299**	
Other	—	96	2	32	130	79	8	217	**(32)**	**(3)**	**182**	
Total allowance for credit losses (ACL)	**$ 14,239**	**$ 4,103**	**$ 4,895**	**$ (453)**	**$ 22,784**	**$ 5,682**	**$ 30**	**$ 28,496**	**$ 282**	**$ 129**	**$ 28,907**	

(1) As of September 30, 2020, in *North America GCB*, Citi-branded cards ACLL/EOP loans was 10.4% and Citi retail services ACLL/EOP loans was 14.2%.

Capital Plan Resubmission and Related Limitations on Capital Distributions

In June 2020, the Federal Reserve Board (FRB) determined that changes in financial markets and macroeconomic outlooks related to the COVID-19 pandemic could have a material effect on the risk profile and financial condition of each firm subject to its capital plan rule, and therefore require updated capital plans. Citigroup resubmitted its capital plan on November 2, 2020.

Through the end of the fourth quarter of 2020, share repurchases continue to be prohibited and dividends continue to be capped and tied to a formula based on recent income. These limitations on capital distributions may be extended by the FRB.

Citi declared common dividends of $0.51 per share for the fourth quarter of 2020 on October 22, 2020, which was not impacted by the FRB's temporary limitations on capital distributions. For additional information about the capital plan resubmission and related limitations on capital distributions, see "Capital Resources" below.

Certain Key Government Actions in Support of the Economy

U.S. Government-Sponsored Liquidity Programs

During the first quarter of 2020, the FRB introduced several liquidity facilities in response to the funding market volatility caused by the 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 during the third quarter, 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

In response to the pandemic, throughout 2020, the U.S. banking agencies issued several final rules and interim final rules revising the current regulatory capital standards, to provide banking organizations with additional flexibility to support consumers and businesses. Those rules applicable to Citi 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 September 30, 2020, reflecting the modified CECL transition provision, was 43 basis points 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. Citigroup's reported Supplementary Leverage ratio of 6.83% benefited 103 basis points during the third quarter of 2020 as a result of the temporary relief. Excluding the temporary relief, Citigroup's Supplementary Leverage ratio would have been 5.80%, compared with a 5.0% effective minimum requirement.
- Assigning a 0% risk weight to loans originated under the Paycheck Protection Program.

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. The loans included in Citi's pandemic consumer relief programs are included in Citi's reserving process under the CECL standard.

Small Business Administration's Paycheck Protection Program

The Paycheck Protection Program (the Program) authorizes the origination of forgivable loans to small businesses to pay their employees during the pandemic. Loan terms are the same for all businesses. Among other programs, Citi is participating in the Paycheck Protection Program and has funded over 30,000 loans totaling $3.8 billion as of September 30, 2020, with approximately $3.7 outstanding at September 30, 2020. Citi remains committed to supporting small businesses. The processing of loan forgiveness requests under the Program began during the third quarter of 2020 and the timing for processing will determine whether there is significant forgiveness in the fourth quarter of 2020.

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 become global, affecting all of the countries and jurisdictions where Citi operates. The pandemic and responses to it have had, and will likely continue to have, a severe impact on global economic conditions, although the impacts will likely vary from time to time by region, country or state, largely depending on the duration and severity of the public health consequences, including availability of any effective therapeutic or vaccine and public response. These impacts to global economic conditions include, among others:

- sharply reduced U.S. and global economic output, resulting in significant losses of employment and lower consumer spending, cards purchase sales and loan volumes;
- lower interest rates;
- disruption of global supply chains;
- significant disruption and volatility in financial markets;
- 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 and among the United States and other countries.

The 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 extent of the impact on Citi's financial performance and operations, including its ability to execute its business initiatives and strategies, will continue to 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, as well as the severity of the economic downturn or any delay or weakness in the economic recovery. The impact will in part be dependent on government and other actions taken to lessen the health and economic repercussions, such as additional fiscal stimulus and/or monetary policy actions, medical investments and advances, restrictions on movement of people, transportation and businesses, and the effectiveness of past and any future 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 and continued lower interest rates, could further affect Citi's businesses, credit costs 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. Such implementations and efforts have resulted in, and may continue to result in, litigation, including class actions, and regulatory and government actions and proceedings. Such actions may result in judgments, settlements, penalties and fines adverse to Citi. 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 their results of operations and financial condition, increased borrowings or credit ratings downgrades, thus likely leading to higher credit costs for Citi. 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, resulting in a further increase in Citi's allowance for credit losses or net credit losses.

The pandemic may not be contained for an extended period of time, due to a further emergence or reemergence of widespread infections. A prolonged health crisis could continue to reduce economic activity in the U.S. and other countries, resulting in additional declines in employment and business and consumer confidence and a prolonged period of lower interest rates. These factors could further negatively impact global economic activity and markets and Citi's consumer customers and corporate clients; cause a continued decline in Citi's revenues and the demand for 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, risk-weighted assets and allowance for credit loss reserves, resulting in a decline in regulatory capital ratios or liquidity measures, as well as regulatory demands for higher capital levels and/or limitations or reductions in capital distributions (such as common share repurchases and dividends). 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.

Any disruption to, breaches of or attacks on Citi's information technology systems, including from cyber incidents, could have adverse effects on Citi's businesses. These systems are supporting a substantial portion of Citi's employees who have been affected by local pandemic restrictions and have been forced to work remotely. 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, these measures could result in increased expenses, and 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 pandemic restrictions.

Further, it is unclear how the macroeconomic business environment or societal norms may be impacted after the pandemic. The post-pandemic environment may undergo unexpected developments or changes in financial markets, the fiscal, monetary, 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 it is not able to adapt or compete effectively, Citi 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 pandemic, as well as Citi's management of pandemic-related risks, see "COVID-19 Pandemic 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 pandemic-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

	Third Quarter			Nine Months		
In millions of dollars, except per share amounts	**2020**	2019	**% Change**	**2020**	2019	**% Change**
Net interest revenue	**$ 10,493**	$ 11,641	**(10)%**	**$ 33,065**	$ 35,350	**(6)%**
Non-interest revenue	**6,809**	6,933	**(2)**	**24,734**	20,558	**20**
Revenues, net of interest expense	**$ 17,302**	$ 18,574	**(7)%**	**$ 57,799**	$ 55,908	**3 %**
Operating expenses	**10,964**	10,464	**5**	**31,973**	31,548	**1**
Provisions for credit losses and for benefits and claims	**2,262**	2,088	**8**	**17,192**	6,161	**NM**
Income from continuing operations before income taxes	**$ 4,076**	$ 6,022	**(32)%**	**$ 8,634**	$ 18,199	**(53)%**
Income taxes	**815**	1,079	**(24)**	**1,522**	3,727	**(59)**
Income from continuing operations	**$ 3,261**	$ 4,943	**(34)%**	**$ 7,112**	$ 14,472	**(51)%**
Income (loss) from discontinued operations, net of taxes	**(7)**	(15)	**53**	**(26)**	—	**—**
Net income before attribution of noncontrolling interests	**$ 3,254**	$ 4,928	**(34)%**	**$ 7,086**	$ 14,472	**(51)%**
Net income attributable to noncontrolling interests	**24**	15	**60**	**18**	50	**(64)**
Citigroup's net income	**$ 3,230**	$ 4,913	**(34)%**	**$ 7,068**	$ 14,422	**(51)%**
Earnings per share						
Basic						
Income from continuing operations	**$ 1.41**	$ 2.09	**(33)%**	**$ 2.98**	$ 5.92	**(50)%**
Net income	**1.41**	2.09	**(33)**	**2.97**	5.92	**(50)**
Diluted						
Income from continuing operations	**$ 1.40**	$ 2.08	**(33)%**	**$ 2.97**	$ 5.89	**(50)%**
Net income	**1.40**	2.07	**(32)**	**2.96**	5.89	**(50)**
Dividends declared per common share	**0.51**	0.51	**—**	**1.53**	1.41	**9**
Common dividends	**$ 1,074**	$ 1,183	**(9)%**	**$ 3,226**	$ 3,299	**(2)%**
Preferred dividends[1]	**284**	254	**12**	**828**	812	**2**
Common share repurchases	**—**	5,120	**(100)**	**2,925**	12,750	**(77)**

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	Third Quarter			Nine Months		
	2020	2019	**% Change**	**2020**	2019	**% Change**
At September 30:						
Total assets	**$2,234,459**	$ 2,014,802	**11 %**			
Total deposits	**1,262,623**	1,087,769	**16**			
Long-term debt	**273,254**	242,238	**13**			
Citigroup common stockholders' equity	**175,896**	176,893	**(1)**			
Total Citigroup stockholders' equity	**193,876**	196,373	**(1)**			
Average assets	**2,259,416**	2,000,082	**13**	**2,201,915**	$1,972,873	12 %
Direct staff *(in thousands)*	**209**	199	**5 %**			
Performance metrics						
Return on average assets	**0.57 %**	0.97 %		**0.43 %**	0.98 %	
Return on average common stockholders' equity[2]	**6.7**	10.4		**4.8**	10.2	
Return on average total stockholders' equity[2]	**6.7**	9.9		**4.9**	9.8	
Return on tangible common equity (RoTCE)[3]	**7.9**	12.2		**5.6**	12.0	
Efficiency ratio (total operating expenses/total revenues)	**63.4**	56.3		**55.3**	56.4	
Basel III ratios						
Common Equity Tier 1 Capital[4]	**11.75 %**	11.58 %				
Tier 1 Capital[4]	**13.25**	13.20				
Total Capital[4]	**15.66**	16.07				
Supplementary Leverage ratio	**6.83**	6.27				
Citigroup common stockholders' equity to assets	**7.87 %**	8.78 %				
Total Citigroup stockholders' equity to assets	**8.68**	9.75				
Dividend payout ratio[5]	**36**	25		**52 %**	24 %	
Total payout ratio[6]	**36**	135		**99**	118	
Book value per common share	**$ 84.48**	$ 81.02	**4 %**			
Tangible book value (TBV) per share[3]	**71.95**	69.03	**4**			

(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. RoTCE and TBV are non-GAAP financial measures.
(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 September 30, 2020 and the Basel III Standardized Approach as of September 30, 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) Dividend payout ratio is calculated as dividends declared per common share as a percentage of net income per diluted share.
(6) Total payout ratio is calculated as 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	Third Quarter 2020	Third Quarter 2019	% Change	Nine Months 2020	Nine Months 2019	% Change
Income (loss) from continuing operations						
Global Consumer Banking						
North America	**$ 693**	$ 884	**(22)%**	**$ (676)**	$ 2,254	**NM**
Latin America	**152**	217	**(30)**	**134**	667	**(80)%**
Asia[1]	**213**	402	**(47)**	**447**	1,203	**(63)**
Total	**$ 1,058**	$ 1,503	**(30)%**	**$ (95)**	$ 4,124	**NM**
Institutional Clients Group						
North America	**$ 1,058**	$ 818	**29 %**	**$ 2,614**	$ 2,616	**— %**
EMEA	**893**	1,060	**(16)**	**2,421**	3,190	**(24)**
Latin America	**108**	487	**(78)**	**440**	1,546	**(72)**
Asia	**860**	864	**—**	**2,950**	2,714	**9**
Total	**$ 2,919**	$ 3,229	**(10)%**	**$ 8,425**	$ 10,066	**(16)%**
Corporate/Other	**(716)**	211	**NM**	**(1,218)**	282	**NM**
Income from continuing operations	**$ 3,261**	$ 4,943	**(34)%**	**$ 7,112**	$ 14,472	**(51)%**
Discontinued operations	**$ (7)**	$ (15)	**53 %**	**$ (26)**	$ —	**— %**
Less: Net income attributable to noncontrolling interests	**24**	15	**60**	**18**	50	**(64)**
Citigroup's net income	**$ 3,230**	$ 4,913	**(34)%**	**$ 7,068**	$ 14,422	**(51)%**

(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	Third Quarter 2020	Third Quarter 2019	% Change	Nine Months 2020	Nine Months 2019	% Change
Global Consumer Banking						
North America	**$ 4,527**	$ 5,179	**(13)%**	**$ 14,493**	$ 15,145	**(4)%**
Latin America	**1,027**	1,269	**(19)**	**3,276**	3,861	**(15)**
Asia[1]	**1,619**	1,841	**(12)**	**4,917**	5,506	**(11)**
Total	**$ 7,173**	$ 8,289	**(13)%**	**$ 22,686**	$ 24,512	**(7)%**
Institutional Clients Group						
North America	**$ 3,920**	$ 3,244	**21 %**	**$ 13,854**	$ 10,145	**37 %**
EMEA	**3,085**	3,138	**(2)**	**9,947**	9,268	**7**
Latin America	**1,141**	1,294	**(12)**	**3,766**	3,869	**(3)**
Asia	**2,207**	2,175	**1**	**7,407**	6,642	**12**
Total	**$ 10,353**	$ 9,851	**5 %**	**$ 34,974**	$ 29,924	**17 %**
Corporate/Other	**(224)**	434	**NM**	**139**	1,472	**(91)**
Total Citigroup net revenues	**$ 17,302**	$ 18,574	**(7)%**	**$ 57,799**	$ 55,908	**3 %**

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

SEGMENT BALANCE SHEET[1]—SEPTEMBER 30, 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	$ 6,156	$ 75,001	$ 242,538	$ —	$ 323,695
Securities borrowed and purchased under agreements to resell, net of allowance	174	288,866	318	—	289,358
Trading account assets	2,154	332,604	13,451	—	348,209
Investments, net of allowance	1,080	132,260	314,184	—	447,524
Loans, net of unearned income and allowance for credit losses on loans	253,212	379,936	7,337	—	640,485
Other assets, net of allowance	37,895	105,138	42,155	—	185,188
Net inter-segment liquid assets[4]	134,675	388,941	(523,616)	—	—
Total assets	$ 435,346	$ 1,702,746	$ 96,367	$ —	$ 2,234,459
Liabilities and equity					
Total deposits	$ 325,539	$ 924,770	$ 12,314	$ —	$ 1,262,623
Securities loaned and sold under agreements to repurchase	692	206,488	47	—	207,227
Trading account liabilities	1,452	144,942	596	—	146,990
Short-term borrowings	99	27,586	9,754	—	37,439
Long-term debt[3]	1,246	71,762	31,534	168,712	273,254
Other liabilities, net of allowance	19,239	76,272	16,820	—	112,331
Net inter-segment funding (lending)[3]	87,079	250,926	24,583	(362,588)	—
Total liabilities	$ 435,346	$ 1,702,746	$ 95,648	$ (193,876)	$ 2,039,864
Total stockholders' equity[5]	—	—	719	193,876	194,595
Total liabilities and equity	$ 435,346	$ 1,702,746	$ 96,367	$ —	$ 2,234,459

(1) The supplemental information presented in the table above reflects Citigroup's consolidated GAAP balance sheet by reporting segment as of September 30, 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 are reflected 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.

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, in the U.S., 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 2,321 branches in 19 countries and jurisdictions as of September 30, 2020. At September 30, 2020, *GCB* had $435 billion in assets and $326 billion in retail banking 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.

	Third Quarter			Nine Months		
In millions of dollars, except as otherwise noted	**2020**	2019	**% Change**	**2020**	2019	**% Change**
Net interest revenue	**$ 6,251**	$ 7,127	**(12)%**	**$ 19,857**	$ 21,024	**(6)%**
Non-interest revenue	**922**	1,162	**(21)**	**2,829**	3,488	**(19)**
Total revenues, net of interest expense	**$ 7,173**	$ 8,289	**(13)%**	**$ 22,686**	$ 24,512	**(7)%**
Total operating expenses	**$ 4,217**	$ 4,368	**(3)%**	**$ 12,598**	$ 13,255	**(5)%**
Net credit losses on loans	**$ 1,598**	$ 1,802	**(11)%**	**$ 5,468**	$ 5,540	**(1)%**
Credit reserve build (release) for loans	**(88)**	129	**NM**	**4,701**	319	**NM**
Provision (release) for credit losses on unfunded lending commitments	**5**	2	**NM**	**4**	(1)	**NM**
Provisions for benefits and claims, HTM debt securities and other assets	**45**	17	**NM**	**103**	48	**NM**
Provisions for credit losses and for benefits and claims (PBC)	**$ 1,560**	$ 1,950	**(20)%**	**$ 10,276**	$ 5,906	**74 %**
Income (loss) from continuing operations before taxes	**$ 1,396**	$ 1,971	**(29)%**	**$ (188)**	$ 5,351	**NM**
Income taxes (benefits)	**338**	468	**(28)**	**(93)**	1,227	**NM**
Income (loss) from continuing operations	**$ 1,058**	$ 1,503	**(30)%**	**$ (95)**	$ 4,124	**NM**
Noncontrolling interests	**—**	2	**NM**	**(3)**	3	**NM**
Net income (loss)	**$ 1,058**	$ 1,501	**(30)%**	**$ (92)**	$ 4,121	**NM**
Balance Sheet data and ratios *(in billions of dollars)*						
EOP assets	**$ 435**	$ 394	**10 %**			
Average assets	**434**	392	**11**	**$ 419**	$ 385	**9 %**
Return on average assets	**0.97 %**	1.52 %		**(0.03)%**	1.43 %	
Efficiency ratio	**59**	53		**56**	54	
Average retail banking deposits	**$ 320**	$ 277	**16**	**$ 304**	$ 275	**11**
Net credit losses as a percentage of average loans	**2.33 %**	2.52 %		**2.63 %**	2.63 %	
Revenue by business						
Retail banking	**$ 2,916**	$ 3,117	**(6)%**	**$ 8,798**	$ 9,425	**(7)%**
Cards[1]	**4,257**	5,172	**(18)**	**13,888**	15,087	**(8)**
Total	**$ 7,173**	$ 8,289	**(13)%**	**$ 22,686**	$ 24,512	**(7)%**
Income (loss) from continuing operations by business						
Retail banking	**$ 346**	$ 492	**(30)%**	**$ 537**	$ 1,418	**(62)%**
Cards[1]	**712**	1,011	**(30)**	**(632)**	2,706	**NM**
Total	**$ 1,058**	$ 1,503	**(30)%**	**$ (95)**	$ 4,124	**NM**

Table continues on the next page, including footnotes.

Foreign currency (FX) translation impact						
Total revenue—as reported	**$ 7,173**	$ 8,289	**(13)%**	**$ 22,686**	$ 24,512	**(7)%**
Impact of FX translation[2]	**—**	(113)		**—**	(456)	
Total revenues—ex-FX[3]	**$ 7,173**	$ 8,176	**(12)%**	**$ 22,686**	$ 24,056	**(6)%**
Total operating expenses—as reported	**$ 4,217**	$ 4,368	**(3)%**	**$ 12,598**	$ 13,255	**(5)%**
Impact of FX translation[2]	**—**	(62)		**—**	(248)	
Total operating expenses—ex-FX[3]	**$ 4,217**	$ 4,306	**(2)%**	**$ 12,598**	$ 13,007	**(3)%**
Total provisions for credit losses and PBC—as reported	**$ 1,560**	$ 1,950	**(20)%**	**$ 10,276**	$ 5,906	**74 %**
Impact of FX translation[2]	**—**	(28)		**—**	(111)	
Total provisions for credit losses and PBC—ex-FX[3]	**$ 1,560**	$ 1,922	**(19)%**	**$ 10,276**	$ 5,795	**77 %**
Net income—as reported	**$ 1,058**	$ 1,501	**(30)%**	**$ (92)**	$ 4,121	**NM**
Impact of FX translation[2]	**—**	(15)		**—**	(64)	
Net income—ex-FX[3]	**$ 1,058**	$ 1,486	**(29)%**	**$ (92)**	$ 4,057	**NM**

(1) Includes both Citi-branded cards and Citi retail services.
(2) Reflects the impact of FX translation into U.S. dollars at the third quarter of 2020 and year-to-date 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 September 30, 2020, *North America GCB* had 687 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 September 30, 2020, *North America GCB* had $53.1 billion in retail banking loans and $186.0 billion in retail banking deposits. In addition, *North America GCB* had $125.5 billion in outstanding card loan balances.

	Third Quarter			Nine Months		
In millions of dollars, except as otherwise noted	**2020**	2019	**% Change**	**2020**	2019	**% Change**
Net interest revenue	**$ 4,500**	$ 5,041	**(11)%**	**$ 14,243**	$ 14,807	**(4)%**
Non-interest revenue	**27**	138	**(80)**	**250**	338	**(26)**
Total revenues, net of interest expense	**$ 4,527**	$ 5,179	**(13)%**	**$ 14,493**	$ 15,145	**(4)%**
Total operating expenses	**$ 2,444**	$ 2,511	**(3)%**	**$ 7,326**	$ 7,704	**(5)%**
Net credit losses on loans	**$ 1,182**	$ 1,350	**(12)%**	**$ 4,192**	$ 4,175	**— %**
Credit reserve build (release) for loans	**(13)**	161	**NM**	**3,848**	360	**NM**
Provision (release) for credit losses on unfunded lending commitments	**5**	2	**NM**	**4**	(1)	**NM**
Provisions (release) for benefits and claims, HTM debt securities and other assets	**(6)**	4	**NM**	**18**	16	**13**
Provisions for credit losses and for benefits and claims	**$ 1,168**	$ 1,517	**(23)%**	**$ 8,062**	$ 4,550	**77 %**
Income (loss) from continuing operations before taxes	**$ 915**	$ 1,151	**(21)%**	**$ (895)**	$ 2,891	**NM**
Income taxes (benefits)	**222**	267	**(17)**	**(219)**	637	**NM**
Income (loss) from continuing operations	**$ 693**	$ 884	**(22)%**	**$ (676)**	$ 2,254	**NM**
Noncontrolling interests	**—**	—	**—**	**—**	—	**— %**
Net income (loss)	**$ 693**	$ 884	**(22)%**	**$ (676)**	$ 2,254	**NM**
Balance Sheet data and ratios *(in billions of dollars)*						
Average assets	**$ 274**	$ 235	**17 %**	**$ 261**	$ 230	**13 %**
Return on average assets	**1.01 %**	1.49 %		**(0.35)%**	1.31 %	
Efficiency ratio	**54**	48		**51**	51	
Average retail banking deposits	**$ 182**	$ 154	**18**	**$ 172**	$ 152	**13**
Net credit losses as a percentage of average loans	**2.63 %**	2.84 %		**3.03 %**	2.99 %	
Revenue by business						
Retail banking	**$ 1,113**	$ 1,131	**(2)%**	**$ 3,365**	$ 3,421	**(2)%**
Citi-branded cards	**2,061**	2,334	**(12)**	**6,626**	6,726	**(1)**
Citi retail services	**1,353**	1,714	**(21)**	**4,502**	4,998	**(10)**
Total	**$ 4,527**	$ 5,179	**(13)%**	**$ 14,493**	$ 15,145	**(4)%**
Income (loss) from continuing operations by business						
Retail banking	**$ 50**	$ 67	**(25)%**	**$ (105)**	$ 144	**NM**
Citi-branded cards	**427**	441	**(3)**	**(483)**	1,187	**NM**
Citi retail services	**216**	376	**(43)**	**(88)**	923	**NM**
Total	**$ 693**	$ 884	**(22)%**	**$ (676)**	$ 2,254	**NM**

NM Not meaningful

3Q20 vs. 3Q19

Net income decreased 22%, as lower cost of credit and lower expenses were more than offset by lower revenues.

Revenues decreased 13%, reflecting lower revenues in Citi retail services, Citi-branded cards and retail banking, primarily reflecting the continued impact of the COVID-19 pandemic.

Retail banking revenues decreased 2%, as the benefit of stronger deposit volumes and an improvement in mortgage revenues were more than offset by lower deposit spreads, reflecting lower interest rates. Average deposits increased 19%, driven by a combination of factors, including government stimulus payments and a reduction in overall consumer spending related to the pandemic, as well as continued strategic efforts to drive organic growth.

Cards revenues decreased 16%. Citi-branded cards revenues decreased 12%, reflecting lower purchase sales and higher payment rates driving lower average loans. Average loans decreased 10% and purchase sales decreased 9%, reflecting the continued impact of the pandemic on customer activity.

Citi retail services revenues decreased 21%, primarily reflecting lower average loans and higher contractual partner payments. (For additional information on partner payments, see Note 5 to the Consolidated Financial Statements). Average loans were down 10% and purchase sales declined 8%, reflecting the continued impact of the pandemic on customer activity.

Expenses decreased 3%, as lower volume-related expenses, reductions in marketing and other discretionary expenses, as well as efficiency savings, more than offset higher pandemic-related expenses.

Provisions of $1.2 billion decreased 23% from the prior-year period, driven by lower net credit losses, as well as a modest reserve release. Net credit losses decreased 12%, primarily driven by lower net credit losses in Citi retail services (down 16% to $504 million) and Citi-branded cards (down 9% to $647 million), primarily reflecting lower loan volumes as well as higher payment rates given high levels of liquidity, lower spending and the benefits of relief programs. The ACL net release in the third quarter was $8 million, primarily reflecting lower loan volumes (compared to a build of $163 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 Citi's ACL, see "Significant Accounting Policies and Significant Estimates" below, and Notes 1 and 14 to the Consolidated Financial Statements.

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

2020 YTD vs. 2019 YTD

Year-to-date, *North America GCB* experienced similar trends to those described above. *Net loss* was $676 million, compared to *net income* of $2.3 billion in the prior-year period, as significantly higher cost of credit and lower revenues were partially offset by lower expenses.

Revenues decreased 4%, reflecting lower revenues in Citi retail services, Citi-branded cards and retail banking. Retail banking revenues decreased 2%, driven by the same factors described above. Cards revenues decreased 5%. In Citi-branded cards, revenues decreased 1%, driven by the same factors described above. Citi retail services revenues decreased 10%, driven by the same factors described above.

Expenses decreased 5%, driven by the same factors described above.

Provisions of $8.1 billion increased 77% from the prior-year period, driven by a higher ACL build. Net credit losses were largely unchanged. The ACL build was $3.9 billion, primarily reflecting the impact of deterioration in Citi's macroeconomic outlook in each of the first and second quarters of 2020, primarily driven by the pandemic, on estimated lifetime credit losses under CECL (compared to a build of $359 million in the prior-year period under prior accounting standards), partially offset by the impact of a change in estimate effected by a change in accounting principle for third-party collection costs (see "Significant Accounting Policies and Significant Estimates" below).

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 September 30, 2020, *Latin America GCB* had 1,401 retail branches in Mexico, with $9.2 billion in retail banking loans and $22.2 billion in deposits. In addition, the business had $4.3 billion in outstanding card loan balances.

	Third Quarter			Nine Months		
In millions of dollars, except as otherwise noted	**2020**	2019	**% Change**	**2020**	2019	**% Change**
Net interest revenue	**$ 697**	$ 913	**(24)%**	**$ 2,339**	$ 2,708	**(14)%**
Non-interest revenue	**330**	356	**(7)**	**937**	1,153	**(19)**
Total revenues, net of interest expense	**$ 1,027**	$ 1,269	**(19)%**	**$ 3,276**	$ 3,861	**(15)%**
Total operating expenses	**$ 655**	$ 724	**(10)%**	**$ 1,958**	$ 2,101	**(7)%**
Net credit losses on loans	**$ 228**	$ 275	**(17)%**	**$ 714**	$ 850	**(16)%**
Credit reserve build (release) for loans	**(116)**	(34)	**NM**	**351**	(33)	**NM**
Provision for credit losses on unfunded lending commitments	**—**	—	**—**	**—**	—	**—**
Provisions for benefits and claims, HTM debt securities and other assets	**47**	13	**NM**	**78**	32	**NM**
Provisions for credit losses and for benefits and claims (PBC)	**$ 159**	$ 254	**(37)%**	**$ 1,143**	$ 849	**35 %**
Income from continuing operations before taxes	**$ 213**	$ 291	**(27)%**	**$ 175**	$ 911	**(81)%**
Income taxes	**61**	74	**(18)**	**41**	244	**(83)**
Income from continuing operations	**$ 152**	$ 217	**(30)%**	**$ 134**	$ 667	**(80)%**
Net income	**$ 152**	$ 217	**(30)%**	**$ 134**	$ 667	**(80)%**
Balance Sheet data and ratios *(in billions of dollars)*						
Average assets	**$ 31**	$ 35	**(11)%**	**$ 32**	$ 34	**(6)%**
Return on average assets	**1.95 %**	2.46 %		**0.56 %**	2.62 %	
Efficiency ratio	**64**	57		**60**	54	
Average deposits	**$ 23**	$ 23	**—**	**$ 22**	$ 23	**(4)**
Net credit losses as a percentage of average loans	**6.67 %**	6.42 %		**6.58 %**	6.65 %	
Revenue by business						
Retail banking	**$ 737**	$ 851	**(13)%**	**$ 2,225**	$ 2,653	**(16)%**
Citi-branded cards	**290**	418	**(31)**	**1,051**	1,208	**(13)**
Total	**$ 1,027**	$ 1,269	**(19)%**	**$ 3,276**	$ 3,861	**(15)%**
Income (loss) from continuing operations by business						
Retail banking	**$ 92**	$ 134	**(31)%**	**$ 67**	$ 459	**(85)%**
Citi-branded cards	**60**	83	**(28)**	**67**	208	**(68)**
Total	**$ 152**	$ 217	**(30)%**	**$ 134**	$ 667	**(80)%**
FX translation impact						
Total revenues—as reported	**$ 1,027**	$ 1,269	**(19)%**	**$ 3,276**	$ 3,861	**(15)%**
Impact of FX translation[1]	**—**	(128)		**—**	(394)	
Total revenues—ex-FX[2]	**$ 1,027**	$ 1,141	**(10)%**	**$ 3,276**	$ 3,467	**(6)%**
Total operating expenses—as reported	**$ 655**	$ 724	**(10)%**	**$ 1,958**	$ 2,101	**(7)%**
Impact of FX translation[1]	**—**	(70)		**—**	(202)	
Total operating expenses—ex-FX[2]	**$ 655**	$ 654	**— %**	**$ 1,958**	$ 1,899	**3 %**
Provisions for credit losses and PBC—as reported	**$ 159**	$ 254	**(37)%**	**$ 1,143**	$ 849	**35 %**
Impact of FX translation[1]	**—**	(29)		**—**	(99)	
Provisions for credit losses and PBC—ex-FX[2]	**$ 159**	$ 225	**(29)%**	**$ 1,143**	$ 750	**52 %**
Net income (loss)—as reported	**$ 152**	$ 217	**(30)%**	**$ 134**	$ 667	**(80)%**
Impact of FX translation[1]	**—**	(20)		**—**	(64)	
Net income (loss)—ex-FX[2]	**$ 152**	$ 197	**(23)%**	**$ 134**	$ 603	**(78)%**

(1) Reflects the impact of FX translation into U.S. dollars at the third quarter of 2020 and year-to-date 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.

3Q20 vs. 3Q19

Net income decreased 23%, reflecting lower revenues, partially offset by lower cost of credit, while expenses were largely unchanged.

Revenues decreased 10%, reflecting lower retail banking and cards revenues, largely reflecting the continued impact of the pandemic and the ongoing slowdown in overall economic growth and industry volumes in Mexico.

Retail banking revenues decreased 4%, driven by a decline in loan volumes and lower deposit spreads, partially offset by deposit growth. Average deposits were up 13%, while average loans decreased 7%, reflecting the impact of the pandemic on customer activity, as well as the ongoing economic slowdown.

Cards revenues decreased 23%, primarily driven by lower purchase sales (down 21%) and lower average loans (down 12%), reflecting the impact of the pandemic on customer activity and the ongoing economic slowdown.

Expenses were largely unchanged, as efficiency savings were offset by ongoing investment spending and episodic items.

Provisions of $159 million decreased 29%, reflecting a higher allowance for credit loss (ACL) release and lower net credit losses. Net credit losses decreased 7%, primarily driven by lower average loans. The ACL release in the third quarter was $116 million, primarily reflecting lower loan volumes, as well as the impact of a change in estimate effected by a change in accounting principle for third-party collection costs (compared to a release of $30 million in the prior-year period under prior accounting standards). See "Significant Accounting Policies and Significant Estimates" below.

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 Citi's ACL, see "Significant Accounting Policies and Significant Estimates" below, and Notes 1 and 14 to the Consolidated Financial Statements.

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

2020 YTD vs. 2019 YTD

Net income decreased 78%, reflecting significantly higher cost of credit, lower revenues and higher expenses.

Revenues decreased 6%. Excluding the impact of a residual gain (approximately $30 million) in the prior-year period on the sale of an asset management business, revenues decreased 5%, reflecting lower revenues in both retail banking and cards. Retail banking revenues decreased 5% (excluding the gain on sale in the prior-year period), driven by the same factors described above. Cards revenues decreased 3%, driven by the same factors described above.

Expenses increased 3%, as ongoing investment spending and episodic items were partially offset by efficiency savings.

Provisions of $1.1 billion increased 52%, driven by a higher ACL build, partially offset by lower net credit losses. Net credit losses decreased 6%, primarily driven by the same factors described above. The ACL build was $351 million, primarily reflecting the impact of deterioration in Citi's macroeconomic outlook in each of the first and second quarters of 2020, primarily driven by the pandemic, on estimated lifetime credit losses under CECL (compared to a release of $31 million in the prior-year period under prior accounting standards). The increase was partially offset by the impact of a change in estimate effected by a change in accounting principle for third-party collection costs.

ASIA GCB

Asia GCB provides traditional retail banking and Citi-branded card products to retail and small business customers. During the third quarter of 2020, *Asia GCB*'s most significant revenues in *Asia* were from Hong Kong, Singapore, South Korea, Taiwan, India, Australia, Thailand, Philippines, China and Indonesia. 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 September 30, 2020, on a combined basis, the businesses had 233 retail branches, $63.5 billion in retail banking loans and $117.4 billion in deposits. In addition, the businesses had $16.8 billion in outstanding card loan balances.

	Third Quarter			Nine Months		
In millions of dollars, except as otherwise noted[1]	**2020**	2019	**% Change**	**2020**	2019	**% Change**
Net interest revenue	**$ 1,054**	$ 1,173	**(10)%**	**$ 3,275**	$ 3,509	**(7)%**
Non-interest revenue	**565**	668	**(15)**	**1,642**	1,997	**(18)**
Total revenues, net of interest expense	**$ 1,619**	$ 1,841	**(12)%**	**$ 4,917**	$ 5,506	**(11)%**
Total operating expenses	**$ 1,118**	$ 1,133	**(1)%**	**$ 3,314**	$ 3,450	**(4)%**
Net credit losses on loans	**$ 188**	$ 177	**6 %**	**$ 562**	$ 515	**9 %**
Credit reserve build (release) for loans	**41**	2	**NM**	**502**	(8)	**NM**
Provisions for HTM debt securities and other assets	**4**	—	**—**	**7**	—	**—**
Provisions for credit losses	**$ 233**	$ 179	**30 %**	**$ 1,071**	$ 507	**NM**
Income from continuing operations before taxes	**$ 268**	$ 529	**(49)%**	**$ 532**	$ 1,549	**(66)%**
Income taxes	**55**	127	**(57)**	**85**	346	**(75)**
Income from continuing operations	**$ 213**	$ 402	**(47)%**	**$ 447**	$ 1,203	**(63)%**
Noncontrolling interests	**—**	2	**(100)**	**(3)**	3	**NM**
Net income	**$ 213**	$ 400	**(47)%**	**$ 450**	$ 1,200	**(63)%**
Balance Sheet data and ratios *(in billions of dollars)*						
Average assets	**$ 129**	$ 122	**6 %**	**$ 126**	$ 121	**4 %**
Return on average assets	**0.66 %**	1.30 %		**0.48 %**	1.33 %	
Efficiency ratio	**69**	62		**67**	63	
Average deposits	**$ 115**	$ 101	**14**	**$ 110**	$ 100	**10**
Net credit losses as a percentage of average loans	**0.94 %**	0.90 %		**0.95 %**	0.88 %	
Revenue by business						
Retail banking	**$ 1,066**	$ 1,135	**(6)%**	**$ 3,208**	$ 3,351	**(4)%**
Citi-branded cards	**553**	706	**(22)**	**1,709**	2,155	**(21)**
Total	**$ 1,619**	$ 1,841	**(12)%**	**$ 4,917**	$ 5,506	**(11)%**
Income from continuing operations by business						
Retail banking	**$ 204**	$ 291	**(30)%**	**$ 575**	$ 815	**(29)%**
Citi-branded cards	**9**	111	**(92)**	**(128)**	388	**NM**
Total	**$ 213**	$ 402	**(47)%**	**$ 447**	$ 1,203	**(63)%**
FX translation impact						
Total revenues—as reported	**$ 1,619**	$ 1,841	**(12)%**	**$ 4,917**	$ 5,506	**(11)%**
Impact of FX translation[2]	**—**	15		**—**	(62)	
Total revenues—ex-FX[3]	**$ 1,619**	$ 1,856	**(13)%**	**$ 4,917**	$ 5,444	**(10)%**
Total operating expenses—as reported	**$ 1,118**	$ 1,133	**(1)%**	**$ 3,314**	$ 3,450	**(4)%**
Impact of FX translation[2]	**—**	8		**—**	(46)	
Total operating expenses—ex-FX[3]	**$ 1,118**	$ 1,141	**(2)%**	**$ 3,314**	$ 3,404	**(3)%**
Provisions for credit losses—as reported	**$ 233**	$ 179	**30 %**	**$ 1,071**	$ 507	**NM**
Impact of FX translation[2]	**—**	1		**—**	(12)	
Provisions for credit losses—ex-FX[3]	**$ 233**	$ 180	**29 %**	**$ 1,071**	$ 495	**NM**
Net income—as reported	**$ 213**	$ 400	**(47)%**	**$ 450**	$ 1,200	**(63)%**
Impact of FX translation[2]	**—**	5		**—**	—	
Net income—ex-FX[3]	**$ 213**	$ 405	**(47)%**	**$ 450**	$ 1,200	**(63)%**

(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 third quarter of 2020 and year-to-date 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.

3Q20 vs. 3Q19

Net income decreased 47%, reflecting lower revenues and higher cost of credit, partially offset by lower expenses.

Revenues decreased 13%, reflecting lower cards and retail banking revenues, largely due to the continued impact of the pandemic.

Retail banking revenues decreased 7%, primarily driven by lower deposit spreads due to lower interest rates and lower insurance revenues, partially offset by stronger deposit volumes and higher investment revenues. Average deposits increased 13% and average loans increased 4%. Assets under management increased 1% and investment sales increased 43%. Retail lending revenues increased 3%, reflecting growth in mortgages.

Cards revenues decreased 23%, primarily driven by lower purchase sales (down 17%) and lower average loans (down 11%), reflecting the impact of the pandemic on customer activity, including from lower travel spend in the region, given Citi's skew to an affluent client base and a greater proportion of fee revenues coming from travel-related interchange and foreign transaction fees.

Expenses decreased 2%, as lower marketing and other discretionary expenses, lower volume-related costs, as well as efficiency savings, were partially offset by ongoing investment spending.

Provisions of $233 million increased 29%, driven by a higher allowance for credit losses (ACL) build as well as higher net credit losses. Net credit losses increased 6%, as pandemic lockdowns and the deterioration in the macro-environment impacted credit performance. The ACL build in the third quarter was $41 million, reflecting an increase in the qualitative management adjustment component of the reserve to reflect the potential for a higher level of stress and/or somewhat slower economic recovery (compared to a build of $2 million in the prior-year period under prior accounting standards). The increase was partially offset by the impact of a change in estimate effected by a change in accounting principle for third-party collection costs, as well as lower card loan volumes (see "Significant Accounting Policies and Significant Estimates" below).

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 Citi's ACL, see "Significant Accounting Policies and Significant Estimates" below, and Notes 1 and 14 to the Consolidated Financial Statements.

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

2020 YTD vs. 2019 YTD

Year-to-date, Asia *GCB* experienced similar trends to those described above. *Net income* decreased 63%, driven by lower revenues and higher cost of credit, partially offset by lower expenses.

Revenues decreased 10%, driven by a decline in both retail banking and cards revenues. Retail banking revenues decreased 3%, as growth in deposits and higher fees on investments and foreign currency transactions due to higher volumes and volatility were more than offset by lower deposit spreads, insurance revenues and the one-time gain in the prior-year period. Retail lending revenues increased 5%, reflecting growth in mortgages. Cards revenues decreased 20%, driven by the same factors described above, as well as a small one-time gain in the prior-year period.

Expenses decreased 3%, driven by the same factors described above.

Provisions of $1.1 billion increased $576 million from the prior-year period, driven by a higher ACL build and higher net credit losses. NCLs increased 11%, driven by the same factors described above. The ACL build was $502 million, primarily reflecting the impact of deterioration in Citi's macroeconomic outlook in each of the first and second quarters of 2020, primarily driven by the pandemic, on estimated lifetime credit losses under CECL (compared to a release of $10 million in the prior-year period under prior accounting standards). The increase was partially offset by the impact of a change in estimate effected by a change in accounting principle for third-party collection costs.

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 September 30, 2020, *ICG* had $1.7 trillion in assets and $925 billion in deposits, while two of its businesses—securities services and issuer services—managed $21.5 trillion in assets under custody compared to $20.3 trillion at December 31, 2019 and $20.4 trillion at June 30, 2020.

	Third Quarter			Nine Months		
In millions of dollars, except as otherwise noted	**2020**	2019	**% Change**	**2020**	2019	**% Change**
Commissions and fees	**$ 1,099**	$ 1,126	**(2)%**	**$ 3,348**	$ 3,359	**— %**
Administration and other fiduciary fees	**747**	707	**6**	**2,122**	2,099	**1**
Investment banking	**1,145**	1,045	**10**	**3,902**	3,259	**20**
Principal transactions	**2,292**	2,583	**(11)**	**11,560**	7,157	**62**
Other[1]	**597**	319	**87**	**902**	1,320	**(32)**
Total non-interest revenue	**$ 5,880**	$ 5,780	**2 %**	**$ 21,834**	$ 17,194	**27 %**
Net interest revenue (including dividends)	**4,473**	4,071	**10**	**13,140**	12,730	**3**
Total revenues, net of interest expense	**$ 10,353**	$ 9,851	**5 %**	**$ 34,974**	$ 29,924	**17 %**
Total operating expenses	**$ 5,778**	$ 5,611	**3 %**	**$ 17,521**	$ 16,778	**4 %**
Net credit losses on loans	**$ 326**	$ 110	**NM**	**$ 777**	$ 279	**NM**
Credit reserve build for loans	**106**	36	**NM**	**4,792**	14	**NM**
Provision for credit losses on unfunded lending commitments	**423**	7	**NM**	**1,083**	24	**NM**
Provisions (releases) for credit losses on HTM debt securities and other assets	**(17)**	—	**NM**	**44**	—	**NM**
Provisions for credit losses	**$ 838**	$ 153	**NM**	**$ 6,696**	$ 317	**NM**
Income from continuing operations before taxes	**$ 3,737**	$ 4,087	**(9)%**	**$ 10,757**	$ 12,829	**(16)%**
Income taxes	**818**	858	**(5)**	**2,332**	2,763	**(16)**
Income from continuing operations	**$ 2,919**	$ 3,229	**(10)%**	**$ 8,425**	$ 10,066	**(16)%**
Noncontrolling interests	**24**	8	**NM**	**28**	29	**(3)**
Net income	**$ 2,895**	$ 3,221	**(10)%**	**$ 8,397**	$ 10,037	**(16)%**
Balance Sheet data and ratios *(in billions of dollars)*						
EOP assets *(in billions of dollars)*	**$ 1,703**	$ 1,525	**12 %**			
Average assets *(in billions of dollars)*	**1,732**	1,511	**15**	**$ 1,689**	$ 1,489	**13 %**
Return on average assets	**0.66 %**	0.85 %		**0.66 %**	0.90 %	
Efficiency ratio	**56**	57		**50**	56	
Revenues by region						
North America	**$ 3,920**	$ 3,244	**21 %**	**$ 13,854**	$ 10,145	**37 %**
EMEA	**3,085**	3,138	**(2)**	**9,947**	9,268	**7**
Latin America	**1,141**	1,294	**(12)**	**3,766**	3,869	**(3)**
Asia	**2,207**	2,175	**1**	**7,407**	6,642	**12**
Total	**$ 10,353**	$ 9,851	**5 %**	**$ 34,974**	$ 29,924	**17 %**
Income from continuing operations by region						
North America	**$ 1,058**	$ 818	**29 %**	**$ 2,614**	$ 2,616	**— %**
EMEA	**893**	1,060	**(16)**	**2,421**	3,190	**(24)**
Latin America	**108**	487	**(78)**	**440**	1,546	**(72)**
Asia	**860**	864	**—**	**2,950**	2,714	**9**
Total	**$ 2,919**	$ 3,229	**(10)%**	**$ 8,425**	$ 10,066	**(16)%**

Average loans by region *(in billions of dollars)*								
North America	$	**198**	$	189	**5 %**	$ **204**	$ 187	**9 %**
EMEA		**88**		88	**—**	**89**	86	**3**
Latin America		**40**		39	**3**	**40**	41	**(2)**
Asia		**71**		73	**(3)**	**72**	73	**(1)**
Total	$	**397**	$	389	**2 %**	$ **405**	$ 387	**5 %**
EOP deposits by business *(in billions of dollars)*								
Treasury and trade solutions	$	**659**	$	548	**20 %**			
All other *ICG* businesses		**266**		247	**8**			
Total	$	**925**	$	795	**16 %**			

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

ICG Revenue Details

	Third Quarter			Nine Months		
In millions of dollars	**2020**	2019	**% Change**	**2020**	2019	**% Change**
Investment banking revenue details						
Advisory	**$ 163**	$ 276	**(41)%**	**$ 778**	$ 886	**(12)%**
Equity underwriting	**484**	247	**96**	**1,155**	733	**58**
Debt underwriting	**740**	705	**5**	**2,567**	2,246	**14**
Total investment banking	**$ 1,387**	$ 1,228	**13 %**	**$ 4,500**	$ 3,865	**16 %**
Treasury and trade solutions	**2,394**	2,559	**(6)**	**7,124**	7,685	**(7)**
Corporate lending—excluding gains (losses) on loan hedges[1]	**538**	715	**(25)**	**1,632**	2,189	**(25)**
Private bank—excluding gains (losses) on loan hedges[1]	**938**	867	**8**	**2,843**	2,613	**9**
Total *Banking* revenues (ex-gains (losses) on loan hedges)	**$ 5,257**	$ 5,369	**(2)%**	**$ 16,099**	$ 16,352	**(2)%**
Gains (losses) on loan hedges[1]	**$ (124)**	$ (33)	**NM**	**$ 261**	$ (339)	**NM**
Total *Banking* revenues (including gains (losses) on loan hedges), net of interest expense	**$ 5,133**	$ 5,336	**(4)%**	**$ 16,360**	$ 16,013	**2 %**
Fixed income markets[2]	**$ 3,788**	$ 3,211	**18 %**	**$ 14,169**	$ 9,986	**42 %**
Equity markets	**875**	760	**15**	**2,814**	2,392	**18**
Securities services	**631**	664	**(5)**	**1,895**	1,984	**(4)**
Other	**(74)**	(120)	**38**	**(264)**	(451)	**41**
Total *Markets and securities services* revenues, net of interest expense	**$ 5,220**	$ 4,515	**16 %**	**$ 18,614**	$ 13,911	**34 %**
Total revenues, net of interest expense	**$ 10,353**	$ 9,851	**5 %**	**$ 34,974**	$ 29,924	**17 %**
Commissions and fees	**$ 159**	$ 194	**(18)%**	**$ 502**	$ 566	**(11)%**
Principal transactions[3]	**2,178**	2,080	**5**	**9,736**	6,327	**54**
Other[2]	**301**	183	**64**	**472**	866	**(45)**
Total non-interest revenue	**$ 2,638**	$ 2,457	**7 %**	**$ 10,710**	$ 7,759	**38 %**
Net interest revenue	**1,150**	754	**53**	**3,459**	2,227	**55**
Total fixed income markets[4]	**$ 3,788**	$ 3,211	**18 %**	**$ 14,169**	$ 9,986	**42 %**
Rates and currencies	**$ 2,520**	$ 2,491	**1 %**	**$ 10,136**	$ 7,011	**45 %**
Spread products/other fixed income	**1,268**	720	**76**	**4,033**	2,975	**36**
Total fixed income markets	**$ 3,788**	$ 3,211	**18 %**	**$ 14,169**	$ 9,986	**42 %**
Commissions and fees	**$ 279**	$ 287	**(3)%**	**$ 946**	$ 854	**11 %**
Principal transactions[3]	**125**	388	**(68)**	**1,092**	791	**38**
Other	**267**	2	**NM**	**277**	19	**NM**
Total non-interest revenue	**$ 671**	$ 677	**(1)%**	**$ 2,315**	$ 1,664	**39 %**
Net interest revenue	**204**	83	**NM**	**499**	728	**(31)**
Total equity markets[4]	**$ 875**	$ 760	**15 %**	**$ 2,814**	$ 2,392	**18 %**

(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 include the mark-to-market on the credit derivatives and the mark-to-market on the loans in the portfolio that are at fair value. The fixed premium costs of these hedges are netted against the private bank and corporate lending revenues to reflect the cost of credit protection. Gains (losses) on loan hedges include $(116) million and $224 million related to the corporate loan portfolio and $(8) million and $37 million related to the private bank for the three and nine months ended September 30, 2020, respectively. All of gains (losses) on loan hedges are related to corporate loan portfolio for the three and nine months ended September 30, 2019, respectively. Citigroup's results of operations excluding the impact of gains (losses) on loan hedges are non-GAAP financial measures.
(2) The second quarter of 2019 includes an approximate $350 million gain on Citi's investment in Tradeweb.
(3) Excludes principal transactions revenues of *ICG* businesses other than *Markets*, primarily treasury and trade solutions and the private bank.
(4) 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.

3Q20 vs. 3Q19

Net income decreased 10%, as higher credit costs and higher expenses were partially offset by higher revenues.

Revenues were up 5%, reflecting higher *Markets and securities services* revenues (increase of 16%), partially offset by lower *Banking* revenues (decline of 4% including the impact of losses on loan hedges). Excluding the impact of losses on loan hedges, *Banking* revenues were down 2%, driven by lower revenues in treasury and trade solutions and corporate lending, partially offset by higher revenues in investment banking and the private bank. *Markets and securities services* revenues were up 16%, reflecting higher revenues in both fixed income and equity markets, driven by increased client activity, partially offset by lower revenues in securities services.

Within *Banking*:

- *Investment banking* revenues were up 13%, reflecting growth in overall market wallet as well as gains in wallet share. Advisory revenues decreased 41%, largely reflecting a decline in the market wallet. Equity underwriting revenues increased 96%, reflecting growth in *North America*, *EMEA* and *Asia*, driven by continued strength in the market wallet as well as wallet share gains. Debt underwriting revenues increased 5%, reflecting particular strength in *North America* and *Asia*, partially offset by *EMEA*. The increase in revenues was largely driven by a higher market wallet in investment grade debt underwriting.
- *Treasury and trade solutions* revenues decreased 6%. Excluding the impact of FX translation, revenues decreased 4%, driven by declines in *EMEA* and *Asia*, partially offset by growth in *North America*. The decline in revenues was driven by both the cash and trade businesses. The decline in revenues in the cash business reflected the continued impact of lower interest rates and a slowdown in commercial cards spend driven by the impact of the pandemic, partially offset by strong deposit volumes. Average deposit balances increased 25% (26% excluding the impact of FX translation), reflecting strong client engagement and solid growth across all regions. In trade, revenues were impacted by a decline in trade fees and trade loans, reflecting a slowdown in underlying trade related to the pandemic, partially offset by improved trade spreads.
- *Corporate lending* revenues decreased 38%, including higher losses on loan hedges, as credit spreads tightened during the quarter. Excluding the impact of losses on loan hedges, revenues decreased 25%, as higher volumes were more than offset by lower spreads. Average loans were up 3% from the prior-year period, reflecting elevated volumes as the business continued to assist clients with sourcing liquidity in the evolving environment. Average loans declined 13% from the prior quarter, largely reflecting repayments.
- *Private bank* revenues increased 7%. Excluding the impact of losses on loan hedges, revenues increased 8%, reflecting particular strength in *Asia* and *EMEA*. The increase was driven by continued strong client activity, particularly in capital markets as well as higher managed investments revenues and higher loan and deposit volumes, partially offset by lower deposit spreads due to the low interest rate environment.

Within *Markets and securities services*:

- *Fixed income markets* revenues increased 18%, reflecting strength in *North America* and *EMEA*, largely driven by strong client activity in spread products and commodities. Non-interest revenues increased, reflecting higher corporate and investor activity, as volumes remained elevated particularly in spreads products and commodities. Net interest revenues also increased, largely reflecting a change in the mix of trading positions.

  Rates and currencies revenues were largely unchanged. Spread products and other fixed income revenues increased 76%, reflecting strong client activity following robust primary issuance, particularly in flow trading and financing products, as well as a more favorable market making environment, as evidenced by spread tightening. Commodities revenues increased, reflecting a more favorable market making environment, as volatility remained elevated, particularly in gold and oil.
- *Equity markets* revenues increased 15%, driven by higher revenues in cash equities and derivatives, partially offset by lower revenues in prime finance. Equity derivatives revenues increased, reflecting strong client activity and continued market volatility, particularly in *North America*. Cash equities revenues increased driven by elevated levels of client activity. The decline in prime

finance revenues was largely due to lower financing spreads.

- *Securities services* revenues decreased 5%. Excluding the impact of FX translation, revenues decreased 4%, driven by *EMEA* and *Latin America*, as higher deposit volumes were more than offset by lower deposit spreads due to the low interest rate environment.

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

Expenses were up 3%, reflecting continued investments in infrastructure, risk management and controls, higher compensations costs and volume-driven growth, partially offset by efficiency savings.

Provisions increased to $838 million, primarily reflecting a higher ACL build as well as higher net credit losses. Net credit losses were $326 million, compared to $110 million in the prior-year period, largely driven by write-offs across various sectors in both *North America* and *EMEA*, primarily reflecting smaller-sized energy and energy-related exposures. The net credit losses were largely offset by the release of previously established ACL reserves.

The ACL build was $529 million, compared to $43 million in the prior-year period under prior accounting standards. The higher build was primarily driven by an increase in the qualitative management adjustment component of the reserve to reflect the potential for a higher level of stress and/or somewhat slower economic recovery.

The ACL build consisted of a $106 million build for funded loans and a $423 million provision on unfunded lending commitments. This relative difference in the builds in part reflected the release of certain reserves held against funded loans and builds against the unfunded lending commitments when the funded loans (particularly under revolving line of credit facilities) were repaid during the quarter. The provision for unfunded lending commitments also was driven by downgrades, and the increase in the qualitative management adjustment noted above.

As of September 30, 2020, reserves held on Citi's balance sheet represented 1.8% of funded loans, compared to 1.7% as of June 30, 2020, including 5.7% of reserves held against the non-investment grade portion, compared to 4.9% as of June 30, 2020.

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

For additional information on Citi's ACL, see "Significant Accounting Policies and Significant Estimates" below, and Notes 1, 13 and 14 to the Consolidated Financial Statements.

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

2020 YTD vs. 2019 YTD

Net income decreased 16%, as significantly higher cost of credit and higher expenses were partially offset by higher revenues.

Revenues were up 17%, driven by a 34% increase in *Markets and securities services* revenues as well as a 2% increase in *Banking* revenues (including the impact of gains (losses) on loan hedges). Excluding the impact of gains (losses) on loan hedges, *Banking* revenues declined 2%, as growth in investment banking and the private bank was more than offset by a decrease in treasury and trade solutions and corporate lending. Excluding the pretax gain of approximately $350 million on Citi's investment in Tradeweb in the prior-year period, *Markets and securities services* revenues increased 37%, primarily driven by growth in both fixed income markets and equity markets, partially offset by a decline in securities services.

Within *Banking*:

- *Investment banking* revenues increased 16%. Advisory revenues decreased 12%, reflecting a decline in the overall market wallet, despite gains in share. Equity underwriting revenues increased 58%, primarily reflecting growth in the market wallet and gains in share. Debt underwriting revenues increased 14%, reflecting growth in the market wallet as well as gains in share.
- *Treasury and trade solutions* revenues decreased 7%. Excluding the impact of FX translation, revenues decreased 5%, reflecting lower revenues in both cash and trade, driven by the same factors described above.
- *Corporate lending* revenues were largely unchanged, including gains on loan hedges in the current period compared to losses in the prior-year period. Excluding the impact of gains (losses) on loan hedges, revenues decreased 25%, primarily driven by lower loan spreads and an adjustment to the residual value of a lease financing asset, partially offset by higher loan volumes.
- *Private bank* revenues increased 10%. Excluding the impact of gains on loan hedges in the current period, revenues increased 9%, reflecting strength across all regions, driven by the same factors described above.

Within *Markets and securities services*:

- *Fixed income markets* revenues increased 42%. Excluding the Tradeweb gain in the prior-year period, revenues increased 47%, reflecting higher revenues across all regions, with strong performance across rates and currencies, spread products, and commodities due to the impact of market conditions, including elevated volatility, related to pandemic. Non-interest revenues increased, reflecting higher corporate and investor client activity, as volatility, volumes and spreads remained elevated. 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.
- *Equity markets* revenues increased 18%, driven largely by higher revenues in both cash equities and equity derivatives, partially offset by lower revenues in prime finance.

- *Securities services* revenues declined 4% (down 2% excluding the impact of foreign exchange) driven by the same factors described above.

Expenses were up 4%, driven by the same factors described above.

Provisions increased to $6.7 billion, driven by net credit losses of $777 million, compared to $279 million in the prior-year period, and an ACL build of $5.9 billion compared to a modest build in the prior-year period. The increase in net credit losses was driven by the same factors described above.

The increase in the ACL build primarily reflected the impact of a deterioration in the macroeconomic outlook under the CECL standard, driven by the impact of the pandemic across multiple sectors, as well as downgrades in the portfolio over the course of the year. Sectors significantly impacted by the pandemic (including energy and energy-related, aviation, consumer retail, commercial real estate and autos) drove approximately half of the ACL reserve build year-to-date. The ACL build also included an increase in the qualitative management adjustment component of the reserve to reflect the potential for a higher level of stress and/or somewhat slower economic recovery.

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 September 30, 2020, *Corporate/Other* had $96 billion in assets.

	Third Quarter			Nine Months		
In millions of dollars	**2020**	2019	**% Change**	**2020**	2019	**% Change**
Net interest revenue	**$ (231)**	$ 443	**NM**	**$ 68**	$ 1,596	**(96)%**
Non-interest revenue	**7**	(9)	**NM**	**71**	(124)	**NM**
Total revenues, net of interest expense	**$ (224)**	$ 434	**NM**	**$ 139**	$ 1,472	**(91)%**
Total operating expenses	**$ 969**	$ 485	**100 %**	**$ 1,854**	$ 1,515	**22 %**
Net credit losses (recoveries) on loans	**$ (5)**	$ 1	**NM**	**$ (12)**	$ 5	**NM**
Credit reserve build (release) for loans	**(128)**	(16)	**NM**	**223**	(62)	**NM**
Provision (release) for credit losses on unfunded lending commitments	**1**	—	**— %**	**7**	(5)	**NM**
Provisions (releases) for benefits and claims, HTM debt securities and other assets	**(4)**	—	**NM**	**2**	—	**100 %**
Provisions (release) for credit losses and for benefits and claims	**$ (136)**	$ (15)	**NM**	**$ 220**	$ (62)	**NM**
Income (loss) from continuing operations before taxes	**$ (1,057)**	$ (36)	**NM**	**$ (1,935)**	$ 19	**NM**
Income taxes (benefits)	**(341)**	(247)	**(38)%**	**(717)**	(263)	**NM**
Income (loss) from continuing operations	**$ (716)**	$ 211	**NM**	**$ (1,218)**	$ 282	**NM**
Income (loss) from discontinued operations, net of taxes	**(7)**	(15)	**53 %**	**(26)**	—	**— %**
Net income (loss) before attribution of noncontrolling interests	**$ (723)**	$ 196	**NM**	**$ (1,244)**	$ 282	**NM**
Noncontrolling interests	**—**	5	**(100)%**	**(7)**	18	**NM**
Net income (loss)	**$ (723)**	$ 191	**NM**	**$ (1,237)**	$ 264	**NM**

NM Not meaningful

3Q20 vs. 3Q19

Net loss was $723 million, compared to *net income* of $191 million in the prior-year period, largely driven by lower revenues and higher expenses, partially offset by lower cost of credit.

Revenues of $(224) million, decreased $658 million, reflecting the wind-down of legacy assets, the impact of lower rates and marks on securities.

Expenses of $969 million, increased significantly, as the wind-down of legacy assets was more than offset by the $400 million civil money penalty (for additional information, see "Executive Summary" above), investments in infrastructure, risk management and controls, and incremental costs associated with the pandemic.

Provisions decreased $121 million to a net benefit of $136 million, primarily driven by an ACL release of $132 million on legacy assets (versus a $16 million release in the prior-year period under prior accounting standards).

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

2020 YTD vs. 2019 YTD

Net loss was $1.2 billion, compared to *net income* of $264 million in the prior-year period, largely reflecting lower revenues, higher expenses and significantly higher cost of credit.

Revenues decreased 91%, reflecting the same factors described above, partially offset by gains on securities.

Expenses of $1.9 billion increased 22%, driven by the same factors described above.

Provisions of $220 million increased $282 million (versus a release in the prior-year period), primarily driven by an ACL build on legacy assets (versus a release in the prior-year period under prior accounting standards). The ACL build of $223 million primarily reflected the impact of deterioration in Citi's macroeconomic outlook in each of the first and second quarters of 2020, mainly driven by the pandemic, on estimated lifetime credit losses under CECL (compared to a release of $67 million in the prior-year period under prior accounting standards).

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 third quarter of 2020, Citi returned a total of $1.1 billion of capital to common shareholders in the form of common share dividends. 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. For additional information, see "Unregistered Sales of Equity Securities, Repurchases of Equity Securities and Dividends—Equity Security Repurchases" below.

Common Equity Tier 1 Capital Ratio

Citi's reportable Common Equity Tier 1 Capital ratio was 11.8% as of September 30, 2020, compared to 11.6% as of June 30, 2020, both under the Basel III Advanced Approaches framework. Citi's reportable Common Equity Tier 1 Capital ratio was 11.8% under the Basel III Standardized Approach as of December 31, 2019. Citi's Common Equity Tier 1 Capital ratio increased from June 30, 2020, largely driven by net income of $3.2 billion and beneficial net movements in *Accumulated other comprehensive income (AOCI)*, partially offset by the return of $1.1 billion of capital to common shareholders in the form of common share dividends, as well as an increase in market risk-weighted assets.

Citi's Common Equity Tier 1 Capital ratio remained unchanged from year-end 2019, as a net increase in risk-weighted assets and the return of $6.2 billion of capital to common shareholders in the form of share repurchases and dividends were offset by year-to-date net income of $7.1 billion and the relief of the modified CECL transition provision.

Regulatory Capital Relief Resulting from the COVID-19 Pandemic

During the third quarter of 2020, the U.S. banking agencies finalized several prior interim final rules that revised the current regulatory capital standards applicable to Citi, in light of the pandemic. The final rules ease capital distribution limitations in an effort to reduce the impact of using regulatory capital buffers, modify the regulatory capital transition provision related to the Current Expected Credit Losses (CECL) methodology, and neutralize the regulatory capital impact of the Money Market Mutual Fund Liquidity Facility and the Paycheck Protection Program. Each of the final rules are substantially unchanged from the respective interim final rules that preceded them, and are already effective for Citi. For additional information regarding these rules, see "Capital Resources—Regulatory Capital Relief Resulting from the COVID-19 Pandemic" in Citi's First Quarter of 2020 Form 10-Q and Second Quarter of 2020 Form 10-Q.

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 September 30, 2020	Advanced Approaches June 30, 2020	Advanced Approaches December 31, 2019	Standardized Approach September 30, 2020	Standardized Approach June 30, 2020	Standardized Approach December 31, 2019
Common Equity Tier 1 Capital[2]		**$ 142,234**	$ 139,643	$ 137,798	**$ 142,234**	$ 139,643	$ 137,798
Tier 1 Capital		**160,387**	157,631	155,805	**160,387**	157,631	155,805
Total Capital (Tier 1 Capital + Tier 2 Capital)[2]		**189,499**	187,553	181,337	**198,153**	196,452	193,682
Total Risk-Weighted Assets[3]		**1,210,190**	1,205,123	1,135,553	**1,174,936**	1,187,331	1,166,523
Credit Risk[2]		**$ 812,237**	$ 809,748	$ 771,508	**$1,074,436**	$1,092,943	$1,107,775
Market Risk		**96,873**	91,496	57,317	**100,500**	94,388	58,748
Operational Risk		**301,080**	303,879	306,728	**—**	—	—
Common Equity Tier 1 Capital ratio[4]	**10.0 %**	**11.75 %**	11.59 %	12.13 %	**12.11 %**	11.76 %	11.81 %
Tier 1 Capital ratio[4]	**11.5**	**13.25**	13.08	13.72	**13.65**	13.28	13.36
Total Capital ratio[4]	**13.5**	**15.66**	15.56	15.97	**16.86**	16.55	16.60

In millions of dollars, except ratios	Effective Minimum Requirement	September 30, 2020	June 30, 2020	December 31, 2019
Quarterly Adjusted Average Total Assets[2][5][6]		**$ 2,224,523**	**$ 2,228,062**	$ 1,957,039
Total Leverage Exposure[2][5][7]		**2,347,948**	**2,367,578**	2,507,891
Tier 1 Leverage ratio	**4.0 %**	**7.21 %**	**7.07 %**	7.96 %
Supplementary Leverage ratio	**5.0**	**6.83**	**6.66**	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' September 2020 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 June 30, 2020, loans originated under the Paycheck Protection Program receive a 0% risk weight under the Advanced Approaches and Standardized Approach.

(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 September 30, 2020 and June 30, 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) Commencing with the second quarter of 2020, exposures pledged as collateral pursuant to a non-recourse loan that is provided as part of the Paycheck Protection Program Liquidity Facility are excluded from quarterly adjusted average total assets and Total Leverage Exposure.

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

(7) Supplementary Leverage ratio denominator. Commencing with the second quarter of 2020, Citigroup's Total Leverage Exposure temporarily excludes U.S. Treasuries and deposits at Federal Reserve Banks. For additional information, see "Capital Resources—Regulatory Capital Relief Resulting from the COVID-19 Pandemic—Temporary Supplementary Leverage Ratio Relief" in Citi's Second Quarter of 2020 Form 10-Q.

As indicated in the table above, Citigroup's risk-based capital ratios at September 30, 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 September 30, 2020.

Components of Citigroup Capital

In millions of dollars		**September 30, 2020**		December 31, 2019
Common Equity Tier 1 Capital				
Citigroup common stockholders' equity[1]	**$**	**176,047**	$	175,414
Add: Qualifying noncontrolling interests		**141**		154
Regulatory capital adjustments and deductions:				
Add: CECL transition and 25% provision deferral[2]		**5,710**		—
Less: Accumulated net unrealized gains (losses) on cash flow hedges, net of tax		**1,859**		123
Less: Cumulative unrealized net gain (loss) related to changes in fair value of financial liabilities attributable to own creditworthiness, net of tax		**29**		(679)
Less: Intangible assets:				
Goodwill, net of related DTLs[3]		**20,522**		21,066
Identifiable intangible assets other than MSRs, net of related DTLs		**4,248**		4,087
Less: Defined benefit pension plan net assets		**949**		803
Less: DTAs arising from net operating loss, foreign tax credit and general business credit carry-forwards[4]		**12,057**		12,370
Total Common Equity Tier 1 Capital (Advanced Approaches and Standardized Approach)	**$**	**142,234**	$	137,798
Additional Tier 1 Capital				
Qualifying noncumulative perpetual preferred stock[1]	**$**	**17,829**	$	17,828
Qualifying trust preferred securities[5]		**1,393**		1,389
Qualifying noncontrolling interests		**34**		42
Regulatory capital deductions:				
Less: Permitted ownership interests in covered funds[6]		**1,075**		1,216
Less: Minimum regulatory capital requirements of insurance underwriting subsidiaries[7]		**28**		36
Total Additional Tier 1 Capital (Advanced Approaches and Standardized Approach)	**$**	**18,153**	$	18,007
Total Tier 1 Capital (Common Equity Tier 1 Capital + Additional Tier 1 Capital) (Advanced Approaches and Standardized Approach)	**$**	**160,387**	$	155,805
Tier 2 Capital				
Qualifying subordinated debt	**$**	**23,878**	$	23,673
Qualifying trust preferred securities[8]		**323**		326
Qualifying noncontrolling interests		**41**		46
Excess of eligible credit reserves over expected credit losses[2][9]		**4,898**		1,523
Regulatory capital deduction:				
Less: Minimum regulatory capital requirements of insurance underwriting subsidiaries[7]		**28**		36
Total Tier 2 Capital (Advanced Approaches)	**$**	**29,112**	$	25,532
Total Capital (Tier 1 Capital + Tier 2 Capital) (Advanced Approaches)	**$**	**189,499**	$	181,337
Adjustment for eligible allowance for credit losses[2][9]	**$**	**8,654**	$	12,345
Total Tier 2 Capital (Standardized Approach)	**$**	**37,766**	$	37,877
Total Capital (Tier 1 Capital + Tier 2 Capital) (Standardized Approach)	**$**	**198,153**	$	193,682

(1) Issuance costs of $151 million as of September 30, 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' September 2020 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 $24.8 billion of net DTAs at September 30, 2020, $15.2 billion was includable in Common Equity Tier 1 Capital pursuant to the U.S. Basel III rules, while $9.6 billion was excluded. Excluded from Citi's Common Equity Tier 1 Capital as of September 30, 2020 was $12.1 billion of net DTAs arising from net operating loss, foreign tax credit and general business credit carry-forwards, which was reduced by $2.5 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. Additionally, the U.S. agencies issued a revised Volcker Rule 2.1 in July 2020 that improves and streamlines several "covered funds" requirements, with an effective date of October 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 $13.6 billion and $13.9 billion at September 30, 2020 and December 31, 2019, respectively.

Citigroup Capital Rollforward

In millions of dollars	Three Months Ended September 30, 2020	Nine Months Ended September 30, 2020
Common Equity Tier 1 Capital, beginning of period	**$ 139,643**	**$ 137,798**
Net income	**3,230**	**7,068**
Common and preferred dividends declared	**(1,358)**	**(4,054)**
Net change in treasury stock	**6**	**(2,477)**
Net change in common stock and additional paid-in capital	**96**	**(77)**
Net change in foreign currency translation adjustment net of hedges, net of tax	**897**	**(2,651)**
Net change in unrealized gains (losses) on debt securities AFS, net of tax	**(282)**	**3,683**
Net change in defined benefit plans liability adjustment, net of tax	**246**	**(117)**
Net change in adjustment related to change in fair value of financial liabilities attributable to own creditworthiness, net of tax	**57**	**(107)**
Net change in excluded component of fair value hedges	**(39)**	**1**
Net change in goodwill, net of related DTLs	**(247)**	**544**
Net increase in identifiable intangible assets other than MSRs, net of related DTLs	**(382)**	**(161)**
Net change in defined benefit pension plan net assets	**11**	**(146)**
Net decrease in DTAs arising from net operating loss, foreign tax credit and general business credit carry-forwards	**256**	**313**
CECL 25% provision deferral	**104**	**2,642**
Other	**(4)**	**(25)**
Net increase in Common Equity Tier 1 Capital	**$ 2,591**	**$ 4,436**
Common Equity Tier 1 Capital, end of period (Advanced Approaches and Standardized Approach)	**$ 142,234**	**$ 142,234**
Additional Tier 1 Capital, beginning of period	**$ 17,988**	**$ 18,007**
Net change in qualifying perpetual preferred stock	**—**	**1**
Net increase in qualifying trust preferred securities	**1**	**4**
Net decrease in permitted ownership interests in covered funds	**169**	**141**
Other	**(5)**	**—**
Net increase in Additional Tier 1 Capital	**$ 165**	**$ 146**
Tier 1 Capital, end of period (Advanced Approaches and Standardized Approach)	**$ 160,387**	**$ 160,387**
Tier 2 Capital, beginning of period (Advanced Approaches)	**$ 29,922**	**$ 25,532**
Net change in qualifying subordinated debt	**(830)**	**205**
Net increase in excess of eligible credit reserves over expected credit losses	**18**	**3,375**
Other	**2**	**—**
Net change in Tier 2 Capital (Advanced Approaches)	**$ (810)**	**$ 3,580**
Tier 2 Capital, end of period (Advanced Approaches)	**$ 29,112**	**$ 29,112**
Total Capital, end of period (Advanced Approaches)	**$ 189,499**	**$ 189,499**
Tier 2 Capital, beginning of period (Standardized Approach)	**$ 38,821**	**$ 37,877**
Net change in qualifying subordinated debt	**(830)**	**205**
Net decrease in eligible allowance for credit losses	**(227)**	**(316)**
Other	**2**	**—**
Net decrease in Tier 2 Capital (Standardized Approach)	**$ (1,055)**	**$ (111)**
Tier 2 Capital, end of period (Standardized Approach)	**$ 37,766**	**$ 37,766**
Total Capital, end of period (Standardized Approach)	**$ 198,153**	**$ 198,153**

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

In millions of dollars	Three Months Ended September 30, 2020	Nine Months Ended September 30, 2020
Total Risk-Weighted Assets, beginning of period	**$ 1,205,123**	**$ 1,135,553**
Changes in Credit Risk-Weighted Assets		
Retail exposures(1)	**(4,299)**	**(23,410)**
Wholesale exposures(2)	**(6,641)**	**26,321**
Repo-style transactions(3)	**3,356**	**14,341**
Securitization exposures	**(501)**	**(2,211)**
Equity exposures	**531**	**50**
Over-the-counter (OTC) derivatives(4)	**6,581**	**15,202**
Derivatives CVA(5)	**(1,077)**	**10,575**
Other exposures(6)	**4,302**	**(2,082)**
Supervisory 6% multiplier	**237**	**1,943**
Net increase in Credit Risk-Weighted Assets	**$ 2,489**	**$ 40,729**
Changes in Market Risk-Weighted Assets		
Risk levels(7)	**$ 2,898**	**$ 25,018**
Model and methodology updates(7)	**2,479**	**14,538**
Net increase in Market Risk-Weighted Assets	**$ 5,377**	**$ 39,556**
Net decrease in Operational Risk-Weighted Assets(8)	**$ (2,799)**	**$ (5,648)**
Total Risk-Weighted Assets, end of period	**$ 1,210,190**	**$ 1,210,190**

(1) Retail exposures decreased during the three months ended September 30, 2020 primarily driven by lesser spending for qualifying revolving (cards) exposures due to the pandemic. Retail exposures decreased during the nine months ended September 30, 2020 primarily driven by seasonal holiday spending repayments and lesser spending for qualifying revolving (cards) exposures due to the pandemic.

(2) Wholesale exposures decreased during the three months ended September 30, 2020 primarily due to decrease in commercial loans. Wholesale exposures increased during the nine months ended September 30, 2020 primarily due to increases in commercial loans, AFS and HTM securities and rating downgrades partially offset by 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 September 30, 2020 mainly driven by increase in exposure. Repo-style transactions increased during the nine months ended September 30, 2020 mainly driven by market volatility and increase in exposure.

(4) OTC derivatives increased during the three and nine months ended September 30, 2020 primarily due to an increase in exposure for bilateral derivatives.

(5) Derivatives CVA decreased during the three months ended September 30, 2020 primarily driven by decrease in market volatility. Derivatives CVA increased during the nine months ended September 30, 2020 primarily due to widening 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 September 30, 2020 primarily due to increases in other assets and cleared derivative transactions.

(7) Market risk-weighted assets increased during the three months ended September 30, 2020 primarily due to an increase in exposure subject to standard specific risk charges. Market risk-weighted assets increased during the nine months ended September 30, 2020 primarily driven by increases in market volatility due to the pandemic.

(8) Operational risk-weighted assets decreased during the three and nine months ended September 30, 2020 primarily due to changes in operational loss severity and frequency.

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

In millions of dollars	Three Months Ended September 30, 2020	Nine Months Ended September 30, 2020
Total Risk-Weighted Assets, beginning of period	**$ 1,187,331**	**$ 1,166,523**
Changes in Credit Risk-Weighted Assets		
General credit risk exposures[1]	**(24,514)**	**(37,677)**
Repo-style transactions[2]	**(10,424)**	**7,166**
Securitization exposures	**1,144**	**(64)**
Equity exposures	**363**	**(118)**
Over-the-counter (OTC) derivatives[3]	**2,522**	**10,824**
Other exposures[4]	**6,249**	**(6,827)**
Off-balance sheet exposures[5]	**6,153**	**(6,643)**
Net decrease in Credit Risk-Weighted Assets	**$ (18,507)**	**$ (33,339)**
Net Increase in Market Risk-Weighted Assets		
Risk levels[6]	**$ 3,633**	**$ 27,214**
Model and methodology updates[6]	**2,479**	**14,538**
Net increase in Market Risk-Weighted Assets	**$ 6,112**	**$ 41,752**
Total Risk-Weighted Assets, end of period	**$ 1,174,936**	**$ 1,174,936**

(1) General credit risk exposures include cash and balances due from depository institutions, securities, and loans and leases. General credit risk exposures decreased during the three months ended September 30, 2020 primarily due to reductions in commercial loans and lesser spending for qualifying revolving (cards) exposures due to the pandemic. General credit risk exposures decreased during the nine months ended September 30, 2020 primarily due to seasonal holiday spending repayments and lesser spending for qualifying revolving (cards) exposures due to the pandemic.

(2) Repo-style transactions include repurchase and reverse repurchase transactions as well as securities borrowing and securities lending transactions. Repo-style transactions decreased during the three months ended September 30, 2020, primarily due to volume and exposure driven decreases. Repo-style transactions increased during the nine months ended September 30, 2020, primarily due to volume and exposure driven increases.

(3) OTC derivatives increased during the three and nine months ended September 30, 2020, primarily due to an increase in exposure for bilateral derivatives.

(4) Other exposures include cleared transactions, unsettled transactions, and other assets. Other exposures increased during the three months ended September 30, 2020 primarily due to increases in other assets and cleared derivative transactions. Other exposures decreased during the nine months ended September 30, 2020 primarily due to decreases in cleared derivative transactions and excess of credit reserves not included in Tier 2 capital that are eligible for RWA reduction.

(5) Off-balance sheet exposures increased during the three months ended September 30, 2020, primarily due to an increase in loan commitments. Off-balance sheet exposures decreased during the nine months ended September 30, 2020 primarily due to a reduction in loan commitments.

(6) Market risk-weighted assets increased during the three months ended September 30, 2020 primarily due to an increase in exposure subject to standard specific risk charges. Market risk-weighted assets increased during the nine months ended September 30, 2020 primarily driven by increases in market volatility due to the pandemic.

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

In millions of dollars, except ratios	**September 30, 2020**	June 30, 2020	December 31, 2019
Tier 1 Capital	**$ 160,387**	$ 157,631	$ 155,805
Total Leverage Exposure			
On-balance sheet assets(1)(2)(3)	**$ 1,844,681**	$ 1,878,949	$ 1,996,617
Certain off-balance sheet exposures:(4)			
Potential future exposure on derivative contracts	**174,676**	163,829	169,478
Effective notional of sold credit derivatives, net(5)	**33,103**	37,867	38,481
Counterparty credit risk for repo-style transactions(6)	**18,095**	20,641	23,715
Unconditionally cancellable commitments	**71,338**	71,887	70,870
Other off-balance sheet exposures	**244,934**	233,089	248,308
Total of certain off-balance sheet exposures	**$ 542,146**	$ 527,313	$ 550,852
Less: Tier 1 Capital deductions	**(38,879)**	(38,684)	(39,578)
Total Leverage Exposure(3)	**$ 2,347,948**	$ 2,367,578	$ 2,507,891
Supplementary Leverage ratio	**6.83 %**	6.66 %	6.21 %

(1) Represents the daily average of on-balance sheet assets for the quarter.
(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' September 2020 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.
(3) Commencing with the second quarter of 2020, Citigroup's Total Leverage Exposure temporarily excludes U.S. Treasuries and deposits at Federal Reserve Banks. For additional information, see "Capital Resources—Regulatory Capital Relief Resulting from the COVID-19 Pandemic—Temporary Supplementary Leverage Ratio Relief" in Citi's Second Quarter of 2020 Form 10-Q.
(4) Represents the average of certain off-balance sheet exposures calculated as of the last day of each month in the quarter.
(5) 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.
(6) 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 6.8% for the third quarter of 2020, compared to 6.7% for the second quarter of 2020, and 6.2% for the fourth quarter of 2019. The ratio increased from the second quarter of 2020 primarily due to net income of $3.2 billion and a decrease in Total Leverage Exposure, partially offset by the return of $1.1 billion of capital to common shareholders. The ratio increased from the fourth quarter of 2019, primarily driven by a decrease in Total Leverage Exposure mainly attributable to the 103 basis point benefit resulting from the Federal Reserve Board's temporary Supplementary Leverage ratio relief.

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:

In millions of dollars, except ratios	Effective Minimum Requirement[1]	Advanced Approaches September 30, 2020	Advanced Approaches June 30, 2020	Advanced Approaches December 31, 2019	Standardized Approach September 30, 2020	Standardized Approach June 30, 2020	Standardized Approach December 31, 2019
Common Equity Tier 1 Capital[2]		**$ 138,384**	$ 137,476	$ 130,720	**$ 138,384**	$ 137,476	$ 130,720
Tier 1 Capital		**140,471**	139,560	132,847	**140,471**	139,560	132,847
Total Capital (Tier 1 Capital + Tier 2 Capital)[2][3]		**156,721**	155,799	145,918	**164,492**	163,574	157,253
Total Risk-Weighted Assets[4]		**995,361**	983,824	931,743	**1,007,349**	998,456	1,019,266
Credit Risk[2]		**$ 697,914**	$ 696,411	$ 664,139	**$ 950,893**	$ 950,208	$ 989,669
Market Risk		**55,853**	47,931	29,167	**56,456**	48,248	29,597
Operational Risk		**241,594**	239,482	238,437	—	—	—
Common Equity Tier 1 Capital ratio[5][6]	**7.0 %**	**13.90 %**	13.97 %	14.03 %	**13.74 %**	13.77 %	12.82 %
Tier 1 Capital ratio[5][6]	**8.5**	**14.11**	14.19	14.26	**13.94**	13.98	13.03
Total Capital ratio[5][6]	**10.5**	**15.75**	15.84	15.66	**16.33**	16.38	15.43

In millions of dollars, except ratios	Effective Minimum Requirement	September 30, 2020	June 30, 2020	December 31, 2019
Quarterly Adjusted Average Total Assets[2][7][8]		**$ 1,646,354**	$ 1,643,724	$ 1,459,780
Total Leverage Exposure[2][7][9]		**2,125,670**	2,105,285	1,951,630
Tier 1 Leverage ratio[6]	**5.0 %**	**8.53 %**	8.49 %	9.10 %
Supplementary Leverage ratio[6]	**6.0**	**6.61**	6.63	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' September 2020 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) Commencing with the quarter ended June 30, 2020, loans originated under the Paycheck Protection Program receive a 0% risk weight under the Advanced Approaches and Standardized Approach.

(5) Citibank's reportable Total Capital ratio was derived under the Basel III Advanced Approaches framework as of September 30, 2020 and June 30, 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.

(6) 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.

(7) Commencing with the quarter ended June 30, 2020, exposures pledged as collateral pursuant to a non-recourse loan that is provided as part of the Paycheck Protection Program Liquidity Facility are excluded from quarterly adjusted average total assets and Total Leverage Exposure.

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

(9) Supplementary Leverage ratio denominator. Citibank did not elect to temporarily exclude U.S. Treasuries and deposits at Federal Reserve Banks from Total

Leverage Exposure. For additional information, see "Capital Resources—Regulatory Capital Relief Resulting from the COVID-19 Pandemic—Temporary Supplementary Leverage Ratio Relief" in Citi's Second Quarter of 2020 Form 10-Q.

As indicated in the table above, Citibank's capital ratios at September 30, 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 September 30, 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 September 30, 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**	**1.0**	**0.8**	**1.1**	**0.8**	**1.3**
Standardized Approach	**0.9**	**1.0**	**0.9**	**1.2**	**0.9**	**1.4**
Citibank						
Advanced Approaches	**1.0**	**1.4**	**1.0**	**1.4**	**1.0**	**1.6**
Standardized Approach	**1.0**	**1.4**	**1.0**	**1.4**	**1.0**	**1.6**

	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	**0.4**	**0.3**	**0.4**	**0.3**
Citibank	**0.6**	**0.5**	**0.5**	**0.3**

Citigroup Broker-Dealer Subsidiaries
At September 30, 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 $12.3 billion, which exceeded the minimum requirement by $8.4 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 $22.8 billion at September 30, 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 September 30, 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 September 30, 2020, Citi exceeded each of the minimum TLAC and LTD requirements, resulting in a $31 billion surplus above its binding TLAC requirement of LTD as a percentage of Advanced Approaches risk-weighted assets.

	September 30, 2020	
In billions of dollars, except ratios	External TLAC	LTD
Total eligible amount	$ 305	$ 140
% of Advanced Approaches risk-weighted assets	25.2 %	11.5 %
Effective minimum requirement[(1)(2)]	22.5 %	9.0 %
Surplus amount	$ 33	$ 31
% of Total Leverage Exposure[(3)]	13.0 %	5.9 %
Effective minimum requirement	9.5 %	4.5 %
Surplus amount	$ 82	$ 34

(1) External TLAC includes Method 1 GSIB surcharge of 2.0%.
(2) LTD includes Method 2 GSIB surcharge of 3.0%.
(3) Commencing with the second quarter of 2020, Citigroup's Total Leverage Exposure temporarily excludes U.S. Treasuries and deposits at Federal Reserve Banks.

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, and Excluding Temporary Supplementary Leverage Ratio Relief for Citigroup)
The following tables set forth Citigroup's and Citibank's capital components and ratios reflecting the full impact of CECL, and excluding temporary Supplementary Leverage ratio relief for Citigroup, as of September 30, 2020:

	Citigroup			Citibank		
	Effective Minimum Requirement	**Advanced Approaches**	**Standardized Approach**	**Effective Minimum Requirement**	**Advanced Approaches**	**Standardized Approach**
Common Equity Tier 1 Capital ratio	**10.0 %**	**11.32 %**	**11.66 %**	**7.0 %**	**13.42 %**	**13.26 %**
Tier 1 Capital ratio	**11.5**	**12.82**	**13.21**	**8.5**	**13.63**	**13.47**
Total Capital ratio	**13.5**	**15.24**	**16.44**	**10.5**	**15.27**	**15.87**

	Effective Minimum Requirement	**Citigroup**	**Effective Minimum Requirement**	**Citibank**
Tier 1 Leverage ratio	**4.0 %**	**6.97%**	**5.0 %**	**8.24%**
Supplementary Leverage ratio(1)	**5.0**	**5.60%**	**6.0**	**6.37%**

(1) Citigroup's Supplementary Leverage ratio, as presented in the table above, reflects the full impact of CECL as well as the inclusion of U.S. Treasuries and deposits at Federal Reserve Banks in Total Leverage Exposure.

Stress Capital Buffer
In August 2020, the Federal Reserve Board finalized and announced Citi's Stress Capital Buffer (SCB) requirement of 2.5%. Accordingly, beginning October 1, 2020, Citigroup is required to maintain a 10.0% effective minimum Common Equity Tier 1 Capital ratio under the Standardized Approach, which is unchanged from Citigroup's previous effective minimum Common Equity Tier 1 Capital ratio under the Standardized Approach inclusive of the 2.5% Capital Conservation Buffer.

Citigroup's SCB is based on the Federal Reserve Board's March 2020 SCB final rule, which integrates 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 equals 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 framework.

SCB-based minimum capital requirements will be updated at least 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 the SCB final rule, see "Capital Resources—Regulatory Capital Standards Developments—Stress Capital Buffer" in Citi's First Quarter 2020 Form 10-Q. 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.

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

Capital Plan Resubmission and Related Limitations on Capital Distributions
In June 2020, the Federal Reserve Board determined that changes in financial markets and macroeconomic outlooks related to the COVID-19 pandemic could have a material effect on the risk profile and financial condition of each firm subject to its capital plan rule and, therefore, require updated capital plans. Citigroup resubmitted its capital plan on November 2, 2020.

In September 2020, the Federal Reserve Board announced that it was extending for an additional quarter several measures that were previously announced for the third quarter of 2020 to ensure that large banks maintain a high level of capital resilience. Through the end of the fourth quarter of 2020, share repurchases continue to be prohibited and dividends continue to be capped and tied to a formula based on recent income. These limitations on capital distributions may be extended by the Federal Reserve Board. For additional information on the Federal Reserve Board's limitations on capital distributions, see "Capital Resources—Capital Plan Resubmission and Related Limitations on Capital Distributions" in Citi's Second Quarter 2020 Form 10-Q.

On June 29, 2020, Citi announced that its planned capital actions include common dividends. Citi declared common dividends of $0.51 per share for the fourth quarter of 2020 on October 22, 2020, consistent with the Federal Reserve Board's income-based formula for temporary limitations on common dividends announced in September 2020.

The Federal Reserve Board may, but is not required to, recalculate each firm's SCB as a result of the capital plan resubmission. The Federal Reserve Board has stated that it will release results of the second round of stress tests by December 31, 2020.

Regulatory Capital Standards Developments

TLAC Holdings

In October 2020, the U.S. banking agencies released a final rule that creates a new regulatory capital deduction applicable to Advanced Approaches banking organizations for certain investments in covered debt instruments issued by GSIBs. The final rule is substantially consistent with an April 2019 proposal, and is intended to reduce interconnectedness and systemic risk by creating an incentive for Advanced Approaches banking organizations to limit their exposure to GSIBs.

Under the U.S. Basel III rules, non-significant investments in the capital of unconsolidated financial institutions are subject to deduction from regulatory capital using the corresponding deduction approach if, in the aggregate, they exceed 10% of the banking organization's Common Equity Tier 1 Capital. Non-significant investments in the capital of unconsolidated financial institutions that are not deducted from regulatory capital are risk weighted in the usual manner.

Under the final rule, an investment in a "covered debt instrument" will be treated as an investment in a Tier 2 Capital instrument and, therefore, will be subject to deduction from the Advanced Approaches banking organization's own Tier 2 Capital in accordance with the existing rules for non-significant investments in unconsolidated financial institutions. Covered debt instruments include unsecured debt instruments that are "eligible debt securities" for purposes of the TLAC rule, or that are pari passu or subordinated to such securities, in addition to certain unsecured debt instruments issued by foreign GSIBs.

To support a deep and liquid market for covered debt instruments, the rule provides an exception from the approach described above for covered debt instruments held for market-making activities for 30 days or less (or longer, for synthetic exposures only), if the aggregate amount of such debt instruments does not exceed 5% of the banking organization's Common Equity Tier 1 Capital.

Additionally, the final rule requires banking organizations to deduct from Tier 2 Capital investments in their own covered debt instruments.

The final rule will become effective for Citigroup and Citibank on April 1, 2021. Citi estimates that the final rule will not materially impact Citigroup or Citibank's regulatory capital upon adoption.

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

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

In millions of dollars or shares, except per share amounts	**September 30, 2020**	December 31, 2019
Total Citigroup stockholders' equity	**$ 193,876**	$ 193,242
Less: Preferred stock	**17,980**	17,980
Common stockholders' equity	**$ 175,896**	$ 175,262
Less:		
Goodwill	**21,624**	22,126
Identifiable intangible assets (other than MSRs)	**4,470**	4,327
Tangible common equity (TCE)	**$ 149,802**	$ 148,809
Common shares outstanding (CSO)	**2,082.0**	2,114.1
Book value per share (common equity/CSO)	**$ 84.48**	$ 82.90
Tangible book value per share (TCE/CSO)	**71.95**	70.39

	Three Months Ended September 30,		**Nine Months Ended September 30,**	
In millions of dollars	**2020**	2019	**2020**	2019
Net income available to common shareholders	**$ 2,946**	$ 4,659	**$ 6,240**	$ 13,610
Average common stockholders' equity	**174,880**	177,886	**174,737**	177,876
Average TCE	**148,970**	151,748	**148,911**	151,541
Return on average common stockholders' equity	**6.7 %**	10.4 %	**4.8 %**	10.2 %
Return on average TCE (RoTCE)[1]	**7.9**	12.2	**5.6**	12.0

(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 require d 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 more 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	3Q'19	4Q'19	1Q'20	2Q'20	**3Q'20**
Retail banking:					
Mortgages	$ 83.4	$ 85.5	$ 83.6	$ 86.0	**$ 87.5**
Personal, small business and other	37.2	39.3	36.6	37.6	**38.3**
Total retail banking	$ 120.6	$ 124.8	$ 120.2	$ 123.6	**$ 125.8**
Cards:					
Citi-branded cards	$ 115.8	$ 122.2	$ 110.2	$ 103.6	**$ 102.2**
Citi retail services	50.0	52.9	48.9	45.4	**44.4**
Total cards	$ 165.8	$ 175.1	$ 159.1	$ 149.0	**$ 146.6**
Total *GCB*	$ 286.4	$ 299.9	$ 279.3	$ 272.6	**$ 272.4**
***GCB* regional distribution:**					
North America	66 %	66 %	67 %	66 %	**66 %**
Latin America	6	6	5	5	**5**
Asia[2]	28	28	28	29	**29**
Total *GCB*	100 %	100 %	100 %	100 %	**100 %**
***Corporate/Other*[3]**	$ 11.0	$ 9.6	$ 9.1	$ 8.5	**$ 7.6**
Total consumer loans	$ 297.4	$ 309.5	$ 288.4	$ 281.1	**$ 280.0**

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

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

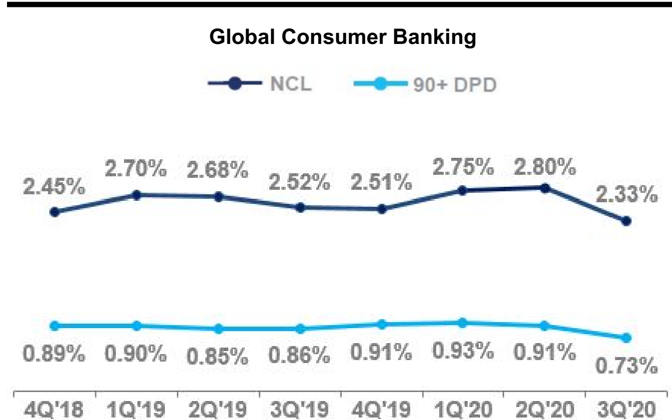
Overall Consumer Credit Trends

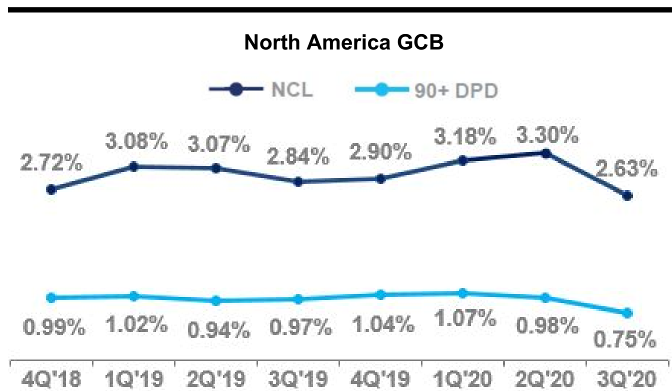
GCB did not experience a significant net credit loss impact from the COVID-19 pandemic during the third quarter of 2020, similar to the prior quarter. Net credit loss rates were positively impacted by the relief programs Citi implemented since the beginning of the pandemic, combined with the benefit of reduced customer spending and significant government stimulus and assistance, as well as other banks' consumer relief programs. The 90+ days past due delinquency rates broadly declined sequentially for the same reasons. In addition, as discussed above, loans modified under Citi's consumer relief programs continue to be reported in the same delinquency bucket they were in at the time of modification, and thus would not be reported as 90+ days past due or written off for the duration of the programs (which have various durations, and certain of which may be renewed by the customer).

Citi continues to expect that 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. These include the severity and duration of the impact from the pandemic, as these government stimulus and consumer relief programs expire and when the loans are no longer reported in the same delinquency bucket as they were when the relief programs began.

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

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



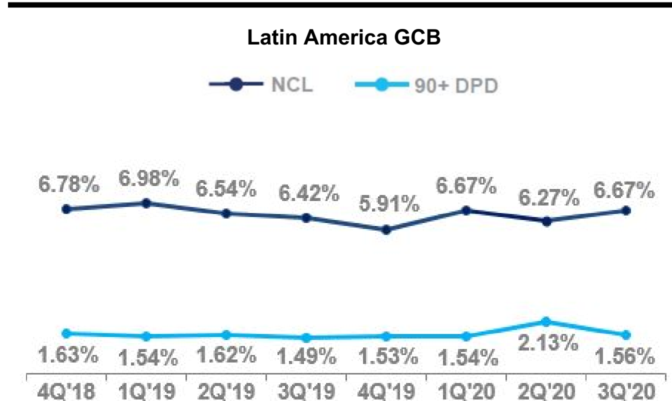


North America GCB provides mortgage, home equity, small business and personal loans through Citi's retail banking network and card products through Citi-branded cards and Citi retail services businesses. The retail bank is concentrated in six major metropolitan cities in the United States (for additional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

As of September 30, 2020, approximately 70% of *North America GCB* consumer loans consisted of Citi-branded and Citi retail services cards, which generally drives the overall credit performance of *North America GCB* (for additional information on *North America GCB*'s cards portfolios, including delinquency and net credit loss rates, see "Credit Card Trends" below).

As shown in the chart above, the net credit loss and 90+ days past due delinquency rates in *North America GCB* decreased quarter-over-quarter, driven by the impact of the relief programs described above, unemployment benefits and government stimulus.

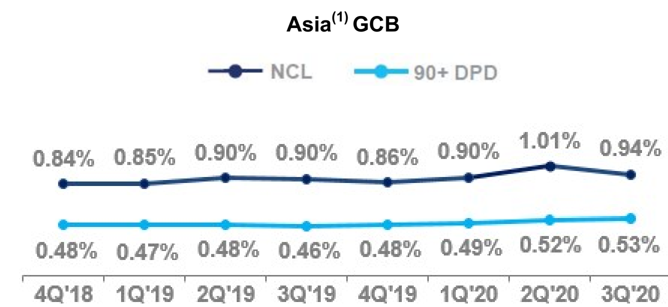
Year-over-year, the net credit loss and 90+ days past due delinquency rates decreased, also driven by the impact of the relief programs, unemployment benefits and government stimulus.



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.

The pandemic adversely affected the economy in Mexico, and customers did not benefit from a similar level of government stimulus as other regions. As shown in the chart above, the 90+ days past due delinquency rate in *Latin America GCB* decreased quarter-over-quarter, as customers continued to participate in Citi's relief programs, while the net credit loss rate increased, driven by losses related to customers ineligible for the relief programs.

Year-over-year, the net credit loss rate and 90+ days past due delinquency rate increased, primarily due to the pandemic impact described above and lower loan balances.



(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, quarter-over-quarter, the net credit loss rate in *Asia GCB* decreased, driven by an increase in average loans, mainly in the retail portfolios. The 90+ days past due delinquency rate modestly increased, primarily driven by the cards portfolio.

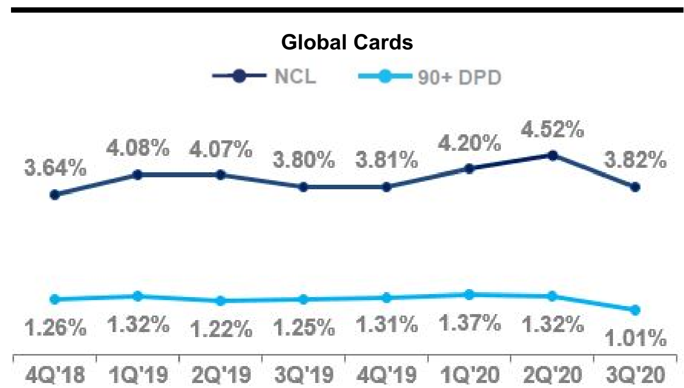
Year-over-year, the net credit loss rate and the 90+ days past due delinquency rate increased due to the pandemic-related macroeconomic impact.

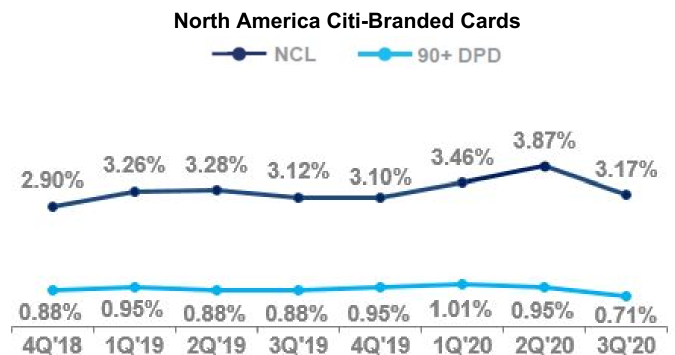
The performance of *Asia GCB*'s portfolios reflects the strong credit profiles in the region's target customer segments. Regulatory changes in many markets in *Asia* over the past few years have also improved credit quality.

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.

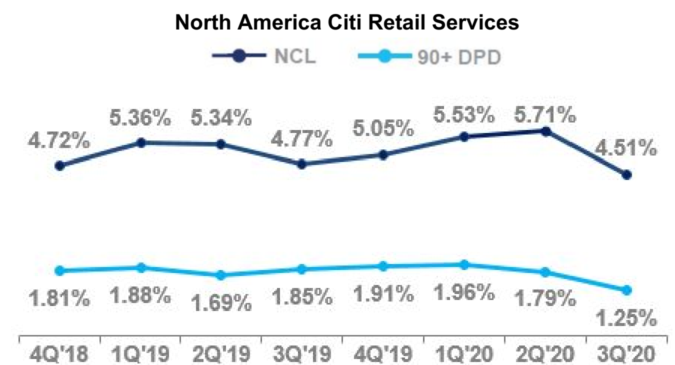




North America GCB's Citi-branded cards portfolio issues proprietary and co-branded cards.

As shown in the chart above, the net credit loss rate and 90+ days past due delinquency rate in *North America* Citi-branded cards decreased quarter-over-quarter, driven by the impact of the relief programs described above, unemployment benefits and government stimulus.

The net credit loss rate increased year-over-year, primarily due to lower average loans, while the 90+ days past due delinquency rate also decreased due to the impact of the relief programs, unemployment benefits and government stimulus.

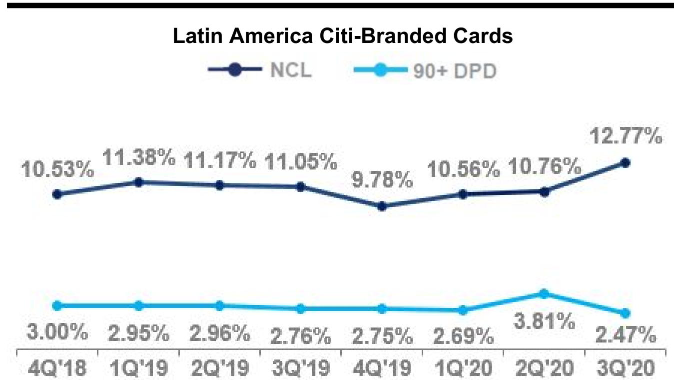


Citi retail services partners directly with more than 20 retailers and dealers to offer private label and co-branded cards. Citi retail services' target market focuses on select industry segments such as home improvement, specialty retail, consumer electronics and fuel.

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

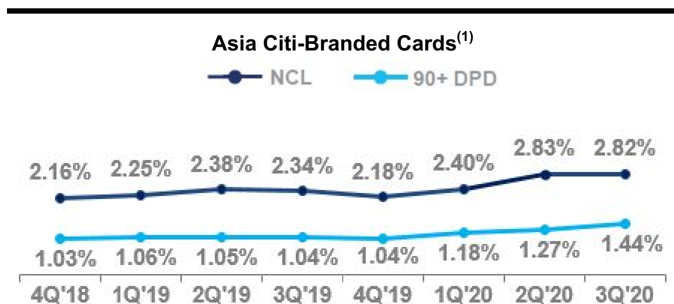
As shown in the chart above, the net credit loss rate and 90+ days past due delinquency rate decreased quarter-over-quarter, driven by the impact of the relief programs, unemployment benefits and government stimulus.

The net credit loss rate and 90+ days past due delinquency rate decreased year-over-year, also driven by the impact of the relief programs, unemployment benefits and government stimulus.



Latin America GCB issues proprietary and co-branded cards. As shown in the chart above, the 90+ days past due delinquency rate in *Latin America GCB* decreased quarter-over-quarter, driven by customer enrollment in the consumer relief programs, while the net credit loss rate increased, driven by customers that were ineligible for the relief programs.

Year-over-year the net credit loss rate increased, primarily due to the pandemic impact described above and the lower loan balances, while the 90+ days past due delinquency rate decreased due to the implementation of Citi's consumer relief programs.



(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, quarter-over-quarter, the net credit loss rate remained broadly stable, and the 90+ days past due delinquency rate increased, primarily due to the impact of the macroeconomic slowdown related to the pandemic, including the impact of customers who have exited the relief programs.

Year-over-year, the net credit loss rate and the 90+ days past due delinquency rate increased due to the pandemic-related macroeconomic impact.

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)	September 30, 2020	June 30, 2020	September 30, 2019
> 760	**43 %**	41 %	41 %
680–760	**41**	41	41
< 680	**16**	18	18
Total	**100 %**	100 %	100 %

Citi Retail Services

FICO distribution(1)	September 30, 2020	June 30, 2020	September 30, 2019
> 760	**25 %**	24 %	24 %
680–760	**44**	43	43
< 680	**31**	33	33
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, as well as a benefit from the impact of the government stimulus and relief programs described above and lower credit utilization due to reduced customer spending. For additional information on FICO scores, see Note 13 to the Consolidated Financial Statements.

Additional Consumer Credit Details

Consumer Loan Delinquencies Amounts and Ratios[1]

In millions of dollars, except EOP loan amounts in billions	EOP loans[2] September 30, 2020	90+ days past due[3] September 30, 2020	June 30, 2020	September 30, 2019	30–89 days past due[3] September 30, 2020	June 30, 2020	September 30, 2019
***Global Consumer Banking*[4][5]**							
Total	**$ 272.4**	**$ 1,976**	$ 2,466	$ 2,470	**$ 2,398**	$ 2,503	$ 2,956
Ratio		**0.73 %**	0.91 %	0.86 %	**0.88 %**	0.92 %	1.03 %
Retail banking							
Total	**$ 125.8**	**$ 497**	$ 497	$ 392	**$ 786**	$ 918	$ 803
Ratio		**0.40 %**	0.40 %	0.33 %	**0.63 %**	0.75 %	0.67 %
North America	**53.1**	**211**	182	125	**378**	440	313
Ratio		**0.40 %**	0.35 %	0.26 %	**0.72 %**	0.84 %	0.65 %
Latin America	**9.2**	**105**	121	97	**136**	151	191
Ratio		**1.14 %**	1.34 %	0.87 %	**1.48 %**	1.68 %	1.71 %
Asia[6]	**63.5**	**181**	194	170	**272**	327	299
Ratio		**0.29 %**	0.32 %	0.28 %	**0.43 %**	0.53 %	0.50 %
Cards							
Total	**$ 146.6**	**$ 1,479**	$ 1,969	$ 2,078	**$ 1,612**	$ 1,585	$ 2,153
Ratio		**1.01 %**	1.32 %	1.25 %	**1.10 %**	1.06 %	1.30 %
North America—Citi-branded	**81.1**	**574**	784	807	**624**	594	800
Ratio		**0.71 %**	0.95 %	0.88 %	**0.77 %**	0.72 %	0.87 %
North America—Citi retail services	**44.4**	**557**	811	923	**610**	611	943
Ratio		**1.25 %**	1.79 %	1.85 %	**1.37 %**	1.35 %	1.89 %
Latin America	**4.3**	**106**	160	152	**89**	111	161
Ratio		**2.47 %**	3.81 %	2.76 %	**2.07 %**	2.64 %	2.93 %
Asia[6]	**16.8**	**242**	214	196	**289**	269	249
Ratio		**1.44 %**	1.27 %	1.04 %	**1.72 %**	1.60 %	1.32 %
***Corporate/Other*—Consumer[7]**							
Total	**$ 7.6**	**$ 278**	$ 295	$ 293	**$ 198**	$ 261	$ 288
Ratio		**3.86 %**	3.60 %	2.82 %	**2.75 %**	3.18 %	2.77 %
Total Citigroup	**$ 280.0**	**$ 2,254**	$ 2,761	$ 2,763	**$ 2,596**	$ 2,764	$ 3,244
Ratio		**0.81 %**	0.99 %	0.93 %	**0.93 %**	0.99 %	1.10 %

(1) As discussed above, loans modified under Citi's consumer relief programs continue to be reported in the same delinquency bucket they were in at the time of modification, and thus almost all would not be reported as 30-89 or 90+ days past due for the duration of the programs (which have various durations, and certain of which may be renewed by the customer).
(2) End-of-period (EOP) loans include interest and fees on credit cards.
(3) The ratios of 90+ days past due and 30–89 days past due are calculated based on EOP loans, net of unearned income.
(4) 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.
(5) 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 $148 million ($0.6 billion), $130 million ($0.5 billion) and $150 million ($0.6 billion) as of September 30, 2020, June 30, 2020 and September 30, 2019, respectively. The amounts excluded for loans 30–89 days past due and (EOP loans) were $88 million ($0.6 billion), $86 million ($0.5 billion) and $78 million ($0.6 billion) as of September 30, 2020, June 30, 2020 and September 30, 2019, respectively.
(6) *Asia* includes delinquencies and loans in certain *EMEA* countries for all periods presented.
(7) 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 $172 million ($0.5 billion), $173 million ($0.4 billion) and $249 million ($0.6 billion) as of September 30, 2020, June 30, 2020 and September 30, 2019, respectively. The amounts excluded for loans 30–89 days past due and (EOP loans) for each period were $66 million ($0.5 billion), $57 million ($0.4 billion) and $110 million ($0.6 billion) as of September 30, 2020, June 30, 2020 and September 30, 2019, respectively.

Consumer Loan Net Credit Losses and Ratios

In millions of dollars, except average loan amounts in billions	Average loans[1] 3Q20	Net credit losses[2] 3Q20	2Q20	3Q19
Global Consumer Banking				
Total	**$ 272.4**	**$ 1,598**	$ 1,887	$ 1,802
Ratio		**2.33 %**	2.80 %	2.52 %
Retail banking				
Total	**$ 125.6**	**$ 190**	$ 204	$ 225
Ratio		**0.60 %**	0.67 %	0.75 %
North America	**53.4**	**31**	33	40
Ratio		**0.23 %**	0.25 %	0.33 %
Latin America	**9.3**	**90**	94	119
Ratio		**3.85 %**	4.15 %	4.14 %
Asia[3]	**62.9**	**69**	77	66
Ratio		**0.44 %**	0.51 %	0.44 %
Cards				
Total	**$ 146.8**	**$ 1,408**	$ 1,683	$ 1,577
Ratio		**3.82 %**	4.52 %	3.80 %
North America—Citi-branded	**81.2**	**647**	795	712
Ratio		**3.17 %**	3.87 %	3.12 %
North America—Citi retail services	**44.5**	**504**	656	598
Ratio		**4.51 %**	5.71 %	4.77 %
Latin America	**4.3**	**138**	115	156
Ratio		**12.77 %**	10.76 %	11.05 %
Asia[3]	**16.8**	**119**	117	111
Ratio		**2.82 %**	2.83 %	2.34 %
***Corporate/Other*—Consumer**				
Total	**$ 8.2**	**$ (4)**	$ (5)	$ 1
Ratio		**(0.19)%**	0.23 %	0.04 %
Total Citigroup	**$ 280.6**	**$ 1,594**	$ 1,882	$ 1,803
Ratio		**2.26 %**	2.70 %	2.42 %

(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 "COVID-19 Pandemic Overview" and "Risk Factors" above. For information on Citi's ACL for its corporate portfolios, see "Significant Accounting Policies and Significant 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 table details Citi's corporate credit portfolio within *ICG* (excluding certain loans in the private bank, which are managed on a delinquency basis), and before consideration of collateral or hedges, by remaining tenor for the periods indicated:

	September 30, 2020				June 30, 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	Due within 1 year	Greater than 1 year but within 5 years	Greater than 5 years	Total exposure
Direct outstandings (on-balance sheet)[1]	**$ 175**	**$ 145**	**$ 24**	**$ 344**	$ 184	$ 156	$ 24	$ 364	$ 184	$ 142	$ 25	$ 351
Unfunded lending commitments (off-balance sheet)[2]	**154**	**264**	**12**	**430**	157	250	13	420	161	266	17	444
Total exposure	**$ 329**	**$ 409**	**$ 36**	**$ 774**	$ 341	$ 406	$ 37	$ 784	$ 345	$ 408	$ 42	$ 795

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

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 the delinquency-managed private bank portfolio) based on Citi's internal management geography:

	September 30, 2020	June 30, 2020	December 31, 2019
North America	**57 %**	58 %	57 %
EMEA	**25**	24	24
Asia	**12**	12	12
Latin America	**6**	6	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 the delinquency-managed private bank portfolio) by facility risk rating as a percentage of the total corporate credit portfolio:

	Total exposure		
	September 30, 2020	June 30, 2020	December 31, 2019
AAA/AA/A	**48 %**	49 %	50 %
BBB	**31**	31	33
BB/B	**17**	16	15
CCC or below	**4**	4	2
Total	**100 %**	100 %	100 %

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

In addition to the counterparty and facility risk ratings assigned to all exposures, Citi may classify exposures in the corporate credit portfolio. These classifications are consistent with Citi's interpretation of the U.S. banking regulators' definition of criticized exposures, which may categorize exposures as special mention, substandard or doubtful.

Risk ratings and classifications are reviewed regularly, and adjusted as appropriate. The credit review process incorporates quantitative and qualitative factors, including financial and non-financial disclosures or metrics, idiosyncratic events or changes to the competitive, regulatory or macroeconomic environment. This includes but is not limited to exposures in those sectors significantly impacted by the pandemic (including energy and energy-related, aviation, consumer retail, commercial real estate and autos).

Citigroup believes the corporate credit portfolio to be appropriately rated and classified as of September 30, 2020. During the course of the third quarter of 2020, and since the onset of the COVID-19 pandemic, Citigroup has taken action to adjust internal ratings and classifications of exposures as both the macroeconomic environment and obligor-specific factors have changed, particularly where additional stress has been seen.

As exposures are downgraded, the probability of default increases. Downgrades of exposures tend to result in a higher provision for credit losses. In addition, downgrades may result in the purchase of additional credit derivatives or other risk mitigants to hedge the incremental credit risk, or may result in seeking to reduce exposure to an obligor or an industry sector. Citigroup will continue to review exposures to ensure the appropriate probability of default is incorporated into all risk assessments.

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

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 the delinquency-managed private bank portfolio):

	Total exposure		
	September 30, 2020	June 30, 2020	December 31, 2019
Transportation and industrials	**19 %**	19 %	19 %
Private bank	**14**	13	13
Consumer retail	**11**	11	10
Technology, media and telecom	**10**	10	11
Power, chemicals, metals and mining	**8**	8	9
Real estate	**8**	8	7
Banks and finance companies	**7**	7	7
Energy and commodities	**7**	7	7
Health	**4**	4	4
Public sector	**3**	3	3
Insurance	**3**	3	3
Asset managers and funds	**3**	3	3
Financial markets infrastructure	**2**	2	2
Securities firms	**—**	—	—
Other industries	**1**	2	2
Total	**100 %**	100 %	100 %

The following table details Citi's corporate credit portfolio by industry as of September 30, 2020:

In millions of dollars	Total credit exposure	Funded[1]	Unfunded[1]	Investment grade	Non-investment grade: Non-criticized	Non-investment grade: Criticized performing	Non-investment grade: Criticized non-performing[2]	Selected metrics: 30 days or more past due and accruing[3]	Selected metrics: Net charge-offs (recoveries)[4]	Selected metrics: Credit derivative hedges[5]
Transportation and industrials	**$ 146,935**	**$ 62,879**	**$ 84,056**	**$ 105,781**	**$ 17,286**	**$ 22,348**	**$ 1,520**	**$ 155**	**$ 187**	**$ (8,722)**
Autos[6]	51,039	24,191	26,848	41,534	4,828	4,424	253	32	45	(3,477)
Transportation	28,824	15,720	13,104	16,257	3,069	8,374	1,124	21	98	(1,241)
Industrials	67,072	22,968	44,104	47,990	9,389	9,550	143	102	44	(4,004)
Private bank	**107,351**	**70,030**	**37,321**	**102,369**	**2,302**	**2,333**	**347**	**806**	**54**	**(1,080)**
Consumer retail	**81,278**	**34,998**	**46,280**	**59,143**	**10,928**	**10,921**	**286**	**139**	**49**	**(5,138)**
Technology, media and telecom	**79,659**	**31,136**	**48,523**	**59,283**	**14,749**	**5,368**	**259**	**115**	**48**	**(7,202)**
Power, chemicals, metals and mining	**64,767**	**20,947**	**43,820**	**49,304**	**10,996**	**4,307**	**160**	**61**	**52**	**(5,283)**
Power	28,408	6,665	21,743	24,539	2,907	864	98	43	39	(2,577)
Chemicals	22,883	8,124	14,759	16,981	4,037	1,836	29	18	8	(2,067)
Metals and mining	13,476	6,158	7,318	7,784	4,052	1,607	33	—	5	(639)
Real estate	**62,489**	**42,197**	**20,292**	**51,259**	**5,814**	**5,331**	**85**	**268**	**6**	**(551)**
Banks and finance companies	**51,920**	**30,088**	**21,832**	**42,119**	**4,791**	**4,946**	**64**	**1**	**78**	**(750)**
Energy and commodities[7]	**51,035**	**16,244**	**34,791**	**34,560**	**6,888**	**8,484**	**1,103**	**90**	**231**	**(4,083)**
Health	**31,637**	**8,017**	**23,620**	**25,417**	**4,282**	**1,695**	**243**	**29**	**15**	**(1,864)**
Public sector	**26,267**	**13,723**	**12,544**	**21,726**	**1,844**	**2,679**	**18**	**22**	**8**	**(1,040)**
Insurance	**25,990**	**2,208**	**23,782**	**25,110**	**642**	**238**	**—**	**45**	**1**	**(2,611)**
Asset managers and funds	**20,695**	**4,881**	**15,814**	**19,323**	**1,160**	**212**	**—**	**9**	**(1)**	**(85)**
Financial markets infrastructure	**12,440**	**401**	**12,039**	**12,422**	**18**	**—**	**—**	**—**	**—**	**(3)**
Securities firms	**1,117**	**380**	**737**	**844**	**199**	**64**	**10**	**—**	**—**	**(7)**
Other industries	**10,477**	**5,561**	**4,916**	**6,078**	**3,111**	**1,195**	**93**	**57**	**41**	**(11)**
Total	**$ 774,057**	**$ 343,690**	**$ 430,367**	**$ 614,738**	**$ 85,010**	**$ 70,121**	**$ 4,188**	**$ 1,797**	**$ 769**	**$ (38,430)**

(1) Excludes $43,196 million and $6,314 million of funded and unfunded exposure at September 30, 2020, respectively, primarily related to the delinquency-managed credit portfolio of private bank.

(2) Includes non-accrual loan exposures and criticized unfunded exposures.

(3) Excludes $457 million of past due loans primarily related to delinquency-managed credit portfolio of private bank.

(4) Net charge-offs (recoveries) are for the nine months ended September 30, 2020 and exclude delinquency-managed private bank charge-offs of $7 million.

(5) Represents the amount of purchased credit protection in the form of derivatives to economically hedge funded and unfunded exposures. Of the $38.4 billion of purchased credit protection, $36.4 billion represents the total notional of purchased credit derivatives on individual reference entities. The remaining $2.0 billion represents the first loss tranche of portfolios of purchased credit derivatives with a total notional of $16.1 billion, where the protection seller absorbs the first loss on the referenced loan portfolios.

(6) 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 $20 billion ($9.9 billion in funded, with more than 95% rated investment grade) as of September 30, 2020.

(7) 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 September 30, 2020, Citi's total exposure to these energy-related entities remained largely consistent with December 31, 2019, at approximately $5.5 billion, of which approximately $3.2 billion consisted of direct outstanding funded loans.

Exposure to Commercial Real Estate
As of September 30, 2020, Citi's total corporate credit exposure to commercial real estate (CRE) within *ICG* was $59 billion, with $42 billion consisting of direct outstanding funded loans (mainly included in the real estate and private bank categories in the above table), or 6% of Citi's total outstanding loans. In addition, as of September 30, 2020, more than 70% of *ICG*'s total corporate CRE exposure was to borrowers in the United States. Also as of September 30, 2020, approximately 72% of *ICG*'s total corporate CRE exposure was rated investment grade.

As of September 30, 2020, the ACLL was 1.8% of funded CRE exposure, including 4.3% of funded non-investment grade exposure.

Of the total CRE exposure:

- $18 billion of the exposure ($12 billion of direct outstanding funded loans) relates to Community Reinvestment Act-related lending provided pursuant to Citi's regulatory requirements to meet the credit needs of borrowers in low and moderate income neighborhoods.
- $16 billion of the exposure ($13 billion of direct outstanding funded loans) relates to exposure secured by mortgages on underlying properties or in well-rated securitization exposures.
- $14 billion of the exposure ($6 billion of direct outstanding funded loans) relates to unsecured loans to large REITs, with nearly 80% of the exposure rated investment grade.
- $11 billion of exposure ($11 billion of direct outstanding funded loans) relates to CRE exposure in the private bank of which 100% is secured by mortgages. In addition, 43% of the exposure is also full recourse to the client. As of September 30, 2020, 78% of the exposure was rated investment grade.

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

					Non-investment grade			Selected metrics		
In millions of dollars	Total credit exposure	Funded[1]	Unfunded[1]	Investment grade	Non-criticized	Criticized performing	Criticized non-performing[2]	30 days or more past due and accruing[3]	Net charge-offs (recoveries)[4]	Credit derivative hedges[5]
Transportation and industrials	$ 146,643	$ 59,726	$ 86,917	$ 120,777	$ 19,433	$ 5,725	$ 706	$ 161	$ 67	$ (7,134)
Autos[6]	48,604	21,564	27,040	43,570	3,582	1,311	140	8	5	(2,982)
Transportation	29,984	14,550	15,434	23,021	4,886	1,652	425	21	21	(725)
Industrials	68,055	23,612	44,443	54,186	10,965	2,762	141	132	41	(3,427)
Private bank[1]	102,463	68,798	33,665	100,017	2,244	171	31	1,094	36	(1,080)
Consumer retail	81,338	36,117	45,221	62,993	15,131	2,773	441	209	38	(4,105)
Technology, media and telecom	83,199	31,333	51,866	63,845	15,846	3,305	203	81	14	(6,181)
Power, chemicals, metals and mining	73,961	24,377	49,584	58,670	11,997	2,963	331	50	24	(4,763)
Power	34,349	7,683	26,666	29,317	4,051	679	302	37	19	(2,111)
Chemicals	23,721	9,152	14,569	18,790	3,905	1,014	12	12	1	(2,079)
Metals and mining	15,891	7,542	8,349	10,563	4,041	1,270	17	1	4	(573)
Real estate	55,518	38,058	17,460	49,461	5,495	525	37	97	(3)	(573)
Banks and finance companies	52,036	32,571	19,465	43,663	4,661	3,345	39	15	12	(755)
Energy and commodities[7]	53,317	17,428	35,889	42,996	5,780	3,627	914	51	99	(2,808)
Health	35,008	8,790	26,218	27,791	5,932	1,180	105	25	14	(1,588)
Public sector	27,194	14,226	12,968	23,294	1,637	2,558	33	107	1	(944)
Insurance	24,305	1,658	22,647	23,370	866	69	—	7	1	(2,218)
Asset managers and funds	24,763	6,942	17,821	22,357	2,276	130	—	1	31	(32)
Financial markets infrastructure	16,838	22	16,816	16,838	—	—	—	—	—	(2)
Securities firms	1,151	423	728	801	304	38	8	—	13	—
Other industries	16,842	9,718	7,214	8,299	7,383	1,080	80	48	42	65
Total	$ 794,576	$ 350,187	$ 444,479	$ 665,172	$ 98,985	$ 27,489	$ 2,928	$ 1,946	$ 389	$ (32,118)

(1) Excludes $39,748 million and $3,426 million of funded and unfunded exposure at December 31, 2019, respectively, primarily related to delinquency-managed credit portfolio of private bank.
(2) Includes non-accrual loan exposures and criticized unfunded exposures.
(3) Excludes $434 million of past due loans primarily related to delinquency-managed credit portfolio of the private bank.
(4) Net charge-offs (recoveries) are for the year ended December 31, 2019 and exclude delinquency-managed private bank charge-offs of $6 million.
(5) Represents the amount of purchased credit protection in the form of derivatives to economically hedge funded and unfunded exposures. Of the $32.1 billion of purchased credit protection, $30.5 billion represents the total notional of purchased credit derivatives on individual reference entities. The remaining $1.6 billion represents the first loss tranche of portfolios of purchased credit derivatives with a total notional of $13.8 billion, where the protection seller absorbs the first loss on the referenced loan portfolios.
(6) 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.
(7) 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.

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 September 30, 2020, June 30, 2020 and December 31, 2019, *ICG* (excluding the delinquency-managed private bank portfolio) had economic hedges on the corporate credit portfolio of $38.4 billion, $36.5 billion and $32.1 billion, respectively. Citigroup's expected credit 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 the delinquency-managed private bank portfolio) corporate credit portfolio exposures with the following risk rating distribution:

Rating of Hedged Exposure

	September 30, 2020	June 30, 2020	December 31, 2019
AAA/AA/A	**29 %**	30 %	36 %
BBB	**52**	53	51
BB/B	**16**	14	12
CCC or below	**3**	3	1
Total	**100 %**	100 %	100 %

ADDITIONAL CONSUMER AND CORPORATE CREDIT DETAILS

Loans Outstanding

In millions of dollars	**3rd Qtr. 2020**	2nd Qtr. 2020	1st Qtr. 2020	4th Qtr. 2019	3rd Qtr. 2019
Consumer loans					
In North America offices[1]					
Residential first mortgages[2]	**$ 48,370**	$ 48,167	$ 47,260	$ 47,008	$ 46,337
Home equity loans[2]	**7,625**	8,524	8,936	9,223	9,850
Credit cards	**125,485**	128,032	137,316	149,163	141,560
Personal, small business and other	**4,689**	4,859	3,675	3,699	3,793
Total	**$ 186,169**	$ 189,582	$ 197,187	$ 209,093	$ 201,540
In offices outside North America[1]					
Residential first mortgages[2]	**$ 38,507**	$ 37,194	$ 35,744	$ 38,024	$ 37,057
Credit cards	**21,108**	20,966	21,801	25,909	24,367
Personal, small business and other	**34,241**	33,371	33,698	36,522	34,436
Total	**$ 93,856**	$ 91,531	$ 91,243	$ 100,455	$ 95,860
Consumer loans, net of unearned income[3]	**$ 280,025**	$ 281,113	$ 288,430	$ 309,548	$ 297,400
Corporate loans					
In North America offices[1]					
Commercial and industrial	**$ 59,921**	$ 70,755	$ 81,231	$ 55,929	$ 59,645
Financial institutions	**52,884**	53,860	60,653	53,922	52,678
Mortgage and real estate[2]	**59,340**	57,821	55,428	53,371	52,972
Installment and other	**26,858**	25,602	30,591	31,238	31,303
Lease financing	**704**	869	988	1,290	1,314
Total	**$ 199,707**	$ 208,907	$ 228,891	$ 195,750	$ 197,912
In offices outside North America[1]					
Commercial and industrial	**$ 108,551**	$ 115,471	$ 121,703	$ 112,668	$ 120,900
Financial institutions	**32,583**	35,173	37,003	40,211	37,908
Mortgage and real estate[2]	**10,424**	10,332	9,639	9,780	7,811
Installment and other	**32,323**	30,678	31,728	27,303	26,774
Lease financing	**63**	66	72	95	80
Governments and official institutions	**3,235**	3,552	3,554	4,128	2,958
Total	**$ 187,179**	$ 195,272	$ 203,699	$ 194,185	$ 196,431
Corporate loans, net of unearned income[4]	**$ 386,886**	$ 404,179	$ 432,590	$ 389,935	$ 394,343
Total loans—net of unearned income	**$ 666,911**	$ 685,292	$ 721,020	$ 699,483	$ 691,743
Allowance for credit losses on loans (ACLL)	**(26,426)**	(26,420)	(20,841)	(12,783)	(12,530)
Total loans—net of unearned income and ACLL	**$ 640,485**	$ 658,872	$ 700,179	$ 686,700	$ 679,213
ACLL as a percentage of total loans—net of unearned income[5]	**4.00 %**	3.89 %	2.91 %	1.84 %	1.82 %
ACLL for consumer loan losses as a percentage of total consumer loans—net of unearned income[5]	**6.96 %**	6.97 %	6.03 %	3.20 %	3.27 %
ACLL for corporate loan losses as a percentage of total corporate loans—net of unearned income[5]	**1.82 %**	1.71 %	0.81 %	0.75 %	0.72 %

(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 $739 million, $734 million, $771 million, $783 million and $783 million at September 30, 2020, June 30, 2020, March 31, 2020, December 31, 2019 and September 30, 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 $(857) million, $(854) million, $(791) million, $(814) million and $(818) million at September 30, 2020, June 30, 2020, March 31, 2020, December 31, 2019 and September 30, 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	**3rd Qtr. 2020**	2nd Qtr. 2020	1st Qtr. 2020	4th Qtr. 2019	3rd Qtr. 2019
Allowance for credit losses on loans (ACLL) at beginning of period	**$ 26,420**	$ 20,841	$ 12,783	$ 12,530	$ 12,466
Adjustment to opening balance for CECL adoption[1]	—	—	4,201	—	—
Adjusted ACLL at beginning of period	**$ 26,420**	$ 20,841	$ 16,984	$ 12,530	$ 12,466
Provision for credit losses on loans (PCLL)					
Consumer[2][3]	**$ 1,378**	$ 4,003	$ 5,001	$ 1,948	$ 1,916
Corporate	**431**	3,693	1,443	175	146
Total	**$ 1,809**	$ 7,696	$ 6,444	$ 2,123	$ 2,062
Gross credit losses on loans					
Consumer					
In U.S. offices	**$ 1,478**	$ 1,675	$ 1,763	$ 1,672	$ 1,564
In offices outside the U.S.	**537**	506	578	535	588
Corporate					
In U.S. offices	**195**	177	116	68	98
In offices outside the U.S.	**157**	170	22	86	31
Total	**$ 2,367**	$ 2,528	$ 2,479	$ 2,361	$ 2,281
Credit recoveries on loans[4]					
Consumer					
In U.S. offices	**$ 303**	$ 199	$ 239	$ 249	$ 231
In offices outside the U.S.	**118**	100	121	128	118
Corporate					
In U.S. offices	**9**	12	6	9	13
In offices outside the U.S.	**18**	11	5	31	6
Total	**$ 448**	$ 322	$ 371	$ 417	$ 368
Net credit losses on loans (NCLs)					
In U.S. offices	**$ 1,361**	$ 1,641	$ 1,634	$ 1,482	$ 1,418
In offices outside the U.S.	**558**	565	474	462	495
Total	**$ 1,919**	$ 2,206	$ 2,108	$ 1,944	$ 1,913
Other—net[5][6][7][8][9][10]	**$ 116**	$ 89	$ (479)	$ 74	$ (85)
Allowance for credit losses on loans (ACLL) at end of period	**$ 26,426**	$ 26,420	$ 20,841	$ 12,783	$ 12,530
ACLL as a percentage of EOP loans[11]	**4.00 %**	3.89 %	2.91 %	1.84 %	1.82 %
Allowance for credit losses on unfunded lending commitments (ACLUC)[12][13]	**$ 2,299**	$ 1,859	$ 1,813	$ 1,456	$ 1,385
Total ACLL and ACLUC	**$ 28,725**	$ 28,279	$ 22,654	$ 14,239	$ 13,915
Net consumer credit losses on loans	**$ 1,594**	$ 1,882	$ 1,981	$ 1,830	$ 1,803
As a percentage of average consumer loans	**2.26 %**	2.70 %	2.66 %	2.41 %	2.42 %
Net corporate credit losses on loans	**$ 325**	$ 324	$ 127	$ 114	$ 110
As a percentage of average corporate loans	**0.33 %**	0.31 %	0.13 %	0.12 %	0.11 %
ACLL by type at end of period[14]					
Consumer	**$ 19,488**	$ 19,596	$ 17,390	$ 9,897	$ 9,727
Corporate	**6,938**	6,824	3,451	2,886	2,803
Total	**$ 26,426**	$ 26,420	$ 20,841	$ 12,783	$ 12,530

(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) During the second quarter of 2020, Citi updated its ACLL estimate of lifetime credit losses related to a change in accounting principle for variable post-charge-off third-party agency collection costs in its U.S. cards portfolios. After June 30, 2020, these costs are recorded as operating expenses for future periods as they are incurred. The impact of this change in estimate effected by a change in accounting principle resulted in an approximate $426 million reduction in Citi's estimated ACLL at June 30, 2020.
(3) During the third quarter of 2020, Citi updated its ACLL estimate of lifetime credit losses related to a change in accounting principle for variable post-charge-off third-party agency collection costs, primarily in its international cards portfolios. After June 30, 2020, these costs are recorded as operating expenses for future periods as they are incurred. The impact of this change in estimate effected by a change in accounting principle resulted in an approximate $122 million reduction in Citi's estimated ACLL at September 30, 2020. For additional information, see "Significant Accounting Policies and Significant Estimates" below.
(4) Recoveries have been reduced by certain collection costs that are incurred only if collection efforts are successful for periods prior to June 30, 2020.
(5) 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.
(6) The third quarter of 2020 includes an increase of approximately $116 million related to FX translation.
(7) The second quarter of 2020 includes an increase of approximately $88 million related to FX translation.
(8) The first quarter of 2020 includes a decrease of approximately $483 million related to FX translation.
(9) The fourth quarter of 2019 includes an increase of approximately $86 million related to FX translation.
(10) The third quarter of 2019 includes a decrease of approximately $65 million related to FX translation.
(11) September 30, 2020, June 30, 2020, March 31, 2020, December 31, 2019 and September 30, 2019, excludes $5.5 billion, $5.8 billion, $4.0 billion, $4.1 billion and $3.9 billion, respectively, of loans that are carried at fair value.
(12) At June 30, 2020, the Corporate ACLUC includes a non-provision transfer of $68 million, representing reserves on performance guarantees as of March 31, 2020. The reserves on these contracts have been reclassified out of the allowance for credit losses on unfunded lending commitments and into other liabilities as of June 30, 2020.
(13) Represents additional credit reserves recorded as *Other liabilities* on the Consolidated Balance Sheet.
(14) 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:

	September 30, 2020		
In billions of dollars	**ACLL**	**EOP loans, net of unearned income**	**ACLL as a percentage of EOP loans**[1]
North America cards[2]	**$ 14.7**	**$ 125.5**	**11.7 %**
North America mortgages[3]	**0.7**	**56.0**	**1.3**
North America other	**0.4**	**4.7**	**8.5**
International cards	**2.0**	**21.1**	**9.5**
International other[4]	**1.7**	**72.7**	**2.3**
Total consumer	**$ 19.5**	**$ 280.0**	**7.0 %**
Total corporate	**6.9**	**386.9**	**1.8**
Total Citigroup	**$ 26.4**	**$ 666.9**	**4.0 %**

(1) 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 $14.7 billion of loan loss reserves represented approximately 38 months of coincident net credit loss coverage. As of September 30, 2020, *North America* Citi-branded cards ACLL as a percentage of EOP loans was 10.4% and *North America* Citi retail services ACLL as a percentage of EOP loans was 14.2%.
(3) Of the $0.7 billion, approximately $0.3 billion was allocated to *North America* mortgages in *Corporate/Other*, including approximately $0.5 billion and $0.2 billion determined in accordance with ASC 450-20 and ASC 310-10-35 (troubled debt restructurings), respectively. Of the $56.0 billion in loans, approximately $54.1 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	1.4	25.9	5.4
International other[4]	1.1	74.6	1.5
Total consumer	$ 9.9	$ 309.6	3.2 %
Total corporate	2.9	389.9	0.7
Total Citigroup	$ 12.8	$ 699.5	1.8 %

(1) 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.

The following table details Citi's corporate credit allowance for credit losses on loans (ACLL) by industry exposure:

	September 30, 2020		
In millions of dollars, except percentages	Funded exposure[1]	ACLL[2][3]	ACLL as a % of funded exposure
Transportation and industrials	$ 62,879	$ 2,095	3.33 %
Private bank	70,030	378	0.54
Consumer retail	34,998	802	2.29
Health	8,017	176	2.20
Technology, media and telecom	31,136	456	1.46
Power, chemicals, metals and mining	20,947	466	2.22
Banks and finance companies	30,088	258	0.86
Securities firms	380	10	2.63
Real estate	42,197	639	1.51
Energy and commodities	16,244	793	4.88
Public sector	13,723	268	1.95
Insurance	2,208	10	0.45
Asset managers and funds	4,881	20	0.41
Financial markets infrastructure	401	—	—
Other industries	5,561	248	4.46
Total	**$ 343,690**	**$ 6,619**	**1.93 %**

(1) Funded exposure includes $5,510 million of loans at fair value that are not subject to ACLL under the CECL standard.
(2) As of September 30, 2020, the ACLL shown above reflects coverage of 0.5% of funded investment grade exposure and 5.7% of funded non-investment grade exposure.
(3) Excludes $319 million of ACLL associated with approximately $43 billion of funded delinquency-managed private bank exposures at September 30, 2020. Including those reserves and exposures, the total ACLL is 1.82% of total funded exposure, including 0.5% of funded investment grade exposure and 4.2% of funded non-investment grade exposure.

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	**Sept. 30, 2020**	Jun. 30, 2020	Mar. 31, 2020	Dec. 31, 2019	Sept. 30, 2019
Corporate non-accrual loans[1][2]					
North America	**$ 2,018**	$ 2,466	$ 1,138	$ 1,214	$ 1,056
EMEA	**720**	812	720	430	307
Latin America	**609**	585	447	473	399
Asia	**237**	153	179	71	84
Total corporate non-accrual loans	**$ 3,584**	$ 4,016	$ 2,484	$ 2,188	$ 1,846
Consumer non-accrual loans[3]					
North America	**$ 934**	$ 928	$ 926	$ 905	$ 1,013
Latin America	**493**	608	489	632	595
Asia[4]	**263**	293	284	279	258
Total consumer non-accrual loans	**$ 1,690**	$ 1,829	$ 1,699	$ 1,816	$ 1,866
Total non-accrual loans	**$ 5,274**	$ 5,845	$ 4,183	$ 4,004	$ 3,712

(1) Approximately 58%, 63%, 45%, 44% and 41% of Citi's corporate non-accrual loans were performing at September 30, 2020, June 30, 2020, March 31, 2020, December 31, 2019 and September 30, 2019, respectively.
(2) The September 30, 2020 corporate non-accrual loans represented 0.99% of total corporate loans.
(3) Excludes purchased credit-deteriorated loans, as they are generally accreting interest. The carrying value of these loans was $138 million at September 30, 2020, $121 million at June 30, 2020, $129 million at March 31, 2020, $128 million at December 31, 2019 and $117 million at September 30, 2019.
(4) *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 September 30, 2020			Three Months Ended September 30, 2019		
In millions of dollars	**Corporate**	**Consumer**	**Total**	Corporate	Consumer	Total
Non-accrual loans at beginning of period	**$ 4,016**	**$ 1,829**	**$ 5,845**	$ 1,667	$ 1,971	$ 3,638
Additions	**832**	**403**	**1,235**	1,037	912	1,949
Sales and transfers to HFS	**—**	**(42)**	**(42)**	(18)	(22)	(40)
Returned to performing	**(12)**	**(76)**	**(88)**	(10)	(87)	(97)
Paydowns/settlements	**(1,037)**	**(150)**	**(1,187)**	(849)	(289)	(1,138)
Charge-offs	**(158)**	**(303)**	**(461)**	(35)	(421)	(456)
Other	**(57)**	**29**	**(28)**	54	(198)	(144)
Ending balance	**$ 3,584**	**$ 1,690**	**$ 5,274**	$ 1,846	$ 1,866	$ 3,712

	Nine Months Ended September 30, 2020			Nine Months Ended September 30, 2019		
In millions of dollars	**Corporate**	**Consumer**	**Total**	Corporate	Consumer	Total
Non-accrual loans at beginning of period	**$ 2,188**	**$ 1,816**	**$ 4,004**	$ 1,511	$ 2,026	$ 3,537
Additions	**4,062**	**1,993**	**6,055**	2,259	2,457	4,716
Sales and transfers to HFS	**(1)**	**(73)**	**(74)**	(23)	(78)	(101)
Returned to performing	**(129)**	**(280)**	**(409)**	(49)	(321)	(370)
Paydowns/settlements	**(2,193)**	**(583)**	**(2,776)**	(1,832)	(729)	(2,561)
Charge-offs	**(290)**	**(908)**	**(1,198)**	(107)	(1,229)	(1,336)
Other	**(53)**	**(275)**	**(328)**	87	(260)	(173)
Ending balance	**$ 3,584**	**$ 1,690**	**$ 5,274**	$ 1,846	$ 1,866	$ 3,712

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	**Sept. 30, 2020**	Jun. 30, 2020	Mar. 31, 2020	Dec. 31, 2019	Sept. 30, 2019
OREO					
North America	**$ 22**	$ 32	$ 35	$ 39	$ 51
EMEA	**—**	—	1	1	1
Latin America	**8**	6	6	14	14
Asia	**12**	6	8	7	6
Total OREO	**$ 42**	$ 44	$ 50	$ 61	$ 72
Non-accrual assets					
Corporate non-accrual loans	**$ 3,584**	$ 4,016	$ 2,484	$ 2,188	$ 1,846
Consumer non-accrual loans	**1,690**	1,829	1,699	1,816	1,866
Non-accrual loans (NAL)	**$ 5,274**	$ 5,845	$ 4,183	$ 4,004	$ 3,712
OREO	**$ 42**	$ 44	$ 50	$ 61	$ 72
Non-accrual assets (NAA)	**$ 5,316**	$ 5,889	$ 4,233	$ 4,065	$ 3,784
NAL as a percentage of total loans	**0.79 %**	0.85 %	0.58 %	0.57 %	0.54 %
NAA as a percentage of total assets	**0.24**	0.26	0.19	0.21	0.19
ACLL as a percentage of NAL[1]	**501 %**	452 %	498 %	319 %	338 %

(1) The allowance for credit losses 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	**Sept. 30, 2020**	Dec. 31, 2019
Corporate renegotiated loans[1]		
In U.S. offices		
Commercial and industrial[2]	**$ 227**	$ 226
Mortgage and real estate	**66**	57
Financial institutions	**—**	—
Other	**19**	4
Total	**$ 312**	$ 287
In offices outside the U.S.		
Commercial and industrial[2]	**$ 163**	$ 200
Mortgage and real estate	**32**	22
Financial institutions	**—**	—
Other	**3**	40
Total	**$ 198**	$ 262
Total corporate renegotiated loans	**$ 510**	$ 549
Consumer renegotiated loans[3]		
In U.S. offices		
Mortgage and real estate	**$ 1,869**	$ 1,956
Cards	**1,433**	1,464
Installment and other	**23**	17
Total	**$ 3,325**	$ 3,437
In offices outside the U.S.		
Mortgage and real estate	**$ 286**	$ 305
Cards	**490**	466
Installment and other	**424**	400
Total	**$ 1,200**	$ 1,171
Total consumer renegotiated loans	**$ 4,525**	$ 4,608

(1) Includes $476 million and $472 million of non-accrual loans included in the non-accrual loans table above at September 30, 2020 and December 31, 2019, respectively. The remaining loans are accruing interest.

(2) In addition to modifications reflected as TDRs at September 30, 2020 and December 31, 2019, Citi also modified $49 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 or because the modifications qualified for exemptions from TDR accounting provided by the CARES Act or Interagency Guidance.

(3) Includes $765 million and $814 million of non-accrual loans included in the non-accrual loans table above at September 30, 2020 and December 31, 2019, respectively. The remaining loans were 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	**Sept. 30, 2020**	Jun. 30, 2020	Sept. 30, 2019	**Sept. 30, 2020**	Jun. 30, 2020	Sept. 30, 2019	**Sept. 30, 2020**	Jun. 30, 2020	Sept. 30, 2019
Available cash	**$ 279.3**	$ 273.8	$ 123.7	**$ 2.0**	$ 2.9	$ 31.8	**$ 281.3**	$ 276.7	$ 155.5
U.S. sovereign	**80.6**	67.5	94.3	**56.0**	42.2	32.4	**136.6**	109.7	126.7
U.S. agency/agency MBS	**34.6**	36.4	55.5	**5.8**	7.0	4.6	**40.4**	43.4	60.1
Foreign government debt[1]	**44.5**	46.6	65.9	**17.0**	11.4	10.9	**61.5**	58.0	76.8
Other investment grade	**1.5**	1.3	2.9	**0.7**	0.7	0.7	**2.2**	2.0	3.6
Total HQLA (AVG)	**$ 440.5**	$ 425.6	$ 342.3	**$ 81.5**	$ 64.2	$ 80.4	**$ 522.0**	$ 489.8	$ 422.7

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 applicable under the U.S. LCR rule. 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 Japan, Mexico, India, Singapore 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 quarter-over-quarter, reflecting an increase in average long-term non-bank debt. While deposit growth and a decline in loans increased liquidity at Citibank, a significant amount of this liquidity was assumed not to be transferable to other entities within Citigroup and therefore not included in Citi's consolidated HQLA.

As of September 30, 2020, Citigroup had approximately $965 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 Citi'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	**Sept. 30, 2020**	Jun. 30, 2020	Sept. 30, 2019
HQLA	**$ 522.0**	$ 489.8	$ 422.7
Net outflows	**442.6**	420.1	373.4
LCR	**118 %**	117 %	113 %
HQLA in excess of net outflows	**$ 79.4**	$ 69.7	$ 49.3

Note: The amounts are presented on an average basis.

As of September 30, 2020, Citigroup's average LCR increased modestly from the quarter ended June 30, 2020, primarily reflecting the increase in average long-term non-bank debt.

Long-Term Liquidity Measurement: Net Stable Funding Ratio (NSFR)

On October 20, 2020, the U.S. banking agencies adopted a final rule to assess the availability of a bank's stable funding against a required level. The intended purpose of the final rule is to support the ability of financial institutions to provide financial intermediation to businesses and households across a range of market conditions and reduce the possibility of funding shocks compromising a financial institution's liquidity position.

In general, a bank's available stable funding will include portions of equity, deposits and long-term debt, while its required stable funding will be based on the liquidity characteristics of its assets, derivatives and commitments. Standardized weightings will be required to be applied to the various asset and liabilities classes. The ratio of available stable funding to required stable funding will be required to be greater than 100%.

The final rule becomes effective beginning July 1, 2021 while public disclosure requirements to report the ratio will occur on a semi-annual basis beginning June 30, 2023. Citi expects to be in compliance with the final rule when the rule is effective. Citi continues to review this recently-issued rule.

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	**Sept. 30, 2020**	Jun. 30, 2020	Sept. 30, 2019
Global Consumer Banking			
North America	**$ 179.1**	$ 181.0	$ 188.8
Latin America	**13.6**	13.4	17.0
Asia[1]	**79.7**	77.1	78.3
Total	**$ 272.4**	$ 271.5	$ 284.1
Institutional Clients Group			
Corporate lending	**$ 166.1**	$ 190.4	$ 160.9
Treasury and trade solutions (TTS)	**67.1**	71.0	72.5
Private bank	**110.3**	108.9	104.0
Markets and securities services and other	**53.1**	52.0	52.3
Total	**$ 396.6**	$ 422.3	$ 389.7
Total *Corporate/Other*	**$ 8.2**	$ 9.0	$ 11.2
Total Citigroup loans (AVG)	**$ 677.2**	$ 702.8	$ 685.0
Total Citigroup loans (EOP)	**$ 666.9**	$ 685.3	$ 691.7

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

End-of-period loans declined 4% year-over-year and 3% sequentially, on both a reported basis as well as excluding the impact of FX translation.

On an average basis, loans declined 1% year-over-year and 4% sequentially. Excluding the impact of FX translation, average loans declined 1% year-over-year and 5% sequentially. On this basis, average *GCB* loans declined 4% year-over-year, reflecting the impact of lower customer spending in Citi's cards businesses, higher payments by customers given government stimulus and a continuation of Citi's pause in proactive marketing.

Excluding the impact of FX translation, average *ICG* loans increased 2% year-over-year. Loans in corporate lending grew 4% on an average basis, but were down 14% sequentially, reflecting significant repayments as Citi assisted its clients in accessing the capital markets. Private bank loans increased 6%, largely driven by residential real estate lending to Citi's high-net-worth clients. TTS loans decreased 7%, reflecting weakness in underlying trade flows and the continued low level of spend in commercial cards.

Average *Corporate/Other* loans continued to decline (down 27%), 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	**Sept. 30, 2020**	Jun. 30, 2020	Sept. 30, 2019
Global Consumer Banking[1]			
North America	**$ 182.1**	$ 172.5	$ 153.6
Latin America	**22.5**	20.6	22.5
Asia[2]	**115.2**	108.8	100.7
Total	**$ 319.8**	$ 301.9	$ 276.8
Institutional Clients Group			
Treasury and trade solutions (TTS)	**$ 678.6**	$ 667.5	$ 541.0
Banking ex-TTS	**150.1**	143.5	137.0
Markets and securities services	**107.9**	108.2	95.7
Total	**$ 936.6**	$ 919.2	$ 773.7
Corporate/Other	**$ 11.4**	$ 12.8	$ 15.8
Total Citigroup deposits (AVG)	**$ 1,267.8**	$ 1,233.9	$ 1,066.3
Total Citigroup deposits (EOP)	**$ 1,262.6**	$ 1,233.7	$ 1,087.8

(1) Reflects deposits within retail banking.
(2) Includes deposits in certain *EMEA* countries for all periods presented.

End-of-period deposits increased 16% year-over-year and 2% sequentially, on both a reported basis as well as excluding the impact of FX translation.

On an average basis, deposits increased 19% year-over-year and 3% sequentially. Excluding the impact of FX translation, average deposits grew 19% from the prior-year period and 2% sequentially, reflecting continued client engagement as well as the elevated level of liquidity in the financial system. On this basis, average deposits in *GCB* increased 16%, with strong growth across all regions.

Excluding the impact of FX translation, average deposits in *ICG* grew 21% year-over-year, primarily driven by 26% growth in TTS, as well as continued growth in the private bank and securities services.

Long-Term Debt

The weighted-average maturity of unsecured long-term debt issued by Citigroup and its affiliates (including Citibank) with a remaining life greater than one year was approximately 8.6 years as of September 30, 2020, compared to 8.4 years as of the prior year and 8.7 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	**Sept. 30, 2020**	Jun. 30, 2020	Sept. 30, 2019
Non-bank[1]			
Benchmark debt:			
Senior debt	**$ 126.3**	$ 126.9	$ 104.3
Subordinated debt	**27.4**	27.6	25.9
Trust preferred	**1.7**	1.7	1.7
Customer-related debt	**61.0**	60.4	50.1
Local country and other[2]	**8.1**	7.7	5.3
Total non-bank	**$ 224.5**	$ 224.3	$ 187.3
Bank			
FHLB borrowings	**$ 14.7**	$ 15.0	$ 5.5
Securitizations[3]	**16.4**	17.6	22.8
Citibank benchmark senior debt	**14.2**	16.3	23.1
Local country and other[2]	**3.5**	6.6	3.5
Total bank	**$ 48.8**	$ 55.5	$ 54.9
Total long-term debt	**$ 273.3**	$ 279.8	$ 242.2

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) Non-bank 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 September 30, 2020, non-bank included $55.8 billion of long-term debt issued by Citi's broker-dealer and other subsidiaries, as well as certain Citigroup consolidated hedging activities.

(2) Local country and other includes debt issued by Citi's affiliates in support of their local operations. Within non-bank, certain secured financing is also included. Within bank, borrowings under certain U.S. government-sponsored liquidity programs are also included.

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

Citi's total long-term debt outstanding increased year-over-year, primarily driven by the issuance of unsecured benchmark senior debt and customer-related debt at the non-bank entities, as well as an increase in FHLB borrowings at the bank, partially offset by declines in unsecured benchmark senior debt and securitizations at the bank. Sequentially, long-term debt outstanding decreased, driven primarily by declines in unsecured benchmark senior debt and securitizations at the bank.

As part of its liability management, Citi has considered, and may continue to consider, opportunities to redeem or repurchase its long-term debt pursuant to open market purchases, tender offers or other means. Such redemptions and repurchases help reduce Citi's overall funding costs. During the third quarter of 2020, Citi redeemed or repurchased an aggregate of approximately $7.1 billion of its outstanding long-term debt.

Long-Term Debt Issuances and Maturities

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

	3Q20		2Q20		3Q19	
In billions of dollars	**Maturities**	**Issuances**	Maturities	Issuances	Maturities	Issuances
Non-bank						
Benchmark debt:						
Senior debt	**$ 1.4**	**$ —**	$ —	$ 10.4	$ 6.9	$ —
Subordinated debt	**—**	**—**	—	—	—	—
Trust preferred	**—**	**—**	—	—	—	—
Customer-related debt	**6.6**	**6.2**	8.4	10.3	2.7	6.1
Local country and other	**0.1**	**0.4**	0.2	0.3	—	0.1
Total non-bank	**$ 8.1**	**$ 6.6**	$ 8.6	$ 21.0	$ 9.6	$ 6.2
Bank						
FHLB borrowings	**$ 0.3**	**$ —**	$ 1.0	$ —	$ 4.3	$ 2.1
Securitizations	**1.2**	**—**	3.3	—	3.2	—
Citibank benchmark senior debt	**2.1**	**—**	6.0	—	2.3	—
Local country and other	**3.5**	**0.4**	0.4	3.5	0.1	—
Total bank	**$ 7.1**	**$ 0.4**	$ 10.7	$ 3.5	$ 9.9	$ 2.1
Total	**$ 15.2**	**$ 7.0**	$ 19.3	$ 24.5	$ 19.5	$ 8.3

The table below shows Citi's aggregate long-term debt maturities (including repurchases and redemptions) year-to-date in 2020, as well as its aggregate expected remaining long-term debt maturities by year as of September 30, 2020:

		Maturities							
In billions of dollars	**2020 YTD**	2020	2021	2022	2023	2024	2025	Thereafter	Total
Non-bank									
Benchmark debt:									
Senior debt	**$ 3.5**	$ 3.0	$ 14.5	$ 11.5	$ 12.9	$ 8.7	$ 7.6	$ 68.1	$ 126.3
Subordinated debt	**—**	—	—	0.8	1.3	1.1	5.3	19.0	27.4
Trust preferred	**—**	—	—	—	—	—	—	1.7	1.7
Customer-related debt	**21.4**	1.8	7.8	7.8	6.1	3.8	4.1	29.6	61.0
Local country and other	**0.8**	0.8	3.0	2.4	0.2	—	—	1.5	8.1
Total non-bank	**$ 25.7**	$ 5.6	$ 25.3	$ 22.5	$ 20.5	$ 13.6	$ 17.0	$ 119.9	$ 224.5
Bank									
FHLB borrowings	**$ 3.7**	$ 1.8	$ 7.7	$ 5.3	$ —	$ —	$ —	$ —	$ 14.7
Securitizations	**4.5**	—	7.0	2.2	2.4	1.1	0.4	3.3	16.4
Citibank benchmark senior debt	**9.1**	0.6	5.1	5.7	—	2.8	—	—	14.2
Local country and other	**4.5**	0.7	0.3	0.9	0.3	0.6	0.1	0.5	3.5
Total bank	**$ 21.8**	$ 3.1	$ 20.1	$ 14.1	$ 2.7	$ 4.5	$ 0.5	$ 3.8	$ 48.8
Total long-term debt	**$ 47.5**	$ 8.7	$ 45.4	$ 36.6	$ 23.2	$ 18.1	$ 17.5	$ 123.7	$ 273.3

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 $207 billion as of September 30, 2020 increased 6% from the prior-year period and declined 4% sequentially. Excluding the impact of FX translation, secured funding increased 4% from the prior-year period and declined 6% sequentially, both driven by normal business activity. The average balances for secured funding were approximately $217 billion for the quarter ended September 30, 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 September 30, 2020.

Citi manages the risks in its secured funding by conducting daily stress tests to account for changes in capacity, tenor, 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 $37 billion increased 6% year-over-year, primarily driven by an increase in commercial paper at both the bank and non-bank. Sequentially, short-term borrowings declined by 7%, primarily driven by a decline in FHLB advances (see Note 16 to the Consolidated Financial Statements for further information on Citigroup's and its affiliates' outstanding short-term borrowings).

Credit Ratings

While not included in the table below, the long-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 September 30, 2020.

Ratings as of September 30, 2020

	Citigroup Inc.			Citibank, N.A.		
	Senior debt	**Commercial paper**	**Outlook**	**Long-term**	**Short-term**	**Outlook**
Fitch Ratings (Fitch)	**A**	**F1**	**Negative**	**A+**	**F1**	**Negative**
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**

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 September 30, 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 as of June 30, 2020. 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 September 30, 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 $0.4 billion, unchanged from June 30, 2020.

In total, as of September 30, 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 $1.0 billion, unchanged from June 30, 2020 (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 September 30, 2020, Citibank had liquidity commitments of approximately $11.4 billion to consolidated asset-backed commercial paper conduits, compared to $11.0 billion as of June 30, 2020 (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	**Sept. 30, 2020**	Jun. 30, 2020	Sept. 30, 2019
Estimated annualized impact to net interest revenue			
U.S. dollar[1]	**$ 65**	$ 27	$ 292
All other currencies	**702**	683	605
Total	**$ 767**	$ 710	$ 897
As a percentage of average interest-earning assets	**0.04 %**	0.03 %	0.05 %
Estimated initial impact to *AOCI* (after-tax)[2]	**$ (5,757)**	$ (5,705)	$ (4,055)
Estimated initial impact on Common Equity Tier 1 Capital ratio (bps)	**(36)**	(35)	(24)

(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 $(140) million for a 100 bps instantaneous increase in interest rates as of September 30, 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 in the table above, Citi increased its net interest revenue exposure to an increase in interest rates. The increase was predominantly in U.S. dollar exposure, which was $65 million as of September 30, 2020, primarily driven by placement of an increase in deposits into cash equivalents and investments.

The relatively small quarterly change in the estimated impact to *AOCI* primarily reflected a continuation of the positioning strategy 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 September 30, 2020, Citi expects that the negative $5.8 billion impact to *AOCI* in such a scenario could potentially be offset over approximately 36 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.

In addition, 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	$ 65	$ 70	$ 73	$ (153)	$ (217)
All other currencies	702	507	29	(29)	(313)
Total	$ 767	$ 577	$ 102	$ (182)	$ (530)
Estimated initial impact to *AOCI* (after-tax)[1]	$ (5,757)	$ (3,913)	$ (2,159)	$ 1,468	$ 2,923
Estimated initial impact to Common Equity Tier 1 Capital ratio (bps)	(36)	(25)	(14)	8	12

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 September 30, 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 $1.6 billion, or 1.0%, as a result of changes to Citi's foreign currency translation adjustment in *AOCI*, net of hedges. This impact would be primarily due to changes in the value of the Mexican peso, Australian dollar, Euro and South Korean won.

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.

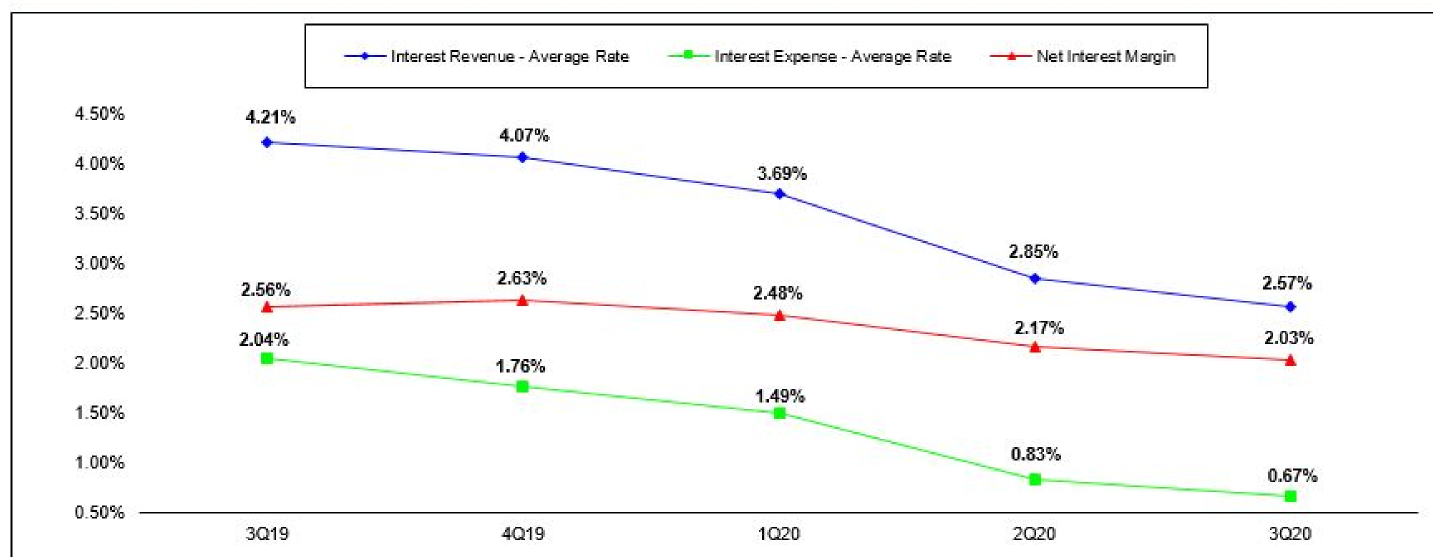
The effect of Citi's ongoing management strategies with respect to changes in foreign exchange rates, and the impact of these changes on Citi's TCE and Common Equity Tier 1 Capital ratio, are shown in the table below. For additional information on the changes in *AOCI*, see Note 17 to the Consolidated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

	For the quarter ended		
In millions of dollars, except as otherwise noted	**Sept. 30, 2020**	Jun. 30, 2020	Sept. 30, 2019
Change in FX spot rate[1]	**2.6 %**	2.1 %	(3.0)%
Change in TCE due to FX translation, net of hedges	**$ 655**	$ 418	$ (1,192)
As a percentage of TCE	**0.4 %**	0.3 %	(0.8)%
Estimated impact to Common Equity Tier 1 Capital ratio (on a fully implemented basis) due to changes in FX translation, net of hedges (bps)	**(1.0)**	(0.2)	(1)

(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)

Average Rates - Interest Revenue, Interest Expense, and Net Interest Margin



In millions of dollars, except as otherwise noted	**3rd Qtr. 2020**	2nd Qtr. 2020	3rd Qtr. 2019	**Change 3Q20 vs. 3Q19**
Interest revenue[1]	**$ 13,373**	$ 14,632	$ 19,224	**(30)%**
Interest expense[2]	**2,821**	3,509	7,536	**(63)**
Net interest revenue, taxable equivalent basis	**$ 10,552**	$ 11,123	$ 11,688	**(10)%**
Interest revenue—average rate[3]	**2.57 %**	2.85 %	4.21 %	**(164) bps**
Interest expense—average rate	**0.67**	0.83	2.04	**(137) bps**
Net interest margin[3][4]	**2.03**	2.17	2.56	**(53) bps**
Interest-rate benchmarks				
Two-year U.S. Treasury note—average rate	**0.14 %**	0.19 %	1.69 %	**(155) bps**
10-year U.S. Treasury note—average rate	**0.65**	0.69	1.80	**(115) bps**
10-year vs. two-year spread	**51 bps**	50 bps	11 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%) of $59 million, $43 million and $47 million for the three months ended September 30, 2020, June 30, 2020 and September 30, 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	**3rd Qtr. 2020**	2nd Qtr. 2020	3rd Qtr. 2019	**Change 3Q20 vs. 3Q19**
Net interest revenue—taxable equivalent basis[1] per above	**$ 10,552**	$ 11,123	$ 11,688	**(10)%**
ICG Markets net interest revenue—taxable equivalent basis[1]	**1,413**	1,511	885	**60**
Net interest revenue excluding *ICG Markets*—taxable equivalent basis[1]	**$ 9,139**	$ 9,612	$ 10,803	**(15)%**

(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%) of $59 million, $43 million and $47 million for the three months ended September 30, 2020, June 30, 2020 and September 30, 2019, respectively.

Citi's net interest revenue in the third quarter of 2020 decreased 10% to $10.5 billion versus the prior-year period. Citi's net interest revenue on a taxable equivalent basis also decreased 10% (as set forth in the table above). Excluding the impact of FX translation, net interest revenue declined year-over-year by approximately $930 million, as a decline of approximately $1,490 million in net interest revenue excluding *ICG Markets* was partially offset by an approximate $560 million increase in *ICG Markets* (fixed income markets and equity markets) net interest revenue. The decrease in net interest revenue excluding *ICG Markets* reflected the impact of lower interest rates and lower loan balances. The increase in *ICG Markets* net interest revenue largely reflected a change in the mix of trading positions in support of client activity. Citi expects its net interest revenue to decline year-over-year in the fourth quarter of 2020 due to the impact of lower interest rates and lower levels of customer activity related to the pandemic.

Citi's NIM was 2.03% on a taxable equivalent basis in the third quarter of 2020, a decrease of 14 basis points from the prior quarter, reflecting the lower net interest revenue.

Citi's *ICG Markets* net interest revenues and net interest revenue excluding *ICG Markets* are non-GAAP financial measures. Citi reviews net interest revenue excluding *ICG Markets* 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

Quarterly—Assets	Average volume			Interest revenue			% Average rate		
In millions of dollars, except rates	**3rd Qtr. 2020**	2nd Qtr. 2020	3rd Qtr. 2019	**3rd Qtr. 2020**	2nd Qtr. 2020	3rd Qtr. 2019	**3rd Qtr. 2020**	2nd Qtr. 2020	3rd Qtr. 2019
Deposits with banks[4]	**$ 307,845**	$ 305,485	$ 194,972	**$ 116**	$ 159	$ 736	**0.15 %**	0.21 %	1.50 %
Securities borrowed and purchased under agreements to resell[5]									
In U.S. offices	**$ 153,513**	$ 143,429	$ 145,267	**$ 153**	$ 174	$ 1,198	**0.40 %**	0.49 %	3.27 %
In offices outside the U.S.[4]	**141,436**	142,681	118,741	**199**	227	549	**0.56**	0.64	1.83
Total	**$ 294,949**	$ 286,110	$ 264,008	**$ 352**	$ 401	$ 1,747	**0.47 %**	0.56 %	2.63 %
Trading account assets[6][7]									
In U.S. offices	**$ 144,268**	$ 155,037	$ 113,711	**$ 861**	$ 953	$ 1,062	**2.37 %**	2.47 %	3.71 %
In offices outside the U.S.[4]	**140,765**	124,908	137,514	**597**	722	834	**1.69**	2.32	2.41
Total	**$ 285,033**	$ 279,945	$ 251,225	**$ 1,458**	$ 1,675	$ 1,896	**2.03 %**	2.41 %	2.99 %
Investments									
In U.S. offices									
Taxable	**$ 282,024**	$ 260,163	$ 218,823	**$ 877**	$ 1,024	$ 1,224	**1.24 %**	1.58 %	2.22 %
Exempt from U.S. income tax	**14,166**	14,699	14,649	**126**	126	126	**3.54**	3.45	3.41
In offices outside the U.S.[4]	**142,596**	139,917	118,991	**899**	971	1,083	**2.51**	2.79	3.61
Total	**$ 438,786**	$ 414,779	$ 352,463	**$ 1,902**	$ 2,121	$ 2,433	**1.72 %**	2.06 %	2.74 %
Loans (net of unearned income)[8]									
In U.S. offices	**$ 389,831**	$ 410,371	$ 396,038	**$ 6,316**	$ 6,732	$ 7,708	**6.45 %**	6.60 %	7.72 %
In offices outside the U.S.[4]	**287,369**	292,424	288,942	**3,130**	3,434	4,304	**4.33**	4.72	5.91
Total	**$ 677,200**	$ 702,795	$ 684,980	**$ 9,446**	$ 10,166	$ 12,012	**5.55 %**	5.82 %	6.96 %
Other interest-earning assets[9]	**$ 63,577**	$ 75,287	$ 63,869	**$ 99**	$ 110	$ 400	**0.62 %**	0.59 %	2.48 %
Total interest-earning assets	**$ 2,067,390**	$ 2,064,401	$1,811,517	**$ 13,373**	$ 14,632	$ 19,224	**2.57 %**	2.85 %	4.21 %
Non-interest-earning assets[6]	**$ 192,026**	$ 202,209	$ 188,565						
Total assets	**$ 2,259,416**	$ 2,266,610	$2,000,082						

Nine Months—Assets	Average volume		Interest revenue		% Average rate	
	Nine Months	Nine Months	**Nine Months**	Nine Months	**Nine Months**	Nine Months
In millions of dollars, except rates	**2020**	2019	**2020**	2019	**2020**	2019
Deposits with banks[4]	**$ 273,487**	$ 186,275	**$ 802**	$ 2,079	**0.39 %**	1.49 %
Securities borrowed and purchased under agreements to resell[5]						
In U.S. offices	**$ 146,098**	$ 148,492	**$ 1,076**	$ 3,805	**0.98 %**	3.43 %
In offices outside the U.S.[4]	**137,222**	120,274	**885**	1,629	**0.86**	1.81
Total	**$ 283,320**	$ 268,766	**$ 1,961**	$ 5,434	**0.92 %**	2.70 %
Trading account assets[6][7]						
In U.S. offices	**$ 143,148**	$ 106,203	**$ 2,789**	$ 3,016	**2.60 %**	3.80 %
In offices outside the U.S.[4]	**129,331**	132,973	**1,938**	2,715	**2.00**	2.73
Total	**$ 272,479**	$ 239,176	**$ 4,727**	$ 5,731	**2.32 %**	3.20 %
Investments						
In U.S. offices						
Taxable	**$ 260,161**	$ 220,716	**$ 3,059**	$ 4,006	**1.57 %**	2.43 %
Exempt from U.S. income tax	**14,345**	15,390	**361**	451	**3.36**	3.92
In offices outside the U.S.[4]	**137,127**	114,185	**2,908**	3,083	**2.83**	3.61
Total	**$ 411,633**	$ 350,291	**$ 6,328**	$ 7,540	**2.05 %**	2.88 %
Loans (net of unearned income)[8]						
In U.S. offices	**$ 401,253**	$ 394,376	**$ 20,366**	$ 22,971	**6.78 %**	7.79 %
In offices outside the U.S.[4]	**290,303**	286,894	**10,514**	13,030	**4.84**	6.07
Total	**$ 691,556**	$ 681,270	**$ 30,880**	$ 36,001	**5.96 %**	7.07 %
Other interest-earning assets[9]	**$ 69,200**	$ 66,225	**$ 492**	$ 1,340	**0.95 %**	2.71 %
Total interest-earning assets	**$ 2,001,675**	$1,792,003	**$ 45,190**	$ 58,125	**3.02 %**	4.34 %
Non-interest-earning assets[6]	**$ 200,240**	$ 180,870				
Total assets	**$ 2,201,915**	$1,972,873				

(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%) of $148 million and $160 million for the nine months ended September 30, 2020 and 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

Quarterly—Liabilities	Average volume			Interest expense			% Average rate		
In millions of dollars, except rates	**3rd Qtr. 2020**	2nd Qtr. 2020	3rd Qtr. 2019	**3rd Qtr. 2020**	2nd Qtr. 2020	3rd Qtr. 2019	**3rd Qtr. 2020**	2nd Qtr. 2020	3rd Qtr. 2019
Deposits									
In U.S. offices[4]	**$ 505,627**	$ 492,966	$ 400,445	**$ 691**	$ 727	$ 1,699	**0.54 %**	0.59 %	1.68 %
In offices outside the U.S.[5]	**553,673**	540,779	491,472	**602**	742	1,670	**0.43**	0.55	1.35
Total	**$ 1,059,300**	$ 1,033,745	$ 891,917	**$ 1,293**	$ 1,469	$ 3,369	**0.49 %**	0.57 %	1.50 %
Securities loaned and sold under agreements to repurchase[6]									
In U.S. offices	**$ 132,721**	$ 150,055	$ 117,823	**$ 168**	$ 240	$ 1,087	**0.50 %**	0.64 %	3.66 %
In offices outside the U.S.[5]	**83,835**	74,720	81,677	**124**	213	543	**0.59**	1.15	2.64
Total	**$ 216,556**	$ 224,775	$ 199,500	**$ 292**	$ 453	$ 1,630	**0.54 %**	0.81 %	3.24 %
Trading account liabilities[7][8]									
In U.S. offices	**$ 37,040**	$ 38,468	$ 37,465	**$ 39**	$ 62	$ 228	**0.42 %**	0.65 %	2.41 %
In offices outside the U.S.[5]	**51,557**	54,396	48,985	**84**	82	117	**0.65**	0.61	0.95
Total	**$ 88,597**	$ 92,864	$ 86,450	**$ 123**	$ 144	$ 345	**0.55 %**	0.62 %	1.58 %
Short-term borrowings and other interest-bearing liabilities[9]									
In U.S. offices	**$ 76,817**	$ 96,139	$ 75,179	**$ 57**	$ 104	$ 517	**0.30 %**	0.44 %	2.73 %
In offices outside the U.S.[5]	**18,654**	22,939	17,576	**31**	36	92	**0.66**	0.63	2.08
Total	**$ 95,471**	$ 119,078	$ 92,755	**$ 88**	$ 140	$ 609	**0.37 %**	0.47 %	2.60 %
Long-term debt[10]									
In U.S. offices	**$ 222,406**	$ 217,676	$ 192,943	**$ 1,023**	$ 1,298	$ 1,569	**1.83 %**	2.40 %	3.23 %
In offices outside the U.S.[5]	**3,827**	3,848	4,698	**2**	5	14	**0.21**	0.52	1.18
Total	**$ 226,233**	$ 221,524	$ 197,641	**$ 1,025**	$ 1,303	$ 1,583	**1.80 %**	2.37 %	3.18 %
Total interest-bearing liabilities	**$ 1,686,157**	$ 1,691,986	$1,468,263	**$ 2,821**	$ 3,509	$ 7,536	**0.67 %**	0.83 %	2.04 %
Demand deposits in U.S. offices	**$ 32,208**	$ 30,847	$ 27,538						
Other non-interest-bearing liabilities[7]	**347,532**	350,060	307,586						
Total liabilities	**$ 2,065,897**	$ 2,072,893	$1,803,387						
Citigroup stockholders' equity	**$ 192,860**	$ 193,093	$ 196,034						
Noncontrolling interests	**659**	624	661						
Total equity	**$ 193,519**	$ 193,717	$ 196,695						
Total liabilities and stockholders' equity	**$ 2,259,416**	$ 2,266,610	$2,000,082						
Net interest revenue as a percentage of average interest-earning assets[11]									
In U.S. offices	**$ 1,215,016**	$ 1,223,519	$1,026,273	**$ 6,479**	$ 6,703	$ 7,036	**2.12 %**	2.20 %	2.72 %
In offices outside the U.S.[6]	**852,374**	840,882	785,244	**4,073**	4,420	4,652	**1.90**	2.11	2.35
Total	**$ 2,067,390**	$ 2,064,401	$1,811,517	**$ 10,552**	$ 11,123	$ 11,688	**2.03 %**	2.17 %	2.56 %

Nine Months—Liabilities	Average volume		Interest expense		% Average rate	
	Nine Months	Nine Months	**Nine Months**	Nine Months	**Nine Months**	Nine Months
In millions of dollars, except rates	**2020**	2019	**2020**	2019	**2020**	2019
Deposits						
In U.S. offices[4]	**$ 475,516**	$ 381,447	**$ 2,778**	$ 4,815	**0.78 %**	1.69 %
In offices outside the U.S.[5]	**533,649**	483,228	**2,598**	4,865	**0.65**	1.35
Total	**$ 1,009,165**	$ 864,675	**$ 5,376**	$ 9,680	**0.71 %**	1.50 %
Securities loaned and sold under agreements to repurchase[6]						
In U.S. offices	**$ 137,091**	$ 113,747	**$ 1,126**	$ 3,343	**1.10 %**	3.93 %
In offices outside the U.S.[5]	**76,189**	77,080	**704**	1,600	**1.23**	2.78
Total	**$ 213,280**	$ 190,827	**$ 1,830**	$ 4,943	**1.15 %**	3.46 %
Trading account liabilities[7][8]						
In U.S. offices	**$ 37,321**	$ 37,856	**$ 239**	$ 639	**0.86 %**	2.26 %
In offices outside the U.S.[5]	**51,333**	54,392	**267**	353	**0.69**	0.87
Total	**$ 88,654**	$ 92,248	**$ 506**	$ 992	**0.76 %**	1.44 %
Short-term borrowings and other interest bearing liabilities[9]						
In U.S. offices	**$ 86,555**	$ 78,237	**$ 487**	$ 1,718	**0.75 %**	2.94 %
In offices outside the U.S.[5]	**20,481**	21,143	**125**	258	**0.82**	1.63
Total	**$ 107,036**	$ 99,380	**$ 612**	$ 1,976	**0.76 %**	2.66 %
Long-term debt[10]						
In U.S. offices	**$ 212,696**	$ 194,142	**$ 3,639**	$ 4,939	**2.29 %**	3.40 %
In offices outside the U.S.[5]	**3,954**	4,901	**14**	85	**0.47**	2.32
Total	**$ 216,650**	$ 199,043	**$ 3,653**	$ 5,024	**2.25 %**	3.37 %
Total interest-bearing liabilities	**$ 1,634,785**	$1,446,173	**$ 11,977**	$ 22,615	**0.98 %**	2.09 %
Demand deposits in U.S. offices	**$ 29,921**	$ 28,120				
Other non-interest-bearing liabilities[7]	**343,601**	301,864				
Total liabilities	**$ 2,008,307**	$1,776,157				
Citigroup stockholders' equity	**$ 192,967**	$ 195,992				
Noncontrolling interests	**641**	724				
Total equity	**$ 193,608**	$ 196,716				
Total liabilities and stockholders' equity	**$ 2,201,915**	$1,972,873				
Net interest revenue as a percentage of average interest-earning assets[11]						
In U.S. offices	**$ 1,172,136**	$1,012,940	**$ 20,184**	$ 21,298	**2.30 %**	2.81 %
In offices outside the U.S.[6]	**829,539**	779,063	**13,029**	14,213	**2.10**	2.44
Total	**$ 2,001,675**	$1,792,003	**$ 33,213**	$ 35,511	**2.22 %**	2.65 %

(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%) of $148 million and $160 million for the nine months ended September 30, 2020 and 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]

In millions of dollars	3Q20 vs. 2Q20 Increase (decrease) due to change in: Average volume	Average rate	Net change	3Q20 vs. 3Q19 Increase (decrease) due to change in: Average volume	Average rate	Net change
Deposits with banks[3]	$ 1	$ (44)	$ (43)	$ 276	$ (896)	$ (620)
Securities borrowed and purchased under agreements to resell						
In U.S. offices	$ 12	$ (33)	$ (21)	$ 65	$ (1,110)	$ (1,045)
In offices outside the U.S.[3]	(2)	(26)	(28)	89	(439)	(350)
Total	$ 10	$ (59)	$ (49)	$ 154	$ (1,549)	$ (1,395)
Trading account assets[4]						
In U.S. offices	$ (65)	$ (27)	$ (92)	$ 242	$ (443)	$ (201)
In offices outside the U.S.[3]	84	(209)	(125)	19	(256)	(237)
Total	$ 19	$ (236)	$ (217)	$ 261	$ (699)	$ (438)
Investments[1]						
In U.S. offices	$ 85	$ (232)	$ (147)	$ 303	$ (650)	$ (347)
In offices outside the U.S.[3]	18	(90)	(72)	189	(373)	(184)
Total	$ 103	$ (322)	$ (219)	$ 492	$ (1,023)	$ (531)
Loans (net of unearned income)[5]						
In U.S. offices	$ (334)	$ (82)	$ (416)	$ (119)	$ (1,274)	$ (1,393)
In offices outside the U.S.[3]	(59)	(245)	(304)	(23)	(1,151)	(1,174)
Total	$ (393)	$ (327)	$ (720)	$ (142)	$ (2,425)	$ (2,567)
Other interest-earning assets[6]	$ (18)	$ 7	$ (11)	$ (2)	$ (299)	$ (301)
Total interest revenue	$ (278)	$ (981)	$ (1,259)	$ 1,039	$ (6,891)	$ (5,852)

(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]

In millions of dollars	3Q20 vs. 2Q20 Increase (decrease) due to change in: Average volume	Average rate	Net change	3Q20 vs. 3Q19 Increase (decrease) due to change in: Average volume	Average rate	Net change
Deposits						
In U.S. offices	$ 18	$ (54)	$ (36)	$ 362	$ (1,370)	$ (1,008)
In offices outside the U.S.[3]	17	(158)	(141)	189	(1,257)	(1,068)
Total	$ 35	$ (212)	$ (177)	$ 551	$ (2,627)	$ (2,076)
Securities loaned and sold under agreements to repurchase						
In U.S. offices	$ (25)	$ (46)	$ (71)	$ 122	$ (1,041)	$ (919)
In offices outside the U.S.[3]	23	(112)	(89)	14	(433)	(419)
Total	$ (2)	$ (158)	$ (160)	$ 136	$ (1,474)	$ (1,338)
Trading account liabilities[4]						
In U.S. offices	$ (3)	$ (20)	$ (23)	$ (3)	$ (186)	$ (189)
In offices outside the U.S.[3]	(4)	6	2	6	(39)	(33)
Total	$ (7)	$ (14)	$ (21)	$ 3	$ (225)	$ (222)
Short-term borrowings and Other Interest Bearing Liabilities[5]						
In U.S. offices	$ (18)	$ (29)	$ (47)	$ 11	$ (471)	$ (460)
In offices outside the U.S.[3]	(7)	2	(5)	5	(66)	(61)
Total	$ (25)	$ (27)	$ (52)	$ 16	$ (537)	$ (521)
Long-term debt						
In U.S. offices	$ 28	$ (303)	$ (275)	$ 213	$ (759)	$ (546)
In offices outside the U.S.[3]	—	(3)	(3)	(2)	(10)	(12)
Total	$ 28	$ (306)	$ (278)	$ 211	$ (769)	$ (558)
Total interest expense	$ 29	$ (717)	$ (688)	$ 917	$ (5,632)	$ (4,715)
Net interest revenue	$ (307)	$ (264)	$ (571)	$ 122	$ (1,259)	$ (1,137)

(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*.

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

In millions of dollars	Nine Months 2020 vs. Nine Months 2019		
	Increase (decrease) due to change in:		
	Average volume	Average rate	Net change
Deposits with banks[3]	**$ 695**	**$ (1,972)**	**$ (1,277)**
Securities borrowed and purchased under agreements to resell			
In U.S. offices	**$ (60)**	**$ (2,669)**	**$ (2,729)**
In offices outside the U.S.[3]	**204**	**(948)**	**(744)**
Total	**$ 144**	**$ (3,617)**	**$ (3,473)**
Trading account assets[4]			
In U.S. offices	**$ 876**	**$ (1,103)**	**$ (227)**
In offices outside the U.S.[3]	**(73)**	**(704)**	**(777)**
Total	**$ 803**	**$ (1,807)**	**$ (1,004)**
Investments[1]			
In U.S. offices	**$ 645**	**$ (1,682)**	**$ (1,037)**
In offices outside the U.S.[3]	**555**	**(730)**	**(175)**
Total	**$ 1,200**	**$ (2,412)**	**$ (1,212)**
Loans (net of unearned income)[5]			
In U.S. offices	**$ 395**	**$ (3,000)**	**$ (2,605)**
In offices outside the U.S.[3]	**153**	**(2,669)**	**(2,516)**
Total	**$ 548**	**$ (5,669)**	**$ (5,121)**
Other interest-earning assets[6]	**$ 58**	**$ (906)**	**$ (848)**
Total interest revenue	**$ 3,448**	**$ (16,383)**	**$ (12,935)**

(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]

	Nine Months 2020 vs. Nine Months 2019		
	Increase (decrease) due to change in:		
In millions of dollars	Average volume	Average rate	Net change
Deposits			
In U.S. offices	$ 987	$ (3,024)	$ (2,037)
In offices outside the U.S.[3]	464	(2,731)	(2,267)
Total	$ 1,450	$ (5,754)	$ (4,304)
Securities loaned and sold under agreements to repurchase			
In U.S. offices	$ 576	$ (2,793)	$ (2,217)
In offices outside the U.S.[3]	(18)	(878)	(896)
Total	$ 558	$ (3,671)	$ (3,113)
Trading account liabilities[4]			
In U.S. offices	$ (9)	$ (391)	$ (400)
In offices outside the U.S.[3]	(19)	(67)	(86)
Total	$ (28)	$ (458)	$ (486)
Short-term borrowings and Other Interest Bearing Liabilities[5]			
In U.S. offices	$ 166	$ (1,397)	$ (1,231)
In offices outside the U.S.[3]	(8)	(125)	(133)
Total	$ 158	$ (1,522)	$ (1,364)
Long-term debt			
In U.S. offices	$ 437	$ (1,737)	$ (1,300)
In offices outside the U.S.[3]	(14)	(57)	(71)
Total	$ 423	$ (1,794)	$ (1,371)
Total interest expense	$ 2,561	$ (13,199)	$ (10,638)
Net interest revenue	$ 885	$ (3,183)	$ (2,298)

(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 September 30, 2020, Citi believes its VAR model is conservatively calibrated to incorporate fat-tail scaling and the greater of short-term (approximately the most recent month) and long-term (three years) market volatility and estimates that the conservative features of the VAR calibration contribute an approximate 41% add-on to what would be a VAR estimated under the assumption of stable and perfectly, normally distributed markets. As of June 30, 2020, the add-on was 49%.

As set forth in the table below, Citi's average trading VAR decreased from June 30, 2020 to September 30, 2020. The decrease was due to reductions in market volatilities with normalization of credit spread volatilities and lower realized volatilities in equity. Citi's average trading and credit portfolio VAR also decreased from June 30, 2020 to September 30, 2020 due to the same reason.

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

In millions of dollars	**September 30, 2020**	**Third Quarter 2020 Average**	June 30, 2020	Second Quarter 2020 Average	September 30, 2019	Third Quarter 2019 Average
Interest rate	**$ 69**	**$ 82**	$ 95	$ 78	$ 29	$ 33
Credit spread	**67**	**79**	89	137	40	41
Covariance adjustment[1]	**(47)**	**(55)**	(60)	(61)	(24)	(23)
Fully diversified interest rate and credit spread[2]	**$ 89**	**$ 106**	$ 124	$ 154	$ 45	$ 51
Foreign exchange	**27**	**23**	23	28	12	20
Equity	**29**	**26**	27	50	13	17
Commodity	**21**	**25**	25	27	16	26
Covariance adjustment[1]	**(77)**	**(76)**	(73)	(107)	(48)	(60)
Total trading VAR—all market risk factors, including general and specific risk (excluding credit portfolios)[2]	**$ 89**	**$ 104**	$ 126	$ 152	$ 38	$ 54
Specific risk-only component[3]	**$ (2)**	**$ (10)**	$ (20)	$ (9)	$ (5)	$ 2
Total trading VAR—general market risk factors only (excluding credit portfolios)	**$ 91**	**$ 114**	$ 146	$ 161	$ 43	$ 52
Incremental impact of the credit portfolio[4]	**$ 35**	**$ 26**	$ 16	$ 93	$ 16	$ 12
Total trading and credit portfolio VAR	**$ 124**	**$ 130**	$ 142	$ 245	$ 54	$ 66

(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:

	Third Quarter 2020		Second Quarter 2020		Third Quarter 2019	
In millions of dollars	**Low**	**High**	Low	High	Low	High
Interest rate	**$ 61**	**$ 111**	$ 44	$ 137	$ 25	$ 42
Credit spread	**67**	**95**	89	171	37	47
Fully diversified interest rate and credit spread	**$ 83**	**$ 128**	$ 112	$ 223	$ 45	$ 60
Foreign exchange	**15**	**31**	20	34	12	29
Equity	**22**	**33**	23	135	11	24
Commodity	**21**	**32**	17	64	16	75
Total trading	**$ 87**	**$ 128**	$ 106	$ 246	$ 38	$ 84
Total trading and credit portfolio	**113**	**150**	120	424	54	93

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		**Sept. 30, 2020**
Total—all market risk factors, including general and specific risk		
Average—during quarter	**$**	**101**
High—during quarter		**120**
Low—during quarter		**87**

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 September 30, 2020, there were four back-testing exceptions observed for Citi's Regulatory VAR for the prior 12 months. All four exceptions occurred during March 2020 and were related to market volatility due to the COVID-19 pandemic.

OPERATIONAL RISK

For additional information regarding operational risk, including Citi's management of operational risk, see "Operational Risk" in Citi's 2019 Annual Report on Form 10-K.

Erroneous Revlon-Related Payment

In August 2020, Citi, as administrative agent for a Revlon credit facility, in addition to making an interest payment, erroneously paid the lenders under the facility an aggregate of approximately $894 million, which is an amount equal to the principal balance of the loan at that time. Human error at Citi and at a third-party vendor, and limitations in Citi's loan processing systems, were the main contributing factors. After a careful assessment of the incident, Citi immediately put in additional controls to prevent similar loan disbursement errors in the future, while also embarking on a major upgrade of the loan infrastructure and controls.

As of November 4, 2020, $389.8 million has been recovered from various lenders that received portions of the erroneous payment. The remaining balance of $504.2 million is accounted for as a receivable in *Other assets* on the Consolidated Balance Sheet and, in accordance with ASC 450, Citi has not recognized any impairment on this receivable because it does not believe a loss is probable. Citi commenced litigation against certain fund managers of lenders that have not returned the funds that were erroneously sent to them and obtained a temporary restraining order against the fund managers and those acting with them that freezes those transferred funds. For additional information on the litigation, see Note 23 to the Consolidated Financial Statements.

STRATEGIC RISK

For additional information regarding strategic risk, including Citi's management of strategic risk, see "Managing Global Risk—Strategic Risk" in Citi's 2019 Annual Report on Form 10-K.

U.K.'s Future Relationship with EU

As previously disclosed, the U.K. formally left the EU on January 31, 2020, and the U.K. and EU are currently in a transition period whereby the prior legal and regulatory framework has continued. This transition period ceases on December 31, 2020 in the absence of a negotiated agreement. As of January 1, 2021, the U.K. would be treated as an autonomous country by the EU, with U.K. firms no longer having automatic access to the EU's single market.

While the U.K. government and the EU continue to negotiate a free trade agreement, it remains uncertain whether the negotiations will be successfully concluded in time to take effect by the end of the transition period. Moreover, the free trade agreement will likely cover tariffs and quotas for goods but not services in the financial sector between the U.K. and the EU.

Accordingly, Citi has continued to plan for a "no deal" exit scenario. Citi has worked closely with clients, regulators and other relevant stakeholders in order to provide continuity of services to its U.K. and EU clients. Citi has migrated certain business activities to alternative legal entities and branches with appropriate regulatory permissions to carry out such activity, and has established required capabilities in the U.K. and EU. Citi also continues to monitor macroeconomic scenarios and market events and has been undertaking stress testing to assess potential impacts on its businesses.

For additional information about Citi's plans for a U.K. exit from the EU and uncertainties related to the U.K.'s future relationship with the EU, see "Managing Global Risk—Strategic Risk—Exit of U.K. from EU" and "Risk Factors—Strategic Risk" in Citi's 2019 Annual Report on Form 10-K.

LIBOR Transition Risk

Citi has continued to prepare for the transition away from LIBOR by the end of 2021, including working with regulators and various industry groups such as the Alternative Reference Rates Committee (ARRC). Citi also continues to implement its LIBOR transition action plans and associated roadmaps under its key workstreams. In addition, Citi has transitioned the discounting of centrally cleared EUR and USD interest rate derivatives to the Euro Short-Term Rate and the Secured Overnight Financing Rate, respectively; announced the adoption of the newly published ISDA IBOR Fallbacks Protocol for existing IBOR derivatives transactions; and increased Citi's virtual client communication efforts, including outreach regarding these new industry-led protocols and solutions.

For additional information about Citi's actions to address a transition away from and discontinuance of LIBOR, see "Managing Global Risk—Strategic Risk—LIBOR Transition Risk" in Citi's 2019 Annual Report on Form 10-K. For information about Citi's LIBOR transition risks, see "Risk Factors—Strategic Risks" 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 September 30, 2020. The total exposure as of September 30, 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 78% of the total U.K. funded loans and 84% of the total U.K. unfunded lending commitments were investment grade as of September 30, 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 3Q20	Total as of 2Q20	Total as of 3Q19	Total as a % of Citi as of 3Q20
United Kingdom	$ 42.3	$ —	$ 2.1	$ 48.6	$ 16.8	$ (6.0)	$ 4.5	$ 0.1	**$ 108.4**	$ 109.7	$ 116.6	6.3 %
Mexico	16.1	13.4	0.3	7.9	2.6	(0.9)	16.6	5.0	**61.0**	59.1	67.3	3.5
Hong Kong	18.9	13.0	0.7	6.9	1.7	(1.1)	7.1	0.7	**47.9**	49.1	52.5	2.8
Singapore	13.9	13.2	0.1	6.1	2.1	(0.6)	8.5	0.8	**44.1**	46.8	41.3	2.5
Ireland	12.4	—	0.7	26.9	0.6	(0.1)	—	0.8	**41.3**	42.0	34.8	2.4
South Korea	3.3	16.9	0.1	2.4	0.8	(0.5)	9.3	1.0	**33.3**	32.7	31.2	1.9
India	5.9	4.2	0.7	6.0	4.7	(0.4)	9.7	0.7	**31.5**	28.5	29.6	1.8
Germany	0.6	—	—	6.9	5.0	(4.5)	10.8	8.2	**27.0**	24.6	18.0	1.6
Brazil	12.0	—	—	2.8	3.9	(0.9)	3.8	3.5	**25.1**	25.4	25.7	1.4
China	7.3	3.5	0.6	3.0	2.0	(0.7)	5.6	0.5	**21.8**	19.2	18.6	1.3
Australia	4.7	8.7	—	6.7	1.8	(0.6)	1.4	(1.6)	**21.1**	20.2	20.8	1.2
Japan	2.6	—	0.1	3.2	4.5	(1.9)	5.5	5.8	**19.8**	18.5	18.3	1.1
Taiwan	5.9	8.0	0.2	1.1	0.5	(0.1)	0.8	0.6	**17.0**	16.7	17.2	1.0
Canada	2.3	0.6	0.2	7.3	1.5	(0.9)	5.1	0.9	**17.0**	17.8	15.9	1.0
Poland	3.6	1.9	—	2.6	0.1	(0.1)	6.3	0.6	**15.0**	15.1	13.6	0.9
Jersey	7.0	—	—	6.3	0.1	(0.1)	—	—	**13.3**	12.0	13.6	0.8
United Arab Emirates	7.3	1.3	—	3.0	0.4	(0.2)	0.1	(0.1)	**11.8**	12.9	11.6	0.7
Malaysia	1.3	3.8	0.1	0.8	0.2	—	1.8	0.4	**8.4**	9.1	9.1	0.5
Thailand	0.9	2.6	—	2.0	—	—	2.2	0.2	**7.9**	7.8	7.8	0.5
Luxembourg	0.8	—	—	—	0.6	(0.5)	5.2	0.7	**6.8**	6.7	3.1	0.4
Indonesia	2.4	0.7	—	1.2	0.1	(0.1)	1.4	0.3	**6.0**	5.9	5.9	0.3
Philippines	0.9	1.4	—	0.5	—	—	1.9	—	**4.7**	5.4	4.6	0.3
Russia	1.7	0.8	—	0.7	0.2	(0.1)	1.2	0.1	**4.6**	5.4	5.0	0.3
Italy	0.2	—	—	2.1	5.0	(5.0)	—	1.6	**3.9**	3.8	3.4	0.2
Netherlands	—	—	—	—	1.4	(1.6)	1.8	2.2	**3.8**	4.5	(0.1)	0.2
Total as a % of Citi's total exposure												**34.9 %**
Total as a % of Citi's non-U.S. total exposure												**90.0 %**

(1) *ICG* loans reflect funded corporate loans and private bank loans, net of unearned income. As of September 30, 2020, private bank loans in the table above totaled $28.7 billion, concentrated in Hong Kong ($8.2 billion), Singapore ($6.8 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

As previously disclosed, Citi operates in Argentina through its *ICG* businesses. As of September 30, 2020, Citi's net investment in its Argentine operations was approximately $910 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.

During August 2020, the Argentine government announced the successful restructuring of almost all of its foreign currency debt issued under foreign law, for which it had previously postponed principal and interest payments. However, during September 2020, the Argentine government tightened its existing capital and currency controls, which continue to 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 primarily executed outside of Argentina. As of September 30, 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. As a result, and to the extent that Citi is unable to execute NDF contracts for this unhedged exposure in the future, Citi would record devaluations on its net Argentine peso-denominated assets in earnings, without any benefit from a change in the fair value of derivative positions used to economically hedge the exposure.

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 allowances for credit losses 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 September 30, 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 and in Citigroup's First Quarter of 2020 Form 10-Q contain 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 is 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 below the carrying 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)

Citi 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 (these allowances, together with the ACLL, are referred to as the ACL).

The ACL is composed of quantitative and qualitative components. For the quantitative component, Citi uses a single forward-looking macroeconomic forecast that is complemented by a qualitative component. This qualitative component reflects (i) economic uncertainty related to an alternative downside scenario, (ii) loss adjustments for concentration and collateral, and (iii) specific adjustments based on the associated portfolio for estimating the ACL.

Quantitative Component

Citi estimates expected credit losses for its quantitative component based on (i) its internal system of credit risk ratings, (ii) its comprehensive internal history and rating agency information regarding default rates 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.

Citi's 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 used for estimating expected credit losses are sensitive to changes in macroeconomic variables that inform the forecasts. For wholesale portfolios, the loss likelihood and loss severity models cover a wide range of geography, industry, product and business segments that contribute to the portfolios.

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

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. Changes in these estimates could have a direct impact on Citi's credit costs and the allowance in any period.

Qualitative Component

Citi uses a qualitative component of the ACL to adjust for economic uncertainty. The qualitative component considers, among other things, the uncertainty of forward-looking economic scenarios based on the likelihood and severity of a downside scenario, certain portfolio characteristics and concentrations, collateral coverage, model limitations, idiosyncratic events and other relevant criteria under banking supervisory guidance for loan loss reserves. In the current macroeconomic environment, the quantitative and qualitative components reflect the estimated impact of the pandemic on economic forecasts and the impact on credit loss estimates.

Citi's qualitative component also includes a judgmental management adjustment, which is an alternative, more adverse scenario that only considers downside risk.

3Q20 Combined Quantitative and Qualitative Components

The ACL reflects both the quantitative component and the qualitative component, including the judgmental management adjustment, and includes reserves for loans modified under the CARES Act and U.S. banking agency relief (for additional information, see "COVID-19 Pandemic Overview—Troubled Debt Restructuring (TDR) Relief" above).

In the third quarter, Citi (i) released $0.2 billion of the ACL for its consumer portfolios and (ii) built $0.5 billion of the ACL for its corporate portfolios. Both consumer and corporate ACLs were impacted by lower loan balances and some improvement in macroeconomic conditions for the quantitative base scenario. In addition, the corporate ACL reflected an improved outlook in the third quarter for certain variables for the base case, such as the VIX and oil prices. For the consumer ACL, the change in the estimate related to variable third-party collection costs, primarily for its international cards portfolios, reduced the ACL by $122 million.

In the third quarter, the qualitative judgmental management adjustment incorporated this alternative downside scenario at a 15% likelihood, which contributed to an increase in the *Provision for credit losses* of approximately $0.8 billion and ending ACL reserves of $3.1 billion in the quarter, for an overall ACL balance of $28.9 billion at September 30, 2020. This increase in the judgmental management adjustment was partially offset by lower loan volumes. Without the management adjustment, Citi estimates it would have had a $500 million release in the ACL. The outlook for many of the macroeconomic variables, such as GDP and unemployment, continues to evolve.

The extent of the pandemic's ultimate impact will depend, among other things, on (i) how consumers respond to the government stimulus and assistance, as well as Citi's own customer relief efforts; (ii) the impact on unemployment; (iii) the timing and extent of the economic recovery; (iv) whether there is a resurgence of COVID-19, including as businesses and schools reopen and the extent of that resurgence; and (v) the extent of any market volatility. Citi believes its analysis of the ACL reflects the forward view of the economic analysis as of September 30, 2020, based on its September 8, 2020 forecast.

Macroeconomic Variables
Citi uses a multitude of variables in its macroeconomic forecast as part of its calculation of both the qualitative and quantitative components of the ACL, including both domestic and international variables for its global portfolios and exposures. Citi's forecasts of the U.S. unemployment rate and U.S. GDP growth rate represent the key macroeconomic variables that most significantly affect its estimate of its consumer and corporate ACL.

The tables below show these macroeconomic variables for Citi's 3Q20, 2Q20 and 1Q20 consumer and corporate ACL, comparing Citi's forecasted 4Q20, 2Q21 and 4Q21 quarterly average U.S. unemployment rate and year-over-year U.S. GDP forecasted growth rate for 2020, 2021 and 2022:

	Quarterly average			
U.S. unemployment	**4Q20**	**2Q21**	**4Q21**	**13-quarter average**[1]
Citi forecast at 1Q20	7.1 %	6.7 %	6.5 %	6.1 %
Citi forecast at 2Q20	8.9	7.2	5.9	7.2
Citi forecast at 3Q20	8.7	7.6	6.4	6.6

(1) Represents the average unemployment rate for the rolling, forward-looking 13 quarters in forecast horizon.

	Year-over-year growth rate[1]		
	Full year		
U.S. GDP	**2020**	**2021**	**2022**
Citi forecast at 1Q20	(1.3)%	1.5 %	1.9 %
Citi forecast at 2Q20	(5.1)	5.5	3.3
Citi forecast at 3Q20	(5.1)	3.3	2.8

(1) The year-over-year growth rate is the percentage change in the real (inflation adjusted) GDP level.

Under the quantitative base scenario, Citi's 3Q20 forecasts are for U.S. unemployment to continue to improve as the U.S. moves past the peak of the crisis, with a somewhat more muted and slower recovery in both unemployment and U.S. GDP through 2022, compared to the 2Q20 forecasts.

The downside scenario incorporates more adverse economic variables, e.g., approximately 500 bps in higher unemployment rates through 2021 and a slower GDP recovery, which is 9% lower than the base case in 2021, compared with the second quarter outlook that was only 1% lower than the base case.

Consumer
As discussed above, Citi's total consumer ACL release (including *Corporate/Other*) of $0.2 billion in the third quarter of 2020 reduced the ACL balance to $19.5 billion, or 6.96% of total consumer loans, and reflected the update of the macroeconomic forecast scenario for the third quarter. Citi's consumer ACL is largely driven by the cards businesses, where the receivables have longer estimated tenors under the CECL lifetime expected credit loss methodology, net of recoveries, than under the previous incurred loss model. Citi's consumer ACL release included a one-time release of approximately $122 million related to the change in accounting for third-party collection costs, primarily for Citi's international cards portfolios, as discussed below.

For cards, the level of reserves relative to EOP loans increased to 11.42% at September 30, 2020, compared to 11.21% at June 30, 2020, primarily due to lower average loan balances. For the remaining consumer exposures, the level of reserves relative to EOP loans decreased to 2.1% at September 30, 2020, compared to 2.2% at June 30, 2020.

Corporate
Citi's corporate ACLL for outstanding loans increased $0.1 billion in the third quarter of 2020, bringing the ACLL reserve balance to $6.9 billion, or 1.82% of total funded loans, and reflected the update of the macroeconomic forecast scenario for the third quarter.

The higher ACL build was primarily driven by an increase in the qualitative management adjustment component of the reserve to reflect the potential for a higher level of stress and/or somewhat slower economic recovery. Mexico and Argentina were the key contributors to the increase in the corporate ACL build, partially offset primarily by a U.S. release.

The ACL for unfunded loans increased $0.4 billion in the third quarter, bringing the total corporate ACL reserve balance included in *Other liabilities* to $2.3 billion at September 30, 2020.

Impact to ACL Estimate as a Result of a Voluntary Change in the Accounting for Variable Post-Charge-Off Third-Party Collection Costs
During the second quarter of 2020, there was a change in Citi's ACL accounting estimate effected by a change in Citi's accounting principle for variable post-charge-off third-party collection costs. These costs were previously accounted for as a reduction in credit recoveries. As a result of this change, beginning July 1, 2020, these costs are accounted for as an increase in operating expenses. Determining a preferable method of accounting for such costs is a judgmental matter; however, Citi concluded that such a change in the method of accounting is preferable in Citi's circumstances as it better reflects the nature of these collection costs to investors. That is, these costs do not represent reduced payments from borrowers and are similar to Citi's other executory third-party vendor contracts that are accounted for as operating expenses as incurred.

As a result of this accounting change, Citi had a one-time consumer ACL release of approximately $426 million in the second quarter of 2020 related to its U.S. card portfolios. This policy change impacts the ACL estimate as the level of credit recoveries used in the ACL estimation process will increase as a result of the collection costs being reclassified to operating expenses. Since the validation of the models determining the impact of variable post-charge-off third-party collection costs primarily related to Citi's international card portfolios was not completed as of the second quarter of 2020, Citi reflected this adjustment in its third quarter ACL provision to include an incremental release of $122 million. These ACL releases reflect the impact to Citi's ACL estimate of the revised credit recoveries incorporated in the ACL models. Aside from this impact on the ACL estimation process, this change in

accounting also resulted in a reclassification of approximately $50 million of collection costs from credit recoveries to operating expenses each quarter, beginning in the third quarter of 2020.

ACL Sensitivity

To the extent that the probability of the downside scenario increases, a corresponding increase in reserves would be expected. It is important to note the following:

- The above cannot be used to estimate the overall impact on the ACL, as the amount of the qualitative component of the ACL (including, but not limited to, the economic uncertainty management adjustment) could be different under alternative macroeconomic scenarios and changes in the portfolio.
- The pandemic has had, and will likely continue to have, a severe impact on global economic conditions and the variability in macroeconomic variables, and their impacts on credit loss estimates could be material.

ACLL and Non-accrual Ratios

At September 30, 2020, the ratio of the allowance for credit losses to total funded loans was 4.00% (6.96% for consumer loans and 1.82% for corporate loans), compared to 3.89% at June 30, 2020 (6.97% for consumer loans and 1.71% for corporate loans).

Citi's total non-accrual loans were $5.3 billion at September 30, 2020, down $571 billion from June 30, 2020. Consumer non-accrual loans decreased $139 million to $1.7 billion at September 30, 2020 from $1.8 billion at June 30, 2020, while corporate non-accrual loans decreased $432 million to $3.6 billion at September 30, 2020 from $4.0 billion at June 30, 2020. In addition, the ratio of non-accrual loans to total corporate loans was 0.93%, and 0.60% of non-accrual loans to total consumer loans, at September 30, 2020.

Regulatory Capital Impact

Citi has elected to phase in the CECL impact for regulatory capital purposes. The transition provisions were recently modified to defer the phase-in. After two years with no impact on capital, the CECL transition impact will phase in over a three-year transition period with 25% of the impact (net of deferred taxes) recognized on the first day of each subsequent year, commencing January 1, 2022, and will be fully implemented on January 1, 2025. In addition, 25% of the build (pretax) made in 2020 will be deferred and amortized through the same timeframe.

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 as of 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 performed the annual test as of July 1, 2020. The fair values of the Company's reporting units as a percentage of their carrying values ranged from approximately 115% to 136%, resulting in no impairment. While the inherent risk related to uncertainty is embedded in the key assumptions used in the valuations, the current environment remains rapidly evolving due to the COVID-19 pandemic. Further deterioration in macroeconomic and market conditions, including potential adverse effects to economic forecasts due to the severity and duration of the pandemic, as well as the responses of governments, customers and clients, could negatively influence the assumptions used in the valuations, in particular, the discount and growth rates used in the net income projections. If the future were to differ from management's best estimate of key economic assumptions, and associated cash flows were to decrease, Citi could potentially experience material goodwill impairment charges in the future. See Note 15 to the Consolidated Financial Statements for a further discussion on goodwill.

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.

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 September 30, 2020, Citigroup had recorded net DTAs of approximately $24.8 billion, an increase of $0.9 billion from June 30, 2020 and an increase of $1.7 billion from December 31, 2019. The increase for the quarter was primarily driven by a lower level of U.S. earnings and losses in Other comprehensive income.

The table below summarizes Citi's net DTAs balance:

Jurisdiction/ Component	**DTAs balance**		
In billions of dollars	**September 30, 2020**	June 30, 2020	December 31, 2019
Total U.S.	**$ 22.6**	**$ 22.0**	$ 21.0
Total foreign	**2.2**	**1.9**	2.1
Total	**$ 24.8**	**$ 23.9**	$ 23.1

Of Citi's total net DTAs of $24.8 billion as of September 30, 2020, $9.6 billion (primarily relating to net operating losses, foreign tax credit and general business credit carry-forwards, which were reduced by $0.2 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 in excess of the 10%/15% limitations (see "Capital Resources" above). For the quarter ended September 30, 2020, Citi did not have any such DTAs. Accordingly, the remaining $15.2 billion of net DTAs as of September 30, 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 $24.8 billion at September 30, 2020 is more-likely-than-not based upon 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 third quarter of 2020, there was no change in Citi's DTA valuation allowance (VA) requirements for foreign tax credit carry-forwards. In the fourth quarter of 2020, as part of its normal planning process, Citi expects to update its forecasts of operating income and foreign source income, which in turn can affect the VA.

Effective Tax Rate

Citi's reported effective tax rate for the third quarter of 2020 was approximately 20%, compared to approximately 18% in the third quarter of 2019. The increase in the effective tax rate was primarily due to the non-deductible civil money penalty in the quarter (for additional information, see "Executive Summary" above).

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 September 30, 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, in its related quarterly report on Form 10-Q, previously disclosed no reportable activities for the first quarter of 2020 and reportable activities pursuant to Section 219 for the second quarter of 2020.

Citi had no reportable activities pursuant to Section 219 for the third 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, including the duration and further spread of the disease, the severity and duration of the related economic downturn or the pace of the economic recovery, 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, the ongoing or forecasted impact to Citi's results of operations and financial condition, whether due to the pandemic or otherwise; regulatory requirements, including recent actions regarding stock buyback restrictions, stress tests and new dividend limitations, as well as the cessation of the temporary SLR relief for Citigroup and phase-in to regulatory capital of the full impact of CECL; Citi's effectiveness in managing its level of risk-weighted assets and GSIB surcharge; potential changes to the regulatory capital framework; the results of the CCAR process and regulatory stress tests, including regulatory determination or recalibration of Citi's "stress capital buffer" (SCB); and any resulting variability in the SCB and the 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 well as its macroeconomic outlook, due to macroeconomic and geopolitical and other challenges and uncertainties and volatilities, including, among others, election uncertainties and outcomes; the ability of the U.K. and EU to reach an agreement on the terms and conditions related to the U.K.'s withdrawal from the EU; geopolitical tensions and conflicts; natural disasters; pandemics; governmental fiscal and monetary actions, such as changes in interest rates; and protracted or widespread trade tensions, including changes in U.S. trade and sanctions policies and resulting retaliatory measures;
- 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, tax and other changes from the U.S. federal government and others, whether due to the pandemic, election outcomes or otherwise; potential changes to various aspects of the regulatory capital framework; 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, expense management and enhancement of the risk and control environment, 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 scheduled for December 31, 2021 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;

- 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 resulting in U.S. regulators imposing 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, partner store closures, government imposed business restrictions, 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, whether due to the impact of the pandemic or otherwise;
- 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 the application of incorrect, assumptions, judgments or estimates in Citi's financial statements, including the estimates of the allowance for credit losses, reserves related to litigation, regulatory and tax matters exposures, valuation of DTAs, the fair value of certain assets and liabilities or otherwise, such as assessing goodwill or any other asset (e.g., the receivable related to the Revlon credit facility) for impairment;
- the potential impact from reclassification of any foreign currency translation adjustment (CTA) component of *AOCI*, including related hedges and taxes, into Citi's earnings, due to the sale or substantial liquidation of any foreign entity, such as those related to its legacy businesses;
- the potential impact of a continuation of lower interest rates on Citi's pension plan, including any required settlement charge if lump sum payments to retirees were to exceed the interest cost of the plan;
- 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, such as the unemployment rate and the GDP level, whether due to the impact of the pandemic or otherwise; 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 action is taken 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, whether due to the COVID-19 pandemic or otherwise;
- 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, whether due to the COVID-19 pandemic or otherwise;
- 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, infrastructure, data and risk management practices and controls, including the impact on Citi's compliance, regulatory and other risks and costs, such as increased regulatory oversight and restrictions, enforcement proceedings, penalties and fines; and

- the potential outcomes of the extensive legal and regulatory proceedings, as well as regulatory examinations, investigations, other inquiries and consent orders and related compliance efforts, to which Citi is or may be subject at any given time, particularly given the increased focus by regulators on risk and controls, such as risk management, compliance, data quality management and governance and internal controls, and policies and procedures; as well as the transformative efforts to remediate deficiencies on a timely and sufficient basis and increased expenses for such remediation efforts, together with the heightened scrutiny and expectations generally from regulators, and the severity of the remedies sought by regulators, such as civil money penalties, supervisory or enforcement orders, business restrictions, limitations on dividends and changes to directors and/or officers, and potential collateral consequences to Citi arising from such outcomes.

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

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CONSOLIDATED FINANCIAL STATEMENTS

CONSOLIDATED STATEMENT OF INCOME (UNAUDITED)

Citigroup Inc. and Subsidiaries

	Three Months Ended September 30,		Nine Months Ended September 30,	
In millions of dollars, except per share amounts	**2020**	2019	**2020**	2019
Revenues				
Interest revenue	**$ 13,314**	$ 19,177	**$ 45,042**	$ 57,965
Interest expense	**2,821**	7,536	**11,977**	22,615
Net interest revenue	**$ 10,493**	$ 11,641	**$ 33,065**	$ 35,350
Commissions and fees	**$ 2,753**	$ 2,906	**$ 8,707**	$ 8,713
Principal transactions	**2,508**	2,802	**11,926**	7,480
Administration and other fiduciary fees	**892**	880	**2,565**	2,588
Realized gains on sales of investments, net	**304**	361	**1,484**	959
Impairment losses on investments:				
Impairment losses on investments and other assets	**(30)**	(14)	**(154)**	(27)
Provision for credit losses on AFS debt securities[1]	**4**	—	**(4)**	—
Net impairment losses recognized in earnings	**$ (26)**	$ (14)	**$ (158)**	$ (27)
Other revenue (loss)	**$ 378**	$ (2)	**$ 210**	$ 845
Total non-interest revenues	**$ 6,809**	$ 6,933	**$ 24,734**	$ 20,558
Total revenues, net of interest expense	**$ 17,302**	$ 18,574	**$ 57,799**	$ 55,908
Provisions for credit losses and for benefits and claims				
Provision for credit losses on loans	**$ 1,809**	$ 2,062	**$ 15,949**	$ 6,095
Provision for credit losses on held-to-maturity (HTM) debt securities	**(16)**	—	**21**	—
Provision for credit losses on other assets	**(13)**	—	**31**	—
Policyholder benefits and claims	**58**	17	**97**	48
Provision for credit losses on unfunded lending commitments	**424**	9	**1,094**	18
Total provisions for credit losses and for benefits and claims	**$ 2,262**	$ 2,088	**$ 17,192**	$ 6,161
Operating expenses				
Compensation and benefits	**$ 5,595**	$ 5,329	**$ 16,873**	$ 16,368
Premises and equipment	**575**	580	**1,702**	1,713
Technology/communication	**1,891**	1,783	**5,355**	5,227
Advertising and marketing	**238**	378	**865**	1,171
Other operating	**2,665**	2,394	**7,178**	7,069
Total operating expenses	**$ 10,964**	$ 10,464	**$ 31,973**	$ 31,548
Income from continuing operations before income taxes	**$ 4,076**	$ 6,022	**$ 8,634**	$ 18,199
Provision for income taxes	**815**	1,079	**1,522**	3,727
Income from continuing operations	**$ 3,261**	$ 4,943	**$ 7,112**	$ 14,472
Discontinued operations				
Loss from discontinued operations	**$ (7)**	$ (15)	**$ (26)**	$ (27)
Benefit for income taxes	**—**	—	**—**	(27)
Income (loss) from discontinued operations, net of taxes	**$ (7)**	$ (15)	**$ (26)**	$ —
Net income before attribution of noncontrolling interests	**$ 3,254**	$ 4,928	**$ 7,086**	$ 14,472
Noncontrolling interests	**24**	15	**18**	50
Citigroup's net income	**$ 3,230**	$ 4,913	**$ 7,068**	$ 14,422
Basic earnings per share[2]				
Income from continuing operations	**$ 1.41**	$ 2.09	**$ 2.98**	$ 5.92
Income from discontinued operations, net of taxes	**—**	(0.01)	**(0.01)**	—
Net income	**$ 1.41**	$ 2.09	**$ 2.97**	$ 5.92
Weighted average common shares outstanding *(in millions)*	**2,081.8**	2,220.8	**2,087.1**	2,282.4
Diluted earnings per share[2]				
Income from continuing operations	**$ 1.40**	$ 2.08	**$ 2.97**	$ 5.89
Income (loss) from discontinued operations, net of taxes	**—**	(0.01)	**(0.01)**	—
Net income	**$ 1.40**	$ 2.07	**$ 2.96**	$ 5.89
Adjusted weighted average common shares outstanding *(in millions)*	**2,094.3**	2,237.1	**2,100.1**	2,298.2

(1) In accordance with ASC 326.
(2) 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 September 30,		Nine Months Ended September 30,	
In millions of dollars	**2020**	2019	**2020**	2019
Citigroup's net income	**$ 3,230**	$ 4,913	**$ 7,068**	$ 14,422
Add: Citigroup's other comprehensive income[1]				
Net change in unrealized gains and losses on debt securities, net of taxes[1]	**$ (282)**	$ 307	**$ 3,683**	$ 2,145
Net change in debt valuation adjustment (DVA), net of taxes[2]	**(307)**	210	**601**	(358)
Net change in cash flow hedges, net of taxes	**(235)**	253	**1,736**	1,056
Benefit plans liability adjustment, net of taxes	**246**	(250)	**(117)**	(567)
Net change in foreign currency translation adjustment, net of taxes and hedges	**897**	(1,442)	**(2,651)**	(1,293)
Net change in excluded component of fair value hedges, net of taxes	**(39)**	(10)	**1**	52
Citigroup's total other comprehensive income	**$ 280**	$ (932)	**$ 3,253**	$ 1,035
Citigroup's total comprehensive income	**$ 3,510**	$ 3,981	**$ 10,321**	$ 15,457
Add: Other comprehensive income (loss) attributable to noncontrolling interests	**$ 19**	$ (33)	**$ 7**	$ (26)
Add: Net income attributable to noncontrolling interests	**24**	15	**18**	50
Total comprehensive income	**$ 3,553**	$ 3,963	**$ 10,346**	$ 15,481

(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.

In millions of dollars	**September 30, 2020 (Unaudited)**	December 31, 2019
Assets		
Cash and due from banks (including segregated cash and other deposits)	**$ 25,308**	$ 23,967
Deposits with banks, net of allowance	**298,387**	169,952
Securities borrowed and purchased under agreements to resell (including $175,626 and $153,193 as of September 30, 2020 and December 31, 2019, respectively, at fair value), net of allowance	**289,358**	251,322
Brokerage receivables, net of allowance	**51,610**	39,857
Trading account assets (including $160,427 and $120,236 pledged to creditors at September 30, 2020 and December 31, 2019, respectively)	**348,209**	276,140
Investments:		
Available-for-sale debt securities (including $5,996 and $8,721 pledged to creditors as of September 30, 2020 and December 31, 2019, respectively), net of allowance	**343,690**	280,265
Held-to-maturity debt securities (including $360 and $1,923 pledged to creditors as of September 30, 2020 and December 31, 2019, respectively), net of allowance	**96,065**	80,775
Equity securities (including $1,198 and $1,162 at fair value as of September 30, 2020 and December 31, 2019, respectively)	**7,769**	7,523
Total investments	**$ 447,524**	$ 368,563
Loans:		
Consumer (including $14 and $18 as of September 30, 2020 and December 31, 2019, respectively, at fair value)	**280,025**	309,548
Corporate (including $5,510 and $4,067 as of September 30, 2020 and December 31, 2019, respectively, at fair value)	**386,886**	389,935
Loans, net of unearned income	**$ 666,911**	$ 699,483
Allowance for credit losses on loans (ACLL)	**(26,426)**	(12,783)
Total loans, net	**$ 640,485**	$ 686,700
Goodwill	**21,624**	22,126
Intangible assets (including MSRs of $334 and $495 as of September 30, 2020 and December 31, 2019, respectively, at fair value)	**4,804**	4,822
Other assets (including $11,692 and $12,830 as of September 30, 2020 and December 31, 2019, respectively, at fair value), net of allowance	**107,150**	107,709
Total assets	**$ 2,234,459**	$ 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	**September 30, 2020 (Unaudited)**	December 31, 2019
Assets of consolidated VIEs to be used to settle obligations of consolidated VIEs		
Cash and due from banks	**$ 154**	$ 108
Trading account assets	**7,123**	6,719
Investments	**837**	1,295
Loans, net of unearned income		
Consumer	**37,634**	46,977
Corporate	**16,768**	16,175
Loans, net of unearned income	**$ 54,402**	$ 63,152
Allowance for credit losses on loans (ACLL)	**(3,957)**	(1,841)
Total loans, net	**$ 50,445**	$ 61,311
Other assets	**46**	73
Total assets of consolidated VIEs to be used to settle obligations of consolidated VIEs	**$ 58,605**	$ 69,506

Statement continues on the next page.

In millions of dollars, except shares and per share amounts	**September 30, 2020 (Unaudited)**	December 31, 2019
Liabilities		
Non-interest-bearing deposits in U.S. offices	**$ 121,183**	$ 98,811
Interest-bearing deposits in U.S. offices (including $912 and $1,624 as of September 30, 2020 and December 31, 2019, respectively, at fair value)	**497,487**	401,418
Non-interest-bearing deposits in offices outside the U.S.	**94,208**	85,692
Interest-bearing deposits in offices outside the U.S. (including $1,632 and $695 as of September 30, 2020 and December 31, 2019, respectively, at fair value)	**549,745**	484,669
Total deposits	**$ 1,262,623**	$ 1,070,590
Securities loaned and sold under agreements to repurchase (including $60,878 and $40,651 as of September 30, 2020 and December 31, 2019, respectively, at fair value)	**207,227**	166,339
Brokerage payables	**54,328**	48,601
Trading account liabilities	**146,990**	119,894
Short-term borrowings (including $5,981 and $4,946 as of September 30, 2020 and December 31, 2019, respectively, at fair value)	**37,439**	45,049
Long-term debt (including $63,056 and $55,783 as of September 30, 2020 and December 31, 2019, respectively, at fair value)	**273,254**	248,760
Other liabilities (including $5,067 and $6,343 as of September 30, 2020 and December 31, 2019, respectively, at fair value), including allowance	**58,003**	57,979
Total liabilities	**$ 2,039,864**	$ 1,757,212
Stockholders' equity		
Preferred stock ($1.00 par value; authorized shares: 30 million), issued shares: **as of September 30, 2020—719,200** and as of December 31, 2019—719,200, at aggregate liquidation value	**$ 17,980**	$ 17,980
Common stock ($0.01 par value; authorized shares: 6 billion), issued shares: **as of September 30, 2020—3,099,763,661** and as of December 31, 2019—3,099,602,856	**31**	31
Additional paid-in capital	**107,764**	107,840
Retained earnings	**165,303**	165,369
Treasury stock, at cost: **September 30, 2020—1,017,803,983 shares** and December 31, 2019—985,479,501 shares	**(64,137)**	(61,660)
Accumulated other comprehensive income (loss) (AOCI)	**(33,065)**	(36,318)
Total Citigroup stockholders' equity	**$ 193,876**	$ 193,242
Noncontrolling interests	**719**	704
Total equity	**$ 194,595**	$ 193,946
Total liabilities and equity	**$ 2,234,459**	$ 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	**September 30, 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	**$ 10,656**	$ 10,031
Long-term debt	**21,111**	25,582
Other liabilities	**568**	917
Total liabilities of consolidated VIEs for which creditors or beneficial interest holders do not have recourse to the general credit of Citigroup	**$ 32,335**	$ 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 September 30, 2020	Three Months Ended September 30, 2019	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019
Preferred stock at aggregate liquidation value				
Balance, beginning of period	**$ 17,980**	$ 17,980	**$ 17,980**	$ 18,460
Issuance of new preferred stock	**—**	1,500	**1,500**	1,500
Redemption of preferred stock	**—**	—	**(1,500)**	(480)
Balance, end of period	**$ 17,980**	$ 19,480	**$ 17,980**	$ 19,480
Common stock and additional paid-in capital				
Balance, beginning of period	**$ 107,699**	$ 107,688	**$ 107,871**	$ 107,953
Employee benefit plans	**93**	69	**(81)**	(201)
Preferred stock issuance costs	**—**	(4)	**2**	(4)
Other	**3**	19	**3**	24
Balance, end of period	**$ 107,795**	$ 107,772	**$ 107,795**	$ 107,772
Retained earnings				
Balance, beginning of period	**$ 163,431**	$ 158,321	**$ 165,369**	$ 151,347
Adjustment to opening balance, net of taxes[1]	**—**	—	**(3,076)**	151
Adjusted balance, beginning of period	**$ 163,431**	$ 158,321	**$ 162,293**	$ 151,498
Citigroup's net income	**3,230**	4,913	**7,068**	14,422
Common dividends[2]	**(1,074)**	(1,183)	**(3,226)**	(3,299)
Preferred dividends	**(284)**	(254)	**(828)**	(812)
Other	**—**	—	**(4)**	(12)
Balance, end of period	**$ 165,303**	$ 161,797	**$ 165,303**	$ 161,797
Treasury stock, at cost				
Balance, beginning of period	**$ (64,143)**	$ (51,427)	**$ (61,660)**	$ (44,370)
Employee benefit plans[3]	**6**	6	**448**	579
Treasury stock acquired[4]	**—**	(5,120)	**(2,925)**	(12,750)
Balance, end of period	**$ (64,137)**	$ (56,541)	**$ (64,137)**	$ (56,541)
Citigroup's accumulated other comprehensive income (loss)				
Balance, beginning of period	**$ (33,345)**	$ (35,203)	**$ (36,318)**	$ (37,170)
Citigroup's total other comprehensive income	**280**	(932)	**3,253**	1,035
Balance, end of period	**$ (33,065)**	$ (36,135)	**$ (33,065)**	$ (36,135)
Total Citigroup common stockholders' equity	**$ 175,896**	$ 176,893	**$ 175,896**	$ 176,893
Total Citigroup stockholders' equity	**$ 193,876**	$ 196,373	**$ 193,876**	$ 196,373
Noncontrolling interests				
Balance, beginning of period	**$ 680**	$ 751	**$ 704**	$ 854
Transactions between noncontrolling-interest shareholders and the related consolidated subsidiary	**—**	(34)	**—**	(133)
Transactions between Citigroup and the noncontrolling-interest shareholders	**—**	—	**(6)**	—
Net income attributable to noncontrolling-interest shareholders	**24**	15	**18**	50
Distributions paid to noncontrolling-interest shareholders	**(2)**	(3)	**(2)**	(40)
Other comprehensive income (loss) attributable to noncontrolling-interest shareholders	**19**	(33)	**7**	(26)
Other	**(2)**	1	**(2)**	(8)
Net change in noncontrolling interests	**$ 39**	$ (54)	**$ 15**	$ (157)
Balance, end of period	**$ 719**	$ 697	**$ 719**	$ 697
Total equity	**$ 194,595**	$ 197,070	**$ 194,595**	$ 197,070

(1) See Note 1 to the Consolidated Financial Statements for additional details.
(2) Common dividends declared were $0.51 per share in the first, second and third quarters of 2020. Common dividends declared were $0.45 per share in the first and second quarters of 2019 and $0.51 per share in the third 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 (UNAUDITED)

Citigroup Inc. and Subsidiaries

In millions of dollars	Nine Months Ended September 30, 2020	2019
Cash flows from operating activities of continuing operations		
Net income before attribution of noncontrolling interests	**$ 7,086**	$ 14,472
Net income attributable to noncontrolling interests	**18**	50
Citigroup's net income	**$ 7,068**	$ 14,422
Loss from discontinued operations, net of taxes	**(26)**	—
Income from continuing operations—excluding noncontrolling interests	**$ 7,094**	$ 14,422
Adjustments to reconcile net income to net cash provided by (used in) operating activities of continuing operations		
Depreciation and amortization	**2,886**	2,866
Provisions for credit losses on loans and unfunded lending commitments	**17,043**	6,113
Realized gains from sales of investments	**(1,484)**	(959)
Impairment losses on investments and other assets	**154**	28
Change in trading account assets	**(72,115)**	(50,790)
Change in trading account liabilities	**27,096**	(8,709)
Change in brokerage receivables net of brokerage payables	**(6,026)**	(19,994)
Change in loans HFS	**1,288**	287
Change in other assets	**85**	2,866
Change in other liabilities	**(1,070)**	2,360
Other, net	**2,795**	16,152
Total adjustments	**$ (29,348)**	$ (49,780)
Net cash used in operating activities of continuing operations	**$ (22,254)**	$ (35,358)
Cash flows from investing activities of continuing operations		
Change in securities borrowed and purchased under agreements to resell	**$ (38,036)**	$ 9,559
Change in loans	**23,488**	(11,518)
Proceeds from sales and securitizations of loans	**924**	2,717
Purchases of investments	**(276,084)**	(196,733)
Proceeds from sales of investments	**130,237**	96,400
Proceeds from maturities of investments	**78,476**	91,656
Capital expenditures on premises and equipment and capitalized software	**(2,300)**	(4,360)
Proceeds from sales of premises and equipment, subsidiaries and affiliates and repossessed assets	**25**	82
Other, net	**70**	105
Net cash used in investing activities of continuing operations	**$ (83,200)**	$ (12,092)
Cash flows from financing activities of continuing operations		
Dividends paid	**$ (4,024)**	$ (4,048)
Issuance of preferred stock	**1,500**	1,496
Redemption of preferred stock	**(1,500)**	(480)
Treasury stock acquired	**(2,925)**	(12,495)
Stock tendered for payment of withholding taxes	**(408)**	(360)
Change in securities loaned and sold under agreements to repurchase	**40,888**	17,279
Issuance of long-term debt	**65,599**	40,174
Payments and redemptions of long-term debt	**(47,521)**	(37,898)
Change in deposits	**192,033**	74,599
Change in short-term borrowings	**(7,610)**	2,884

CONSOLIDATED STATEMENT OF CASH FLOWS
(UNAUDITED) (Continued)

	Nine Months Ended September 30,	
In millions of dollars	**2020**	2019
Net cash provided by financing activities of continuing operations	**$ 236,032**	$ 81,151
Effect of exchange rate changes on cash and due from banks	**$ (802)**	$ (1,363)
Change in cash, due from banks and deposits with banks	**129,776**	32,338
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	**$ 323,695**	$ 220,443
Cash and due from banks (including segregated cash and other deposits)	**$ 25,308**	$ 24,086
Deposits with banks, net of allowance	**298,387**	196,357
Cash, due from banks and deposits with banks at end of period	**$ 323,695**	$ 220,443
Supplemental disclosure of cash flow information for continuing operations		
Cash paid during the period for income taxes	**$ 3,837**	$ 3,735
Cash paid during the period for interest	**11,502**	22,343
Non-cash investing activities[(1)]		
Transfers to loans HFS *(Other assets)* from loans	**$ 2,122**	$ 4,400

(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 September 30, 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 September 30, 2020 and for the three- and nine-month periods ended September 30, 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) and Citigroup's Quarterly Reports on Form 10-Q for the quarter ended March 31, 2020 (First Quarter of 2020 Form 10-Q) and for the second quarter ended June 30, 2020 (Second Quarter of 2020 Form 10-Q).

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

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

As noted above, the Notes to 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.

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

See Note 1 to the Consolidated Financial Statements in both Citigroup's 2019 Annual Report on Form 10-K and Citigroup's First Quarter of 2020 Form 10-Q for a summary of all of Citigroup's significant accounting policies.

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 introduced 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. Citi calculates a judgmental management adjustment, which is an alternative, more adverse scenario that only considers downside risk.

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, second or third quarters 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.

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. The ASU was adopted by Citi as of June 30, 2020 with prospective application and did not impact results in the second or third quarter of 2020.

Voluntary Change in the Accounting for Variable Post-Charge-Off Third-Party Collection Costs

During the second quarter of 2020, there was a change in Citi's ACL accounting estimate effected by a change in Citi's accounting principle for variable post-charge-off third-party collection costs. These costs were previously accounted for as a reduction in credit recoveries. As a result of this change, beginning July 1, 2020, these costs are accounted for as an increase in operating expenses. Determining a preferable method of accounting for such costs is a judgmental matter; however, Citi concluded that such a change in the method of accounting is preferable in Citi's circumstances as it better reflects the nature of these collection costs to investors. That is, these costs do not represent reduced payments from borrowers and are similar to Citi's other executory third-party vendor contracts that are accounted for as operating expenses as incurred.

As a result of this accounting change, Citi had a one-time consumer ACL release of approximately $426 million in the second quarter of 2020 related to its U.S. card portfolios. This policy change impacts the ACL estimate as the level of credit recoveries used in the ACL estimation process will increase as a result of the collection costs being reclassified to operating expenses. Since the validation of the models determining the impact of variable post-charge-off third-party collection costs primarily related to Citi's international card portfolios was not completed as of the second quarter of 2020, Citi reflected this adjustment in its third quarter ACL provision to include an incremental release of $122 million. These ACL releases reflect the impact to Citi's ACL estimate of the revised credit recoveries incorporated in the ACL models. Aside from this impact on the ACL estimation process, this change in accounting also resulted in a reclassification of approximately $50 million of collection costs from credit recoveries to operating expenses each quarter, beginning in the third quarter of 2020.

2. DISCONTINUED OPERATIONS AND SIGNIFICANT DISPOSALS

The Company's results from *Discontinued operations* consisted of residual activities related to previously divested operations. All *Discontinued operations* results are recorded within *Corporate/Other*.

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
In millions of dollars	**2020**	2019	**2020**	2019
Total revenues, net of interest expense	**$ —**	$ —	**$ —**	$ —
Loss from discontinued operations[1]	**$ (7)**	$ (15)	**$ (26)**	$ (27)
Benefit for income taxes[2]	**—**	—	**—**	(27)
Income (loss) from discontinued operations, net of taxes	**$ (7)**	$ (15)	**$ (26)**	$ —

(1) Amounts in each period relate to the sale of the Egg Banking business in 2011.

(2) The benefit for income taxes, recorded in 2019, includes a settlement for a tax audit related to the German retail banking operations, which were divested in 2008.

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 September 30,						Identifiable assets	
	Revenues, net of interest expense[(1)]		**Provision (benefits) for income taxes**		**Income (loss) from continuing operations**[(2)]			
In millions of dollars, except identifiable assets in billions	**2020**	2019	**2020**	2019	**2020**	2019	**September 30, 2020**	December 31, 2019
Global Consumer Banking	**$ 7,173**	$ 8,289	**$ 338**	$ 468	**$ 1,058**	$ 1,503	**$ 435**	$ 407
Institutional Clients Group	**10,353**	9,851	**818**	858	**2,919**	3,229	**1,703**	1,447
Corporate/Other	**(224)**	434	**(341)**	(247)	**(716)**	211	**96**	97
Total	**$ 17,302**	$ 18,574	**$ 815**	$ 1,079	**$ 3,261**	$ 4,943	**$ 2,234**	$ 1,951

	Nine Months Ended September 30,					
	Revenues, net of interest expense[(3)]		**Provision (benefits) for income taxes**		**Income (loss) from continuing operations**[(4)]	
In millions of dollars	**2020**	2019	**2020**	2019	**2020**	2019
Global Consumer Banking	**$ 22,686**	$ 24,512	**$ (93)**	$ 1,227	**$ (95)**	$ 4,124
Institutional Clients Group	**34,974**	29,924	**2,332**	2,763	**8,425**	10,066
Corporate/Other	**139**	1,472	**(717)**	(263)	**(1,218)**	282
Total	**$ 57,799**	$ 55,908	**$ 1,522**	$ 3,727	**$ 7,112**	$ 14,472

(1) Includes total revenues, net of interest expense (excluding *Corporate/Other*), in *North America* of $8.4 billion and $8.4 billion; in *EMEA* of $3.1 billion and $3.1 billion; in *Latin America* of $2.2 billion and $2.6 billion and in *Asia* of $3.8 billion and $4.0 billion for the three months ended September 30, 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 $1.6 billion and $2.0 billion; in the *ICG* results of $0.8 billion and $0.2 billion; and in the *Corporate/Other* results of $(0.1) billion and $0.0 billion for the three months ended September 30, 2020 and 2019, respectively.

(3) Includes total revenues, net of interest expense, in *North America* of $28.3 billion and $25.3 billion; in *EMEA* of $9.9 billion and $9.3 billion; in *Latin America* of $7.0 billion and $7.7 billion; and in *Asia* of $12.3 billion and $12.1 billion for the nine months ended September 30, 2020 and 2019, respectively. Regional numbers exclude *Corporate/Other*, which largely operates within the U.S.

(4) Includes pretax provisions for credit losses and for benefits and claims in the *GCB* results of $10.3 billion and $5.9 billion; in the *ICG* results of $6.7 billion and $0.3 billion; and in the *Corporate/Other* results of $220 million and $(62) million for the nine months ended September 30, 2020 and 2019, respectively.

4. INTEREST REVENUE AND EXPENSE

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
In millions of dollars	**2020**	2019	**2020**	2019
Interest revenue				
Loan interest, including fees	**$ 9,421**	$ 11,993	**$ 30,820**	$ 35,942
Deposits with banks	**116**	736	**802**	2,079
Securities borrowed and purchased under agreements to resell	**352**	1,745	**1,961**	5,422
Investments, including dividends	**1,870**	2,411	**6,248**	7,464
Trading account assets[1]	**1,457**	1,893	**4,720**	5,719
Other interest	**98**	399	491	1,339
Total interest revenue	**$ 13,314**	$ 19,177	**$ 45,042**	$ 57,965
Interest expense				
Deposits[2]	**$ 1,293**	$ 3,369	**$ 5,376**	$ 9,680
Securities loaned and sold under agreements to repurchase	**292**	1,630	**1,830**	4,943
Trading account liabilities[1]	**123**	345	**506**	992
Short-term borrowings and other interest-bearing liabilities	**88**	609	**612**	1,976
Long-term debt	**1,025**	1,583	**3,653**	5,024
Total interest expense	**$ 2,821**	$ 7,536	**$ 11,977**	$ 22,615
Net interest revenue	**$ 10,493**	$ 11,641	**$ 33,065**	$ 35,350
Provision for credit losses on loans	**1,809**	2,062	**15,949**	6,095
Net interest revenue after provision for credit losses on loans	**$ 8,684**	$ 9,579	**$ 17,116**	$ 29,255

(1) 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.

(2) Includes deposit insurance fees and charges of $375 million and $199 million for the three months ended September 30, 2020 and 2019, respectively, and $870 million and $581 million for the nine months ended September 30, 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 September 30,				**Nine Months Ended September 30,**			
	2020				**2020**			
In millions of dollars	**ICG**	**GCB**	**Corporate/ Other**	**Total**	**ICG**	**GCB**	**Corporate/ Other**	**Total**
Investment banking	**$ 1,076**	**$ —**	**$ —**	**$ 1,076**	**$ 3,474**	**$ —**	**$ —**	**$ 3,474**
Brokerage commissions	**486**	**260**	**—**	**746**	**1,545**	**713**	**—**	**2,258**
Credit- and bank-card income								
Interchange fees	**158**	**1,842**	**—**	**2,000**	**542**	**5,264**	**—**	**5,806**
Card-related loan fees	**4**	**157**	**—**	**161**	**18**	**455**	**—**	**473**
Card rewards and partner payments[1]	**(73)**	**(2,073)**	**—**	**(2,146)**	**(292)**	**(5,911)**	**—**	**(6,203)**
Deposit-related fees[2]	**246**	**79**	**—**	**325**	**699**	**279**	**—**	**978**
Transactional service fees	**217**	**20**	**—**	**237**	**659**	**64**	**—**	**723**
Corporate finance[3]	**77**	**—**	**—**	**77**	**372**	**—**	**—**	**372**
Insurance distribution revenue	**4**	**129**	**—**	**133**	**9**	**367**	**—**	**376**
Insurance premiums	**—**	**25**	**—**	**25**	**—**	**99**	**—**	**99**
Loan servicing	**16**	**4**	**10**	**30**	**54**	**26**	**20**	**100**
Other	**34**	**55**	**—**	**89**	**91**	**157**	**3**	**251**
Total commissions and fees[4]	**$ 2,245**	**$ 498**	**$ 10**	**$ 2,753**	**$ 7,171**	**$ 1,513**	**$ 23**	**$ 8,707**

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2019				2019			
In millions of dollars	ICG	GCB	Corporate/ Other	Total	ICG	GCB	Corporate/ Other	Total
Investment banking	$ 900	$ —	$ —	$ 900	$ 2,755	$ —	$ —	$ 2,755
Brokerage commissions	456	228	—	684	1,365	625	—	1,990
Credit- and bank-card income								
Interchange fees	326	2,179	—	2,505	919	6,359	—	7,278
Card-related loan fees	15	191	—	206	44	534	—	578
Card rewards and partner payments[1]	(192)	(2,252)	—	(2,444)	(520)	(6,590)	—	(7,110)
Deposit-related fees[2]	272	119	—	391	800	361	—	1,161
Transactional service fees	194	30	—	224	594	90	—	684
Corporate finance[3]	129	—	—	129	459	—	—	459
Insurance distribution revenue	4	137	—	141	10	398	—	408
Insurance premiums	—	41	—	41	—	133	—	133
Loan servicing	1	11	7	19	51	41	16	108
Other	39	70	1	110	69	198	2	269
Total commissions and fees[4]	$ 2,144	$ 754	$ 8	$ 2,906	$ 6,546	$ 2,149	$ 18	$ 8,713

(1) Citi's consumer credit card programs have certain partner-sharing agreements that vary by partner. These agreements are subject to contractually based performance thresholds that, if met, would require Citi to make ongoing payments to the partner. The threshold is based on the profitability of a program and is generally calculated based on predefined program revenues less predefined program expenses. In most of Citi's partner-sharing agreements, program expenses include net credit losses and, to the extent that the increase in net credit losses reduces Citi's liability for the partners' share for a given program year, would generally result in lower payments to partners in total for that year and vice versa. Further, in some instances, other partner payments are based on program sales and new account acquisitions.

(2) Includes overdraft fees of $23 million and $33 million for the three months ended September 30, 2020 and 2019, respectively, and $74 million and $94 million for the nine months ended September 30, 2020 and 2019, respectively. Overdraft fees are accounted for under ASC 310.

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

(4) *Commissions and fees* includes $(1,816) million and $(2,009) million not accounted for under ASC 606, *Revenue from Contracts with Customers*, for the three months ended September 30, 2020 and 2019, respectively, and $(5,044) million and $(5,728) million for the nine months ended September 30, 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 September 30,				**Nine Months Ended September 30,**			
	2020				**2020**			
In millions of dollars	**ICG**	**GCB**	**Corporate/ Other**	**Total**	**ICG**	**GCB**	**Corporate/ Other**	**Total**
Custody fees	**$ 427**	**$ 8**	**$ 2**	**$ 437**	**$ 1,165**	**$ 22**	**$ 38**	**$ 1,225**
Fiduciary fees	**167**	**153**	**—**	**320**	**497**	**441**	**—**	**938**
Guarantee fees	**132**	**2**	**1**	**135**	**393**	**5**	**4**	**402**
Total administration and other fiduciary fees[1]	**$ 726**	**$ 163**	**$ 3**	**$ 892**	**$ 2,055**	**$ 468**	**$ 42**	**$ 2,565**

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2019				2019			
In millions of dollars	ICG	GCB	Corporate/ Other	Total	ICG	GCB	Corporate/ Other	Total
Custody fees	$ 370	$ 5	$ 20	$ 395	$ 1,117	$ 12	$ 54	$ 1,183
Fiduciary fees	171	160	12	343	485	460	24	969
Guarantee fees	139	2	1	142	425	6	5	436
Total administration and other fiduciary fees[1]	$ 680	$ 167	$ 33	$ 880	$ 2,027	$ 478	$ 83	$ 2,588

(1) *Administration and other fiduciary fees* includes $135 million and $142 million for the three months ended September 30, 2020 and 2019, respectively, and $402 million and $436 million for the nine months ended September 30, 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 and characterized below based on the primary risk managed by each trading desk. 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 September 30,		Nine Months Ended September 30,	
In millions of dollars	**2020**	2019	**2020**	2019
Interest rate risks[1]	**$ 971**	$ 1,370	**$ 4,791**	$ 3,057
Foreign exchange risks[2]	**960**	794	**3,069**	3,095
Equity risks[3]	**157**	418	**1,078**	809
Commodity and other risks[4]	**270**	244	**967**	447
Credit products and risks[5]	**150**	(24)	**2,021**	72
Total	**$ 2,508**	$ 2,802	**$ 11,926**	$ 7,480

(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 September 30,							
	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	**$ —**	$ 1	**$ 38**	$ 37	**$ —**	$ —	**$ 2**	$ 2
Interest cost on benefit obligation	**87**	112	**59**	70	**4**	6	**22**	25
Expected return on plan assets	**(205)**	(208)	**(62)**	(72)	**(4)**	(5)	**(18)**	(20)
Amortization of unrecognized:								
Prior service cost (benefit)	**—**	1	**(1)**	(1)	**—**	—	**(3)**	(2)
Net actuarial loss	**62**	52	**17**	15	**—**	—	**5**	5
Settlement (gain) loss[1]	**—**	1	**(6)**	(5)	**—**	—	**—**	—
Total net (benefit) expense	**$ (56)**	$ (41)	**$ 45**	$ 44	**$ —**	$ 1	**$ 8**	$ 10

(1) (Gains) losses due to settlement relate to repositioning and divestiture activities.

	Nine Months Ended September 30,							
	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	**$ —**	$ 1	**$ 109**	$ 108	**$ —**	$ —	**$ 6**	$ 6
Interest cost on benefit obligation	**294**	365	**184**	218	**14**	19	**68**	77
Expected return on plan assets	**(619)**	(613)	**(183)**	(208)	**(13)**	(14)	**(56)**	(62)
Amortization of unrecognized:								
Prior service cost (benefit)	**1**	1	**(4)**	(3)	**—**	—	**(7)**	(7)
Net actuarial loss	**171**	144	**51**	45	**—**	—	**15**	16
Curtailment loss (gain)[1]	**—**	1	**—**	(5)	**—**	—	**—**	—
Settlement (gain) loss[1]	**—**	—	**(3)**	2	**—**	—	**—**	—
Total net (benefit) expense	**$ (153)**	$ (101)	**$ 154**	$ 157	**$ 1**	$ 5	**$ 26**	$ 30

(1) Curtailment and settlement relate to repositioning and divestiture activities.

Funded Status and *Accumulated Other Comprehensive Income (AOCI)*

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

	Nine Months Ended September 30, 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
First quarter activity	(78)	(934)	(13)	(255)
Second quarter activity	511	473	—	105
Projected benefit obligation at June 30, 2020—Significant Plans	$ 13,860	$ 5,576	$ 679	$ 911
Benefits earned during the period	—	22	—	1
Interest cost on benefit obligation	87	50	4	20
Actuarial loss (gain)	71	(26)	1	(20)
Benefits paid, net of participants' contributions and government subsidy	(229)	(16)	(11)	(12)
Plan amendments	—	—	(104)	—
Settlement gain[(2)]	—	(81)	—	—
Foreign exchange impact and other	—	110	—	39
Projected benefit obligation at period end—Significant Plans	$ 13,789	$ 5,635	$ 569	$ 939
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
First quarter activity	(864)	(720)	(24)	(270)
Second quarter activity	576	376	3	94
Plan assets at fair value at June 30, 2020—Significant Plans	$ 12,429	$ 5,863	$ 324	$ 942
Actual return on plan assets	494	23	9	23
Company contributions, net of reimbursements	13	18	—	—
Benefits paid, net of participants' contributions and government subsidy	(229)	(16)	(11)	(12)
Settlements gain[(2)]	—	(81)	—	—
Foreign exchange impact and other	—	101	—	40
Plan assets at fair value at period end—Significant Plans	$ 12,707	$ 5,908	$ 322	$ 993
Funded status of the Significant Plans				
Qualified plans[(1)]	$ (369)	$ 273	$ (247)	$ 54
Nonqualified plans	(713)	—	—	—
Funded status of the plans at period end—Significant Plans	$ (1,082)	$ 273	$ (247)	$ 54
Net amount recognized at period end				
Benefit asset	$ —	$ 895	$ —	$ 54
Benefit liability	(1,082)	(622)	(247)	—
Net amount recognized on the balance sheet—Significant Plans	$ (1,082)	$ 273	$ (247)	$ 54
Amounts recognized in *AOCI* at period end				
Prior service benefit	$ —	$ 7	$ 104	$ 54
Net actuarial (loss) gain	(7,653)	(883)	33	(281)
Net amount recognized in equity (pretax)—Significant Plans	$ (7,653)	$ (876)	$ 137	$ (227)
Accumulated benefit obligation at period end—Significant Plans	$ 13,786	$ 5,329	$ 569	$ 939

(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.

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

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 September 30, 2020	Nine Months Ended September 30, 2020
Beginning of period balance, net of tax[1][2]	**$ (7,172)**	**$ (6,809)**
Actuarial assumptions changes and plan experience	**(26)**	**(826)**
Net asset gain due to difference between actual and expected returns	**271**	**249**
Net amortization	**81**	**229**
Prior service cost	**104**	**120**
Curtailment/settlement gain[3]	**(5)**	**(2)**
Foreign exchange impact and other	**(80)**	**64**
Change in deferred taxes, net	**(99)**	**49**
Change, net of tax	**$ 246**	**$ (117)**
End of period balance, net of tax[1][2]	**$ (6,926)**	**$ (6,926)**

(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:

	Three Months Ended	
Net (benefit) expense assumed discount rates during the period	**Sept. 30, 2020**	Sept.. 30, 2019
U.S. plans		
Qualified pension	**2.60 %**	3.45 %
Nonqualified pension	**2.55**	3.50
Postretirement	**2.45**	3.35
Non-U.S. plans		
Pension	**0.20-8.40**	0.30-9.55
Weighted average	**3.68**	4.52
Postretirement	**8.80**	9.70

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	**Sept. 30, 2020**	Jun. 30, 2020	Mar. 31, 2020
U.S. plans			
Qualified pension	**2.55 %**	2.60 %	3.20 %
Nonqualified pension	**2.50**	2.55	3.25
Postretirement	**2.35**	2.45	3.20
Non-U.S. plans			
Pension	**0.05-8.55**	0.20-8.40	0.45-9.45
Weighted average	**3.74**	3.68	4.38
Postretirement	**9.00**	8.80	9.75

Sensitivities of Certain Key Assumptions

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

	Three Months Ended September 30, 2020	
In millions of dollars	**One-percentage-point increase**	**One-percentage-point decrease**
Pension		
U.S. plans	**$ 9**	**$ (14)**
Non-U.S. plans	**(2)**	**3**
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 nine 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 nine months ended September 30, 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 nine months ended September 30	**$ 42**	$ 467	**$ 111**	$ 98	**$ —**	$ 4	**$ 6**	$ 225
Company contributions made during the remainder of the year	**—**	14	**—**	52	**—**	—	**—**	—
Company contributions expected to be made during the remainder of the year	**16**	—	**37**	—	**—**	—	**3**	—

(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 September 30,		Nine Months Ended September 30,	
In millions of dollars	**2020**	2019	**2020**	2019
U.S. plans	**$ 101**	$ 99	**$ 304**	296
Non-U.S. plans	**73**	71	**223**	209

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 September 30,		Nine Months Ended September 30,	
In millions of dollars	**2020**	2019	**2020**	2019
Service-related expense				
Interest cost on benefit obligation	**$ 1**	$ —	**$ 1**	$ 1
Expected return on plan assets	**—**	—	**—**	(1)
Amortization of unrecognized:				
Net actuarial loss	**—**	1	**1**	2
Total service-related expense	**$ 1**	$ 1	**$ 2**	$ 2
Non-service-related expense	**$ 4**	$ 4	**$ 12**	$ 10
Total net expense	**$ 5**	$ 5	**$ 14**	$ 12

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 September 30,		Nine Months Ended September 30,	
In millions of dollars, except per share amounts	**2020**	2019	**2020**	2019
Earnings per common share				
Income from continuing operations before attribution of noncontrolling interests	**$ 3,261**	$ 4,943	**$ 7,112**	$ 14,472
Less: Noncontrolling interests from continuing operations	**24**	15	**18**	50
Net income from continuing operations (for EPS purposes)	**$ 3,237**	$ 4,928	**$ 7,094**	$ 14,422
Loss from discontinued operations, net of taxes	**(7)**	(15)	**(26)**	—
Citigroup's net income	**$ 3,230**	$ 4,913	**$ 7,068**	$ 14,422
Less: Preferred dividends[1]	**284**	254	**828**	812
Net income available to common shareholders	**$ 2,946**	$ 4,659	**$ 6,240**	$ 13,610
Less: Dividends and undistributed earnings allocated to employee restricted and deferred shares with rights to dividends, applicable to basic EPS	**18**	27	**50**	88
Net income allocated to common shareholders for basic EPS	**$ 2,928**	$ 4,632	**$ 6,190**	$ 13,522
Weighted-average common shares outstanding applicable to basic EPS *(in millions)*	**2,081.8**	2,220.8	**2,087.1**	2,282.4
Basic earnings per share[2]				
Income from continuing operations	**$ 1.41**	$ 2.09	**$ 2.98**	$ 5.92
Discontinued operations	**—**	(0.01)	**(0.01)**	—
Net income per share—basic	**$ 1.41**	$ 2.09	**$ 2.97**	$ 5.92
Diluted earnings per share				
Net income allocated to common shareholders for basic EPS	**$ 2,928**	$ 4,632	**$ 6,190**	$ 13,522
Add back: Dividends allocated to employee restricted and deferred shares with rights to dividends that are forfeitable	**7**	9	**21**	24
Net income allocated to common shareholders for diluted EPS	**$ 2,935**	$ 4,641	**$ 6,211**	$ 13,546
Weighted-average common shares outstanding applicable to basic EPS *(in millions)*	**2,081.8**	2,220.8	**2,087.1**	2,282.4
Effect of dilutive securities				
Options[3]	**—**	0.1	**—**	0.1
Other employee plans	**12.5**	16.2	**13.0**	15.7
Adjusted weighted-average common shares outstanding applicable to diluted EPS *(in millions)*[4]	**2,094.3**	2,237.1	**2,100.1**	2,298.2
Diluted earnings per share[2]				
Income from continuing operations	**$ 1.40**	$ 2.08	**$ 2.97**	$ 5.89
Discontinued operations	**—**	(0.01)	**(0.01)**	—
Net income per share—diluted	**$ 1.40**	$ 2.07	**$ 2.96**	$ 5.89

(1) On October 22, 2020, Citi declared preferred dividends of approximately $267 million for the fourth quarter of 2020. 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 third quarter of 2020, weighted-average options to purchase 0.1 million shares of common stock were outstanding but not included in the computation of earnings per share because the weighted-average exercise price of $56.25 per share was anti-dilutive. During the third quarter of 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	**September 30, 2020**	December 31, 2019
Securities purchased under agreements to resell	**$ 205,383**	$ 169,874
Deposits paid for securities borrowed	**83,979**	81,448
Total, net[1]	**$ 289,362**	$ 251,322
Allowance for credit losses on securities purchased and borrowed[2]	**(4)**	—
Total, net of allowance	**$ 289,358**	$ 251,322

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

In millions of dollars	**September 30, 2020**	December 31, 2019
Securities sold under agreements to repurchase	**$ 194,534**	$ 155,164
Deposits received for securities loaned	**12,693**	11,175
Total, net[1]	**$ 207,227**	$ 166,339

(1) The above tables do not include securities-for-securities lending transactions of $5.1 billion and $6.3 billion at September 30, 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*.

(2) See Note 14 to the Consolidated Financial Statements for further information.

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 September 30, 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	**$ 320,598**	**$ 115,215**	**$ 205,383**	**$ 166,638**	**$ 38,745**
Deposits paid for securities borrowed	**89,622**	**5,643**	**83,979**	**19,958**	**64,021**
Total	**$ 410,220**	**$ 120,858**	**$ 289,362**	**$ 186,596**	**$ 102,766**

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	**$ 309,749**	**$ 115,215**	**$ 194,534**	**$ 99,500**	**$ 95,034**
Deposits received for securities loaned	**18,336**	**5,643**	**12,693**	**3,978**	**8,715**
Total	**$ 328,085**	**$ 120,858**	**$ 207,227**	**$ 103,478**	**$ 103,749**

	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 September 30, 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	**$ 152,290**	**$ 76,162**	**$ 39,462**	**$ 41,835**	**$ 309,749**
Deposits received for securities loaned	**11,412**	**651**	**2,421**	**3,852**	**18,336**
Total	**$ 163,702**	**$ 76,813**	**$ 41,883**	**$ 45,687**	**$ 328,085**

	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:

	As of September 30, 2020		
In millions of dollars	**Repurchase agreements**	**Securities lending agreements**	**Total**
U.S. Treasury and federal agency securities	**$ 109,674**	**$ 2**	**$ 109,676**
State and municipal securities	**896**	**1**	**897**
Foreign government securities	**115,031**	**309**	**115,340**
Corporate bonds	**19,891**	**370**	**20,261**
Equity securities	**15,124**	**15,249**	**30,373**
Mortgage-backed securities	**39,652**	**—**	**39,652**
Asset-backed securities	**3,792**	**—**	**3,792**
Other	**5,689**	**2,405**	**8,094**
Total	**$ 309,749**	**$ 18,336**	**$ 328,085**

	As of December 31, 2019		
In millions of dollars	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	**September 30, 2020**	December 31, 2019
Receivables from customers	**$ 14,678**	$ 15,912
Receivables from brokers, dealers and clearing organizations	**36,932**	23,945
Total brokerage receivables[1]	**$ 51,610**	$ 39,857
Payables to customers	**$ 40,503**	$ 37,613
Payables to brokers, dealers and clearing organizations	**13,825**	10,988
Total brokerage payables[1]	**$ 54,328**	$ 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	**September 30, 2020**	December 31, 2019
Debt securities available-for-sale (AFS)	**$ 343,690**	$ 280,265
Debt securities held-to-maturity (HTM)(1)	**96,065**	80,775
Marketable equity securities carried at fair value(2)	**693**	458
Non-marketable equity securities carried at fair value(2)	**505**	704
Non-marketable equity securities measured using the measurement alternative(3)	**865**	700
Non-marketable equity securities carried at cost(4)	**5,706**	5,661
Total investments	**$ 447,524**	$ 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 "Non-Marketable Equity Securities Not Carried at Fair Value" 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 September 30,		**Nine Months Ended September 30,**	
In millions of dollars	**2020**	2019	**2020**	2019
Taxable interest	**$ 1,752**	$ 2,291	**$ 5,915**	$ 6,987
Interest exempt from U.S. federal income tax	**85**	75	**231**	328
Dividend income	**33**	45	**102**	149
Total interest and dividend income	**$ 1,870**	$ 2,411	**$ 6,248**	$ 7,464

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

	Three Months Ended September 30,		**Nine Months Ended September 30,**	
In millions of dollars	**2020**	2019	**2020**	2019
Gross realized investment gains	**$ 381**	$ 393	**$ 1,619**	$ 1,036
Gross realized investment losses	**(77)**	(32)	**(135)**	(77)
Net realized gains on sale of investments	**$ 304**	$ 361	**$ 1,484**	$ 959

Debt Securities Available-for-Sale

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

	September 30, 2020					December 31, 2019			
In millions of dollars	**Amortized cost**	**Gross unrealized gains**	**Gross unrealized losses**	**Allowance for credit losses**	**Fair value**	Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value
Debt securities AFS									
Mortgage-backed securities[1]									
U.S. government-sponsored agency guaranteed	**$ 41,621**	**$ 1,186**	**$ 89**	**$ —**	**$ 42,718**	$ 34,963	$ 547	$ 280	$ 35,230
Non-U.S. residential	**578**	**3**	**—**	**—**	**581**	789	3	—	792
Commercial	**61**	**—**	**—**	**—**	**61**	75	—	—	75
Total mortgage-backed securities	**$ 42,260**	**$ 1,189**	**$ 89**	**$ —**	**$ 43,360**	$ 35,827	$ 550	$ 280	$ 36,097
U.S. Treasury and federal agency securities									
U.S. Treasury	**$ 157,561**	**$ 2,471**	**$ 12**	**$ —**	**$ 160,020**	$ 106,429	$ 50	$ 380	$ 106,099
Agency obligations	**96**	**1**	**—**	**—**	**97**	5,336	3	20	5,319
Total U.S. Treasury and federal agency securities	**$ 157,657**	**$ 2,472**	**$ 12**	**$ —**	**$ 160,117**	$ 111,765	$ 53	$ 400	$ 111,418
State and municipal	**$ 4,204**	**$ 13**	**$ 101**	**$ —**	**$ 4,116**	$ 5,024	$ 43	$ 89	$ 4,978
Foreign government	**119,261**	**1,501**	**199**	**—**	**120,563**	110,958	586	241	111,303
Corporate	**10,676**	**153**	**94**	**5**	**10,730**	11,266	52	101	11,217
Asset-backed securities[1]	**277**	**4**	**6**	**—**	**275**	524	—	2	522
Other debt securities	**4,523**	**6**	**—**	**—**	**4,529**	4,729	1	—	4,730
Total debt securities AFS	**$ 338,858**	**$ 5,338**	**$ 501**	**$ 5**	**$ 343,690**	$ 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
September 30, 2020						
Debt securities AFS						
Mortgage-backed securities						
U.S. government-sponsored agency guaranteed	**$ 6,833**	**$ 67**	**$ 318**	**$ 22**	**$ 7,151**	**$ 89**
Non-U.S. residential	**4**	**—**	**—**	**—**	**4**	**—**
Commercial	**10**	**—**	**5**	**—**	**15**	**—**
Total mortgage-backed securities	**$ 6,847**	**$ 67**	**$ 323**	**$ 22**	**$ 7,170**	**$ 89**
U.S. Treasury and federal agency securities	**24,817**	**12**	**—**	**—**	**24,817**	**12**
State and municipal	**3,302**	**100**	**24**	**1**	**3,326**	**101**
Foreign government	**28,879**	**144**	**2,902**	**55**	**31,781**	**199**
Corporate	**1,836**	**92**	**24**	**2**	**1,860**	**94**
Asset-backed securities	**240**	**6**	**1**	**—**	**241**	**6**
Other debt securities	**356**	**—**	**—**	**—**	**356**	**—**
Total debt securities AFS	**$ 66,277**	**$ 421**	**$ 3,274**	**$ 80**	**$ 69,551**	**$ 501**
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:

In millions of dollars	September 30, 2020 Amortized cost	September 30, 2020 Fair value	December 31, 2019 Amortized cost	December 31, 2019 Fair value
Mortgage-backed securities[1]				
Due within 1 year	**$ 40**	**$ 40**	$ 20	$ 20
After 1 but within 5 years	**572**	**575**	573	574
After 5 but within 10 years	**702**	**776**	594	626
After 10 years[2]	**40,946**	**41,969**	34,640	34,877
Total	**$ 42,260**	**$ 43,360**	$ 35,827	$ 36,097
U.S. Treasury and federal agency securities				
Due within 1 year	**$ 51,342**	**$ 51,490**	$ 40,757	$ 40,688
After 1 but within 5 years	**104,573**	**106,840**	70,128	69,850
After 5 but within 10 years	**1,742**	**1,787**	854	851
After 10 years[2]	**—**	**—**	26	29
Total	**$ 157,657**	**$ 160,117**	$ 111,765	$ 111,418
State and municipal				
Due within 1 year	**$ 396**	**$ 397**	$ 932	$ 932
After 1 but within 5 years	**535**	**544**	714	723
After 5 but within 10 years	**251**	**276**	195	215
After 10 years[2]	**3,022**	**2,899**	3,183	3,108
Total	**$ 4,204**	**$ 4,116**	$ 5,024	$ 4,978
Foreign government				
Due within 1 year	**$ 47,862**	**$ 47,993**	$ 42,611	$ 42,666
After 1 but within 5 years	**63,739**	**64,797**	58,820	59,071
After 5 but within 10 years	**5,766**	**5,845**	8,192	8,198
After 10 years[2]	**1,894**	**1,928**	1,335	1,368
Total	**$ 119,261**	**$ 120,563**	$ 110,958	$ 111,303
All other[3]				
Due within 1 year	**$ 5,696**	**$ 5,720**	$ 7,306	$ 7,311
After 1 but within 5 years	**8,533**	**8,615**	8,279	8,275
After 5 but within 10 years	**1,120**	**1,108**	818	797
After 10 years[2]	**127**	**91**	116	86
Total	**$ 15,476**	**$ 15,534**	$ 16,519	$ 16,469
Total debt securities AFS	**$ 338,858**	**$ 343,690**	$ 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 September 30, 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, net[1]		Gross unrealized gains		Gross unrealized losses		Fair value
September 30, 2020								
Debt securities HTM								
Mortgage-backed securities[2]								
U.S. government-sponsored agency guaranteed	$	**46,833**	$	**2,422**	$	**12**	$	**49,243**
Non-U.S. residential		**1,099**		**3**		**2**		**1,100**
Commercial		**774**		**1**		**1**		**774**
Total mortgage-backed securities	$	**48,706**	$	**2,426**	$	**15**	$	**51,117**
U.S. Treasury securities[3]	$	**14,917**	$	**2**	$	**26**	$	**14,893**
State and municipal		**9,197**		**693**		**17**		**9,873**
Foreign government		**1,739**		**74**		**—**		**1,813**
Asset-backed securities[2]		**21,506**		**5**		**193**		**21,318**
Total debt securities HTM, net	$	**96,065**	$	**3,200**	$	**251**	$	**99,014**
December 31, 2019								
Debt securities HTM								
Mortgage-backed securities[2]								
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[2]		21,479		12		59		21,432
Total debt securities HTM	$	80,775	$	1,557	$	109	$	82,223

(1) Amortized cost is reported net of allowance for credit losses of $98 million at September 30, 2020. There was no allowance as of December 31, 2019.
(2) 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.
(3) In August 2020, Citibank transferred $13.1 billion of investments in U.S. Treasury securities from AFS classification to HTM classification in accordance with ASC 320. At the time of transfer, the securities were in an unrealized gain position of $144 million. The gain amounts will remain in *AOCI* and will be amortized over the remaining life of the securities.

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

In millions of dollars	**September 30, 2020**		December 31, 2019	
	Amortized cost[1]	**Fair value**	**Amortized cost**	**Fair value**
Mortgage-backed securities				
Due within 1 year	**$ 113**	**$ 116**	$ 17	$ 17
After 1 but within 5 years	**367**	**382**	458	463
After 5 but within 10 years	**1,640**	**1,823**	1,662	1,729
After 10 years[2]	**46,586**	**48,796**	46,121	47,081
Total	**$ 48,706**	**$ 51,117**	$ 48,258	$ 49,290
U.S. Treasury securities				
Due within 1 year	**$ —**	**$ —**	$ —	$ —
After 1 but within 5 years	**14,917**	**14,893**	—	—
After 5 but within 10 years	**—**	**—**	—	—
After 10 years[2]	**—**	**—**	—	—
Total	**$ 14,917**	**$ 14,893**	$ —	$ —
State and municipal				
Due within 1 year	**$ 7**	**$ 7**	$ 2	$ 26
After 1 but within 5 years	**90**	**93**	123	160
After 5 but within 10 years	**660**	**699**	597	590
After 10 years[2]	**8,440**	**9,074**	8,382	8,755
Total	**$ 9,197**	**$ 9,873**	$ 9,104	$ 9,531
Foreign government				
Due within 1 year	**$ 284**	**$ 291**	$ 650	$ 652
After 1 but within 5 years	**1,455**	**1,522**	1,284	1,318
After 5 but within 10 years	**—**	**—**	—	—
After 10 years[2]	**—**	**—**	—	—
Total	**$ 1,739**	**$ 1,813**	$ 1,934	$ 1,970
All other[3]				
Due within 1 year	**$ —**	**$ —**	$ —	$ —
After 1 but within 5 years	**—**	**—**	—	—
After 5 but within 10 years	**10,312**	**10,243**	8,545	8,543
After 10 years[2]	**11,194**	**11,075**	12,934	12,889
Total	**$ 21,506**	**$ 21,318**	$ 21,479	$ 21,432
Total debt securities HTM	**$ 96,065**	**$ 99,014**	$ 80,775	$ 82,223

(1) Amortized cost is reported net of allowance for credit losses of $98 million at September 30, 2020.
(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 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 September 30, 2020.

There were no purchased credit-deteriorated HTM debt securities held by the Company as of September 30, 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 September 30, 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 more-likely-than-not be 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 September 30, 2020** AFS	Other assets	Total	Three Months Ended September 30, 2019 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	**30**	**—**	**30**	13	—	—	13
Total impairment losses recognized in earnings	**$ 30**	**$ —**	**$ 30**	$ 13	$ —	$ —	$ 13

In millions of dollars	**Nine Months Ended September 30, 2020** AFS	Other assets	Total	Nine Months Ended September 30, 2019 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	**101**	**—**	**101**	18	—	—	18
Total impairment losses recognized in earnings	**$ 101**	**$ —**	**$ 101**	$ 18	$ —	$ —	$ 18

The following are the three- and nine-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 at September 30, 2019:

Three Months Ended September 30, 2019	Cumulative OTTI credit losses recognized in earnings on debt securities still held				
In millions of dollars	June 30, 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	September 30, 2019 balance
AFS debt securities					
Mortgage-backed securities[(1)]	$ 1	$ —	$ —	$ —	$ 1
State and municipal	—	—	—	—	—
Foreign government securities	—	—	—	—	—
Corporate	4	—	—	—	4
All other debt securities	—	—	—	—	—
Total OTTI credit losses recognized for AFS debt securities	$ 5	$ —	$ —	$ —	$ 5
HTM debt securities					
Mortgage-backed securities	$ —	$ —	$ —	$ —	$ —
State and municipal	—	—	—	—	—
Total OTTI credit losses recognized for HTM debt securities	$ —	$ —	$ —	$ —	$ —

Nine Months Ended September 30, 2019					
In millions of dollars	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	September 30, 2019 balance
AFS debt securities					
Mortgage-backed securities[(1)]	$ 1	$ —	$ —	$ —	$ 1
State and municipal	—	—	—	—	—
Foreign government securities	—	—	—	—	—
Corporate	4	—	—	—	4
All other debt securities	—	—	—	—	—
Total OTTI credit losses recognized for AFS debt securities	$ 5	$ —	$ —	$ —	$ 5
HTM debt securities					
Mortgage-backed securities	$ —	$ —	$ —	$ —	$ —
State and municipal	—	—	—	—	—
Total OTTI credit losses recognized for HTM debt securities	$ —	$ —	$ —	$ —	$ —

(1) Primarily consists of Prime 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 September 30, 2020 and December 31, 2019:

In millions of dollars	**September 30, 2020**	December 31, 2019
Measurement alternative:		
Carrying value	**$ 865**	$ 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 September 30,		**Nine Months Ended September 30,**	
In millions of dollars	**2020**	2019	**2020**	2019
Measurement alternative[(1)]:				
Impairment losses	**$ 2**	$ 1	**$ 55**	$ 9
Downward changes for observable prices	**—**	4	**19**	16
Upward changes for observable prices	**40**	23	**82**	108

(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	**September 30, 2020**
Measurement alternative:	
Impairment losses	**$ 67**
Downward changes for observable prices	**52**
Upward changes for observable prices	**424**

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

In millions of dollars	Fair value		Unfunded commitments		Redemption frequency (if currently eligible) monthly, quarterly, annually	Redemption notice period
	September 30, 2020	December 31, 2019	**September 30, 2020**	December 31, 2019		
Hedge funds	**$ —**	$ —	**$ —**	$ —	Generally quarterly	10–95 days
Private equity funds[1][2]	**114**	134	**62**	62	—	—
Real estate funds[2][3]	**9**	10	**20**	18	—	—
Mutual/collective investment funds	**19**	26	**—**	—	—	—
Total	**$ 142**	$ 170	**$ 82**	$ 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*.

Consumer Loans, Delinquencies and Non-Accrual Status at September 30, 2020

In millions of dollars	Total current[1][2]	30–89 days past due[3][4]	≥ 90 days past due[3][4]	Past due government guaranteed[5]	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[6]									
Residential first mortgages[7]	$ 47,152	$ 458	$ 285	$ 475	$ 48,370	$ 84	$ 466	$ 550	$ 300
Home equity loans[8][9]	7,347	88	190	—	7,625	2	359	361	—
Credit cards	123,120	1,234	1,131	—	125,485	—	—	—	1,131
Personal, small business and other	4,645	30	14	—	4,689	2	21	23	—
Total	$ 182,264	$ 1,810	$ 1,620	$ 475	$186,169	$ 88	$ 846	$ 934	$ 1,431
In offices outside North America[6]									
Residential first mortgages[7]	$ 38,154	$ 184	$ 169	$ —	$ 38,507	$ —	$ 438	$ 438	$ —
Credit cards	20,382	378	348	—	21,108	—	196	196	307
Personal, small business and other	33,900	224	117	—	34,241	—	122	122	—
Total	$ 92,436	$ 786	$ 634	$ —	$ 93,856	$ —	$ 756	$ 756	$ 307
Total Citigroup[10]	$ 274,700	$ 2,596	$ 2,254	$ 475	$280,025	$ 88	$ 1,602	$ 1,690	$ 1,738

(1) Loans less than 30 days past due are presented as current.
(2) Includes $14 million of residential first mortgages recorded at fair value.
(3) Excludes loans guaranteed by U.S. government-sponsored agencies.
(4) Loans modified under Citi's consumer relief programs continue to be reported in the same delinquency bucket they were in at the time of modification, and thus almost all would not be reported as 30-89 or 90+ days past due for the duration of the programs (which have various durations, and certain of which may be renewed by the customer).
(5) Consists of residential first mortgages that are guaranteed by U.S. government-sponsored agencies that are 30–89 days past due of $0.2 billion and 90 days or more past due of $0.3 billion.
(6) North America includes the U.S., Canada and Puerto Rico. Mexico is included in offices outside North America.
(7) Includes approximately $0.1 billion of residential first mortgage loans in process of foreclosure.
(8) Includes approximately $0.1 billion of home equity loans in process of foreclosure.
(9) Fixed-rate home equity loans and loans extended under home equity lines of credit, which are typically in junior lien positions.
(10) Consumer loans are net of unearned income of $739 million. Unearned income on consumer loans primarily represents unamortized origination fees and costs, premiums and discounts.

Interest Income Recognized for Non-Accrual Consumer Loans

In millions of dollars	Interest income Three Months Ended September 30, 2020	Interest income Nine Months Ended September 30, 2020
In North America offices[1]		
Residential first mortgages	$ 4	$ 11
Home equity loans	2	6
Credit cards	—	—
Personal, small business and other	—	—
Total	**$ 6**	**$ 17**
In offices outside North America[1]		
Residential first mortgages	$ —	$ —
Credit cards	—	—
Personal, small business and other	—	—
Total	**$ —**	**$ —**
Total Citigroup	**$ 6**	**$ 17**

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

Consumer Loan, Delinquencies 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]	$ 37,654	$ 210	$ 160	$ —	$ 38,024	$ 425	$ —
Credit cards	25,111	426	372	—	25,909	310	242
Personal, small business and other	36,118	272	132	—	36,522	176	—
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 and nine months ended September 30, 2020 and 2019, the Company sold and/or reclassified to HFS $386 million and $422 million and $65 million and $2,355 million, 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]	**September 30, 2020**				
In millions of dollars	**Less than 680**	**680 to 760**	**Greater than 760**	**FICO not available**	**Total loans**
Residential first mortgages					
2020	**$ 114**	**$ 2,945**	**$ 7,092**		
2019	**177**	**2,040**	**5,827**		
2018	**272**	**789**	**1,443**		
2017	**331**	**923**	**2,084**		
2016	**351**	**1,482**	**4,272**		
Prior	**1,829**	**4,361**	**10,446**		
Total residential first mortgages	**$ 3,074**	**$ 12,540**	**$ 31,164**	**$ 1,592**	**$ 48,370**
Credit cards[2]	**$ 26,613**	**$ 51,604**	**$ 45,187**	**$ 1,513**	**$ 124,917**
Home equity loans (pre-reset)	**$ 309**	**$ 1,061**	**$ 1,702**		
Home equity loans (post-reset)	**1,179**	**1,704**	**1,656**		
Total home equity loans	**$ 1,488**	**$ 2,765**	**$ 3,358**	**$ 14**	**$ 7,625**
Installment and other					
2020	**$ 21**	**$ 49**	**$ 76**		
2019	**93**	**121**	**153**		
2018	**100**	**95**	**97**		
2017	**33**	**33**	**38**		
2016	**14**	**13**	**12**		
Prior	**232**	**403**	**549**		
Personal, small business and other	**$ 493**	**$ 714**	**$ 925**	**$ 2,557**	**$ 4,689**
Total	**$ 31,668**	**$ 67,623**	**$ 80,634**	**$ 5,676**	**$ 185,601**

(1) The FICO bands in the tables are consistent with general industry peer presentations.
(2) Excludes $568 million of balances related to Canada.

FICO Score Distribution in U.S. Portfolio

FICO score distribution in U.S. portfolio[1]	December 31, 2019				
In millions of dollars	Less than 680	680 to 760	Greater than 760	FICO not available	Total loans
Residential first mortgages	$ 3,608	$ 13,264	$ 28,442	$ 1,694	$ 47,008
Credit cards[2]	33,290	59,536	52,935	2,773	148,534
Home equity loans	1,901	3,530	3,732	60	9,223
Personal, small business and other	564	907	1,473	755	3,699
Total	$ 39,363	$ 77,237	$ 86,582	$ 5,282	$ 208,464

(1) The FICO bands in the tables are consistent with general industry peer presentations.
(2) Excludes $629 million of balances related to Canada.

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	**September 30, 2020**				
In millions of dollars	**Less than or equal to 80%**	**> 80% but less than or equal to 100%**	**Greater than 100%**	**LTV not available**	**Total**
Residential first mortgages					
2020	**$ 8,643**	**$ 1,515**	**$ 1**		
2019	**7,437**	**610**	**3**		
2018	**1,908**	**584**	**18**		
2017	**2,988**	**351**	**5**		
2016	**6,003**	**108**	**3**		
Prior	**16,562**	**97**	**19**		
Total residential first mortgages	**$ 43,541**	**$ 3,265**	**$ 49**	**$ 1,515**	**$ 48,370**
Home equity loans (pre-reset)	**$ 2,991**	**$ 44**	**$ 15**		
Home equity loans (post-reset)	**4,022**	**406**	**95**		
Total home equity loans	**$ 7,013**	**$ 450**	**$ 110**	**$ 52**	**$ 7,625**
Total	**$ 50,554**	**$ 3,715**	**$ 159**	**$ 1,567**	**$ 55,995**

LTV distribution in U.S. portfolio	December 31, 2019				
In millions of dollars	Less than or equal to 80%	> 80% but less than or equal to 100%	Greater than 100%	LTV not available	Total
Residential first mortgages	$ 41,993	$ 3,313	$ 98	$ 1,604	$ 47,008
Home equity loans	8,101	829	237	56	9,223
Total	$ 50,094	$ 4,142	$ 335	$ 1,660	$ 56,231

Impaired Consumer Loans

The following tables present information about impaired consumer loans and interest income recognized on impaired consumer loans:

	Balance at September 30, 2020				Three Months Ended September 30,		Nine Months Ended September 30,	
					2020	2019	**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]	**Interest income recognized**[5]	Interest income recognized[5]
Mortgage and real estate								
Residential first mortgages	**$ 1,650**	**$ 1,824**	**$ 146**	**$ 1,631**	**$ 16**	$ 16	**$ 44**	$ 51
Home equity loans	**502**	**684**	**72**	**556**	**3**	2	**10**	6
Credit cards	**1,924**	**1,996**	**860**	**1,913**	**26**	25	**77**	77
Personal, small business and other	**449**	**451**	**186**	**430**	**18**	4	**50**	15
Total	**$ 4,525**	**$ 4,955**	**$ 1,264**	**$ 4,530**	**$ 63**	$ 47	**$ 181**	$ 149

(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) $208 million of residential first mortgages and $157 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.
(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
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[1]

In millions of dollars, except number of loans modified	Number of loans modified	Post-modification recorded investment(2)(3)	Deferred principal(4)	Contingent principal forgiveness(5)	Principal forgiveness(6)	Average interest rate reduction
	For the Three Months Ended September 30, 2020					
North America						
Residential first mortgages	**237**	**$ 42**	**$ —**	**$ —**	**$ —**	**— %**
Home equity loans	**62**	**5**	**—**	**—**	**—**	**—**
Credit cards	**48,909**	**261**	**—**	**—**	**—**	**17**
Personal, small business and other	**1,040**	**12**	**—**	**—**	**—**	**6**
Total(7)	**50,248**	**$ 320**	**$ —**	**$ —**	**$ —**	
International						
Residential first mortgages	**696**	**$ 21**	**$ —**	**$ —**	**$ —**	**1 %**
Credit cards	**25,147**	**122**	**—**	**—**	**2**	**14**
Personal, small business and other	**12,652**	**106**	**—**	**—**	**2**	**10**
Total(7)	**38,495**	**$ 249**	**$ —**	**$ —**	**$ 4**	

In millions of dollars, except number of loans modified	Number of loans modified	Post-modification recorded investment(2)(8)	Deferred principal(4)	Contingent principal forgiveness(5)	Principal forgiveness(6)	Average interest rate reduction
	For the Three Months Ended September 30, 2019					
North America						
Residential first mortgages	175	$ 26	$ —	$ —	$ —	— %
Home equity loans	219	24	1	—	—	1
Credit cards	66,925	296	—	—	—	17
Personal, small business and other	503	4	—	—	—	6
Total(7)	67,822	$ 350	$ 1	$ —	$ —	
International						
Residential first mortgages	572	$ 22	$ —	$ —	$ —	— %
Credit cards	16,703	66	—	—	2	17
Personal, small business and other	7,240	52	—	—	2	8
Total(7)	24,515	$ 140	$ —	$ —	$ 4	

(1) The above tables do not include loan modifications that meet the TDR relief criteria in the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) or the interagency guidance.
(2) Post-modification balances include past-due amounts that are capitalized at the modification date.
(3) Post-modification balances in *North America* include $2 million of residential first mortgages and $0.3 million of home equity loans to borrowers who have gone through Chapter 7 bankruptcy in the three months ended September 30, 2020. These amounts include $1 million of residential first mortgages and $0.2 million of home equity loans that were newly classified as TDRs in the three months ended September 30, 2020, based on previously received OCC guidance.
(4) 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.
(5) Represents portion of contractual loan principal that is non-interest bearing and, depending upon borrower performance, eligible for forgiveness.
(6) Represents portion of contractual loan principal that was forgiven at the time of permanent modification.
(7) The above tables reflect activity for restructured loans that were considered TDRs as of the end of the reporting period.
(8) Post-modification balances in *North America* include $3 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 September 30, 2019. These amounts include $2 million of residential first mortgages and $2 million of home equity loans that were newly classified as TDRs in the three months ended September 30, 2019, based on previously received OCC guidance.

Consumer Troubled Debt Restructurings[1]

In millions of dollars, except number of loans modified	For the Nine Months Ended September 30, 2020					
	Number of loans modified	**Post-modification recorded investment[2][3]**	**Deferred principal[4]**	**Contingent principal forgiveness[5]**	**Principal forgiveness[6]**	**Average interest rate reduction**
North America						
Residential first mortgages	**812**	**$ 137**	**$ —**	**$ —**	**$ —**	**— %**
Home equity loans	**227**	**22**	**—**	**—**	**—**	**1**
Credit cards	**167,082**	**786**	**—**	**—**	**—**	**13**
Personal, small business and other	**1,816**	**19**	**—**	**—**	**—**	**4**
Total[7]	**169,937**	**$ 964**	**$ —**	**$ —**	**$ —**	
International						
Residential first mortgages	**1,874**	**$ 80**	**$ —**	**$ —**	**$ —**	**5 %**
Credit cards	**65,738**	**289**	**—**	**—**	**7**	**16**
Personal, small business and other	**31,590**	**234**	**—**	**—**	**6**	**10**
Total[7]	**99,202**	**$ 603**	**$ —**	**$ —**	**$ 13**	

In millions of dollars, except number of loans modified	For the Nine Months Ended September 30, 2019					
	Number of loans modified	Post-modification recorded investment[2][8]	Deferred principal[4]	Contingent principal forgiveness[5]	Principal forgiveness[6]	Average interest rate reduction
North America						
Residential first mortgages	805	$ 120	$ —	$ —	$ —	— %
Home equity loans	613	66	2	—	—	1
Credit cards	202,453	874	—	—	—	17
Personal, small business and other	1,206	11	—	—	—	5
Total[7]	205,077	$ 1,071	$ 2	$ —	$ —	
International						
Residential first mortgages	1,935	$ 59	$ —	$ —	$ —	— %
Credit cards	53,649	214	—	—	8	16
Personal, small business and other	22,038	151	—	—	5	9
Total[7]	77,622	$ 424	$ —	$ —	$ 13	

(1) The above tables do not include loan modifications that meet the TDR relief criteria in the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) or the interagency guidance.
(2) Post-modification balances include past-due amounts that are capitalized at the modification date.
(3) Post-modification balances in *North America* include $10 million of residential first mortgages and $2 million of home equity loans to borrowers who have gone through Chapter 7 bankruptcy in the nine months ended September 30, 2020. These amounts include $7 million of residential first mortgages and $1 million of home equity loans that were newly classified as TDRs in the nine months ended September 30, 2020, based on previously received OCC guidance.
(4) 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.
(5) Represents portion of contractual loan principal that is non-interest bearing and, depending on borrower performance, eligible for forgiveness.
(6) Represents portion of contractual loan principal that was forgiven at the time of permanent modification.
(7) The above tables reflect activity for restructured loans that were considered TDRs as of the end of the reporting period.
(8) Post-modification balances in *North America* include $15 million of residential first mortgages and $6 million of home equity loans to borrowers who have gone through Chapter 7 bankruptcy in the nine months ended September 30, 2019. These amounts include $9 million of residential first mortgages and $5 million of home equity loans that were newly classified as TDRs in the nine months ended September 30, 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.

	Three Months Ended September 30,		Nine Months Ended September 30,	
In millions of dollars	**2020**	2019	**2020**	2019
North America				
Residential first mortgages	**$ 24**	$ 19	**$ 59**	$ 69
Home equity loans	**6**	4	**12**	11
Credit cards	**70**	74	**251**	217
Personal, small business and other	**1**	1	**3**	3
Total	**$ 101**	$ 98	**$ 325**	$ 300
International				
Residential first mortgages	**$ 6**	$ 1	**$ 17**	$ 8
Credit cards	**47**	34	**118**	109
Personal, small business and other	**20**	19	**55**	56
Total	**$ 73**	$ 54	**$ 190**	$ 173

Purchased Credit-Deteriorated Assets

	Three Months Ended September 30, 2020		
In millions of dollars	**Credit cards**	**Mortgages[(1)]**	**Installment and other**
Purchase price	$ —	$ 25	$ —
Allowance for credit losses at acquisition date	—	—	—
Discount or premium attributable to non-credit factors	—	—	—
Par value (amortized cost basis)	$ —	$ 25	$ —

(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		September 30, 2020		December 31, 2019
In North America offices[1]				
Commercial and industrial	$	**59,921**	$	55,929
Financial institutions		**52,884**		53,922
Mortgage and real estate[2]		**59,340**		53,371
Installment and other		**26,858**		31,238
Lease financing		**704**		1,290
Total	$	**199,707**	$	195,750
In offices outside North America[1]				
Commercial and industrial	$	**108,551**	$	112,668
Financial institutions		**32,583**		40,211
Mortgage and real estate[2]		**10,424**		9,780
Installment and other		**32,323**		27,303
Lease financing		**63**		95
Governments and official institutions		**3,235**		4,128
Total	$	**187,179**	$	194,185
Corporate loans, net of unearned income[3]	$	**386,886**	$	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 ($857) million and ($814) million at September 30, 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 $0.6 billion and $1.7 billion of corporate loans during the three and nine months ended September 30, 2020, respectively, and $0.8 billion and $2.1 billion of corporate loans during the three and nine months ended September 30, 2019, respectively. The Company did not have significant purchases of corporate loans classified as held-for-investment for the three and nine months ended September 30, 2020 or 2019.

Corporate Loan Delinquencies and Non-Accrual Details at September 30, 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	**$ 648**	**$ 57**	**$ 705**	**$ 2,784**	**$ 161,546**	**$ 165,035**
Financial institutions	**405**	**84**	**489**	**165**	**84,259**	**84,913**
Mortgage and real estate	**641**	**134**	**775**	**486**	**68,500**	**69,761**
Lease financing	**18**	**16**	**34**	**37**	**696**	**767**
Other	**197**	**54**	**251**	**112**	**60,537**	**60,900**
Loans at fair value						**5,510**
Total	**$ 1,909**	**$ 345**	**$ 2,254**	**$ 3,584**	**$ 375,538**	**$ 386,886**

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]	September 30, 2020	December 31, 2019
Investment grade[3]									
Commercial and industrial[4]	$ 33,735	$ 8,471	$ 6,379	$ 4,440	$ 2,092	$ 8,506	$ 30,601	$ 94,224	$ 110,797
Financial institutions[4]	9,205	3,403	2,603	760	820	2,090	52,564	71,445	80,533
Mortgage and real estate	5,283	6,931	5,511	2,896	1,342	2,193	1,916	26,072	27,571
Other[5]	8,475	3,393	5,119	1,176	646	5,381	30,040	54,230	58,155
Total investment grade	$ 56,698	$ 22,198	$ 19,612	$ 9,272	$ 4,900	$ 18,170	$ 115,121	$ 245,971	$ 277,056
Non-investment grade[3]									
Accrual									
Commercial and industrial[4]	$ 24,224	$ 6,284	$ 5,806	$ 3,175	$ 1,187	$ 3,621	$ 23,394	$ 67,691	$ 54,220
Financial institutions[4]	7,245	1,137	806	755	93	152	3,302	13,490	11,269
Mortgage and real estate	1,470	1,648	2,239	1,059	596	861	518	8,391	3,811
Other[5]	2,015	1,179	744	229	163	408	2,364	7,102	5,734
Non-accrual									
Commercial and industrial[4]	135	130	81	162	68	343	1,865	2,784	1,828
Financial institutions	—	—	—	—	—	1	164	165	50
Mortgage and real estate	6	1	7	28	6	52	386	486	188
Other[5]	52	9	17	19	—	23	29	149	122
Total non-investment grade	$ 35,147	$ 10,388	$ 9,700	$ 5,427	$ 2,113	$ 5,461	$ 32,022	$ 100,258	$ 77,222
Non-rated private bank loans managed on a delinquency basis[3][6]	$ 7,244	$ 7,368	$ 3,676	$ 3,839	$ 4,448	$ 8,572	$ —	$ 35,147	$ 31,590
Loans at fair value[7]								5,510	4,067
Corporate loans, net of unearned income	$ 99,089	$ 39,954	$ 32,988	$ 18,538	$ 11,461	$ 32,203	$ 147,143	$ 386,886	$ 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 significant 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:

	September 30, 2020				Three Months Ended September 30, 2020	Nine Months Ended September 30, 2020
In millions of dollars	**Recorded investment[1]**	**Unpaid principal balance**	**Related specific allowance**	**Average carrying value[2]**	**Interest income recognized[3]**	**Interest income recognized[3]**
Non-accrual corporate loans						
Commercial and industrial	**$ 2,784**	**$ 4,336**	**$ 487**	**$ 2,407**	**$ 4**	**$ 9**
Financial institutions	**165**	**254**	**26**	**122**	**—**	**—**
Mortgage and real estate	**486**	**756**	**37**	**333**	**—**	**—**
Lease financing	**37**	**37**	**—**	**39**	**—**	**—**
Other	**112**	**225**	**48**	**167**	**1**	**15**
Total non-accrual corporate loans	**$ 3,584**	**$ 5,608**	**$ 598**	**$ 3,068**	**$ 5**	**$ 24**

	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

	September 30, 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	**$ 1,398**	**$ 487**	$ 714	$ 283
Financial institutions	**162**	**26**	40	2
Mortgage and real estate	**286**	**37**	48	10
Lease financing	**36**	**—**	—	—
Other	**40**	**48**	7	4
Total non-accrual corporate loans with specific allowance	**$ 1,922**	**$ 598**	$ 809	$ 299
Non-accrual corporate loans without specific allowance				
Commercial and industrial	**$ 1,386**		$ 1,114	
Financial institutions	**3**		10	
Mortgage and real estate	**200**		140	
Lease financing	**1**		41	
Other	**72**		74	
Total non-accrual corporate loans without specific allowance	**$ 1,662**	**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.
(3) Interest income recognized for the three and nine months ended September 30, 2019 was $8 million and $23 million, respectively.
N/A Not applicable

Corporate Troubled Debt Restructurings[1]

Three and Nine Months Ended September 30, 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[2]	TDRs involving changes in the amount and/or timing of interest payments[3]	TDRs involving changes in the amount and/or timing of both principal and interest payments
Three Months Ended September 30, 2020				
Commercial and industrial	**$ 52**	**$ —**	**$ —**	**$ 52**
Mortgage and real estate	**8**	**—**	**—**	**8**
Other	**1**	**1**	**—**	**—**
Total	**$ 61**	**$ 1**	**$ —**	**$ 60**
Nine Months Ended September 30, 2020				
Commercial and industrial	**$ 200**	**$ —**	**$ —**	**$ 200**
Mortgage and real estate	**16**	**—**	**—**	**16**
Other	**5**	**5**	**—**	**—**
Total	**$ 221**	**$ 5**	**$ —**	**$ 216**

Three and Nine Months Ended September 30, 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[3]	TDRs involving changes in the amount and/or timing of interest payments[3]	TDRs involving changes in the amount and/or timing of both principal and interest payments
Three Months Ended September 30, 2019				
Commercial and industrial	$ 48	$ —	$ —	$ 48
Mortgage and real estate	3	—	—	3
Other	—	—	—	—
Total	$ 51	$ —	$ —	$ 51
Nine Months Ended September 30, 2019				
Commercial and industrial	$ 183	$ 19	$ —	$ 164
Mortgage and real estate	10	—	—	10
Other	6	6	—	—
Total	$ 199	$ 25	$ —	$ 174

(1) The above tables do not include loan modifications that meet the TDR relief criteria in the CARES Act or the interagency guidance.
(2) 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.
(3) TDRs involving changes in the amount or timing of interest payments may involve a below-market interest rate.

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

		TDR loans in payment default			TDR loans in payment default	
In millions of dollars	**TDR balances at September 30, 2020**	**Three Months Ended September 30, 2020**	**Nine Months Ended September 30, 2020**	TDR balances at September 30, 2019	Three Months Ended September 30, 2019	Nine Months Ended September 30, 2019
Commercial and industrial	**$ 390**	**$ —**	**$ —**	$ 591	$ 2	$ 23
Financial institutions	**—**	**—**	**—**	9	—	—
Mortgage and real estate	**98**	**—**	**—**	75	—	—
Other	**22**	**—**	**—**	4	—	—
Total[1]	**$ 510**	**$ —**	**$ —**	$ 679	$ 2	$ 23

(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 September 30, 2020	2019	Nine Months Ended September 30, 2020	2019
Allowance for credit losses on loans (ACLL) at beginning of period	**$ 26,420**	$ 12,466	**$ 12,783**	$ 12,315
Adjustment to opening balance for CECL adoption[1]	**—**	—	**4,201**	—
Adjusted ACLL at beginning of period	**$ 26,420**	$ 12,466	**$ 16,984**	$ 12,315
Gross credit losses on loans	**$ (2,367)**	$ (2,281)	**$ (7,374)**	$ (6,980)
Gross recoveries on loans[2]	**448**	368	**1,141**	1,156
Net credit losses on loans (NCLs)	**$ (1,919)**	$ (1,913)	**$ (6,233)**	$ (5,824)
NCLs	**$ 1,919**	$ 1,913	**$ 6,233**	$ 5,824
Net reserve builds (releases) for loans[3]	**42**	132	**9,010**	252
Net specific reserve builds (releases) for loans	**(152)**	17	**706**	19
Total provision for credit losses on loans (PCLL)	**$ 1,809**	$ 2,062	**$ 15,949**	$ 6,095
Initial allowance for credit losses on newly purchased credit deteriorated assets during the period	**—**	—	**4**	—
Other, net (see table below)	**116**	(85)	**(278)**	(56)
ACLL at end of period	**$ 26,426**	$ 12,530	**$ 26,426**	$ 12,530
Allowance for credit losses on unfunded lending commitments (ACLUC) at beginning of period[4]	**$ 1,859**	$ 1,376	**$ 1,456**	$ 1,367
Adjustment to opening balance for CECL adoption[1]	**—**	—	**(194)**	—
Provision (release) for credit losses on unfunded lending commitments	**424**	9	**1,094**	18
Other, net[5]	**16**	—	**(57)**	—
ACLUC at end of period[4]	**$ 2,299**	$ 1,385	**$ 2,299**	$ 1,385
Total allowance for credit losses on loans, leases and unfunded lending commitments	**$ 28,725**	$ 13,915	**$ 28,725**	$ 13,915

Other, net details	Three Months Ended September 30, 2020	2019	Nine Months Ended September 30, 2020	2019
Sales or transfers of various consumer loan portfolios to HFS	**$ —**	$ (5)	**$ (4)**	$ (9)
FX translation[6]	**116**	(65)	**(279)**	(26)
Other	**—**	(15)	**5**	(21)
Other, net	**$ 116**	$ (85)	**$ (278)**	$ (56)

(1) See Note 1 to the Consolidated Financial Statements for further discussion of 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 for periods prior to June 30, 2020.
(3) During the second quarter of 2020, Citi updated its ACLL estimate of lifetime credit losses related to a change in accounting principle for variable post-charge-off third-party agency collection costs in its U.S. cards portfolios. After June 30, 2020, these costs are recorded as operating expenses for future periods as they are incurred. The impact of this change in estimate effected by a change in accounting principle resulted in an approximate $426 million reduction in Citi's estimated ACLL at June 30, 2020. During the third quarter of 2020, Citi updated its ACLL estimate of lifetime credit losses resulting from a change in accounting estimate effected by a change in accounting principle for variable post-charge-off third-party agency collection costs, primarily in its international cards portfolios. After June 30, 2020, these costs are recorded as operating expenses for future periods as they are incurred. The impact of this change in estimate effected by a change in accounting principle resulted in an approximate $122 million reduction in Citi's estimated ACLL at September 30, 2020.
(4) Represents additional credit loss reserves for unfunded lending commitments and letters of credit recorded in Other liabilities on the Consolidated Balance Sheet.
(5) The nine months ended September 30, 2020 includes a non-provision transfer of $68 million, representing reserves on performance guarantees as of March 31, 2020. The reserves on these contracts have been reclassified out of the allowance for credit losses on unfunded lending commitments and into other liabilities beginning June 30, 2020.
(6) 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					
	September 30, 2020			September 30, 2019		
In millions of dollars	**Corporate**	**Consumer**	**Total**	Corporate	Consumer	Total
ACLL at beginning of period	**$ 6,824**	**$ 19,596**	**$ 26,420**	$ 2,787	$ 9,679	$ 12,466
Charge-offs	**(351)**	**(2,016)**	**(2,367)**	(129)	(2,152)	(2,281)
Recoveries	**26**	**422**	**448**	19	349	368
Replenishment of net charge-offs	**325**	**1,594**	**1,919**	110	1,803	1,913
Net reserve builds (releases)	**267**	**(225)**	**42**	37	95	132
Net specific reserve builds (releases)	**(161)**	**9**	**(152)**	(1)	18	17
Initial allowance for credit losses on newly purchased credit-deteriorated assets during the period	**—**	**—**	**—**	—	—	—
Other	**8**	**108**	**116**	(20)	(65)	(85)
Ending balance	**$ 6,938**	**$ 19,488**	**$ 26,426**	$ 2,803	$ 9,727	$ 12,530

	Nine Months Ended					
	September 30, 2020			September 30, 2019		
In millions of dollars	**Corporate**	**Consumer**	**Total**	Corporate	Consumer	Total
ACLL 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	**(836)**	**(6,538)**	**(7,374)**	(333)	(6,647)	(6,980)
Recoveries	**60**	**1,081**	**1,141**	55	1,101	1,156
Replenishment of net charge-offs	**776**	**5,457**	**6,233**	278	5,546	5,824
Net reserve builds (releases)	**4,418**	**4,592**	**9,010**	91	161	252
Net specific reserve builds (releases)	**373**	**333**	**706**	(77)	96	19
Initial allowance for credit losses on newly purchased credit-deteriorated assets during the period	**—**	**4**	**4**	—	—	—
Other	**(18)**	**(260)**	**(278)**	(22)	(34)	(56)
Ending balance	**$ 6,938**	**$ 19,488**	**$ 26,426**	$ 2,803	$ 9,727	$ 12,530

	September 30, 2020			December 31, 2019		
In millions of dollars	**Corporate**	**Consumer**	**Total**	Corporate	Consumer	Total
Allowance for credit losses on loans						
Collectively evaluated	**$ 6,340**	**$ 18,222**	**$ 24,562**	$ 2,587	$ 8,706	$ 11,293
Individually evaluated	**598**	**1,263**	**1,861**	299	1,190	1,489
Purchased credit deteriorated	**—**	**3**	**3**	—	1	1
Total allowance for credit losses on loans	**$ 6,938**	**$ 19,488**	**$ 26,426**	$ 2,886	$ 9,897	$ 12,783
Loans, net of unearned income						
Collectively evaluated	**$ 377,792**	**$ 275,347**	**$ 653,139**	$ 383,828	$ 304,510	$ 688,338
Individually evaluated	**3,584**	**4,525**	**8,109**	2,040	4,892	6,932
Purchased credit deteriorated	**—**	**139**	**139**	—	128	128
Held at fair value	**5,510**	**14**	**5,524**	4,067	18	4,085
Total loans, net of unearned income	**$ 386,886**	**$ 280,025**	**$ 666,911**	$ 389,935	$ 309,548	$ 699,483

Allowance for Credit Losses on AFS Debt Securities

	Three Months Ended September 30, 2020		
In millions of dollars	Foreign government	Corporate	Total AFS
Allowance for credit losses at beginning of period	**$ 3**	**$ 5**	**$ 8**
Less: Write-offs	—	—	—
Recoveries of amounts written-off	—	**1**	**1**
Net credit losses (NCLs)	**$ —**	**$ 1**	**$ 1**
NCLs	**$ —**	**$ (1)**	**$ (1)**
Credit losses on securities without previous credit losses	—	—	—
Net reserve builds (releases) on securities with previous credit losses	**(3)**	—	**(3)**
Total provision for credit losses	**$ (3)**	**$ (1)**	**$ (4)**
Initial allowance on newly purchased credit-deteriorated securities during the period	—	—	—
Allowance for credit losses at end of period	**$ —**	**$ 5**	**$ 5**

	Nine Months Ended September 30, 2020		
In millions of dollars	Foreign government	Corporate	Total AFS
Allowance for credit losses at beginning of period	**$ —**	**$ —**	**$ —**
Adjustment to opening balance for CECL adoption	—	—	—
Less: Write-offs	—	—	—
Recoveries of amounts written-off	—	**1**	**1**
Net credit losses (NCLs)	**$ —**	**$ 1**	**$ 1**
NCLs	**$ —**	**$ (1)**	**$ (1)**
Credit losses on securities without previous credit losses	**3**	**5**	**8**
Net reserve builds (releases) on securities with previous credit losses	**(3)**	—	**(3)**
Total provision for credit losses	**$ —**	**$ 4**	**$ 4**
Initial allowance on newly purchased credit-deteriorated securities during the period	—	—	—
Allowance for credit losses at end of period	**$ —**	**$ 5**	**$ 5**

Allowance for Credit Losses on HTM Debt Securities

	Three Months Ended September 30, 2020				
In millions of dollars	Mortgage-backed	State and municipal	Foreign government	Asset-backed	Total HTM
Allowance for credit losses on HTM debt securities at beginning of period	$ —	$ 99	$ 6	$ 2	$ 107
Net credit losses (NCLs)	$ —	$ —	$ —	$ —	$ —
NCLs	$ —	$ —	$ —	$ —	$ —
Net reserve builds (releases)	3	(19)	(1)	1	(16)
Net specific reserve builds (releases)	—	—	—	—	—
Total provision for credit losses on HTM debt securities	$ 3	$ (19)	$ (1)	$ 1	$ (16)
Other, net	$ 5	$ —	$ 2	$ —	$ 7
Initial allowance for credit losses on newly purchased credit-deteriorated securities during the period	—	—	—	—	—
Allowance for credit losses on HTM debt securities at end of period	$ 8	$ 80	$ 7	$ 3	$ 98

	Nine Months Ended September 30, 2020				
In millions of dollars	Mortgage-backed	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
Net credit losses (NCLs)	$ —	$ —	$ —	$ —	$ —
NCLs	$ —	$ —	$ —	$ —	$ —
Net reserve builds (releases)	3	16	1	1	21
Net specific reserve builds (releases)	—	—	—	—	—
Total provision for credit losses on HTM debt securities	$ 3	$ 16	$ 1	$ 1	$ 21
Other, net	$ 5	$ 3	$ 2	$ (3)	$ 7
Initial allowance for credit losses on newly purchased credit-deteriorated securities during the period	—	—	—	—	—
Allowance for credit losses on HTM debt securities at end of period	$ 8	$ 80	$ 7	$ 3	$ 98

Allowance for Credit Losses on Other Assets

	Three Months Ended September 30, 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[1]	Total
Allowance for credit losses at beginning of period	$ —	$ 18	$ 7	$ —	$ 77	$ 102
Net credit losses (NCLs)	$ —	$ —	$ —	$ —	$ —	$ —
NCLs	$ —	$ —	$ —	$ —	$ —	$ —
Net reserve builds (releases)	—	7	(3)	—	(17)	(13)
Total provision for credit losses	$ —	$ 7	$ (3)	$ —	$ (17)	$ (13)
Other, net	$ —	$ —	$ —	$ —	$ (10)	$ (10)
Allowance for credit losses on other assets at end of period	$ —	$ 25	$ 4	$ —	$ 50	$ 79

	Nine Months Ended September 30, 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[1]	Total
Allowance for credit losses at beginning of period	$ —	$ —	$ —	$ —	$ —	$ —
Adjustment to opening balance for CECL adoption	6	14	2	1	3	26
Net credit losses (NCLs)	$ —	$ —	$ —	$ —	$ —	$ —
NCLs	$ —	$ —	$ —	$ —	$ —	$ —
Net reserve builds (releases)	(6)	11	2	(1)	25	31
Total provision for credit losses	$ (6)	$ 11	$ 2	$ (1)	$ 25	$ 31
Other, net	$ —	$ —	$ —	$ —	$ 22	$ 22
Allowance for credit losses on other assets at end of period	$ —	$ 25	$ 4	$ —	$ 50	$ 79

(1) Primarily accounts receivable.

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
Foreign currency translation	39	96	135
Balance at June 30, 2020	$ 11,876	$ 9,523	$ 21,399
Foreign currency translation	74	151	225
Balance at September 30, 2020	**$ 11,950**	**$ 9,674**	**$ 21,624**

The Company performed its annual goodwill impairment test as of July 1, 2020, at the level below each business segment (referred to as a reporting unit). The fair values of the Company's reporting units as percentage of their carrying values ranged from approximately 115% to 136%, resulting in no impairment. While the inherent risk related to uncertainty is embedded in the key assumptions used in the valuations, the current environment remains rapidly evolving due to the COVID-19 pandemic. Further deterioration in macroeconomic and market conditions, including potential adverse effects to economic forecasts due to the severity and duration of the pandemic, as well as the responses of governments, customers, and clients, could negatively influence the assumptions used in the valuations, in particular, the discount and growth rates used in the net income projections. If the future were to differ from management's best estimate of key economic assumptions, and associated cash flows were to decrease, Citi could potentially experience material goodwill impairment charges in the future.

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. See Note 1 for Citi's adoption of a new accounting standard regarding the subsequent measurement of goodwill and Note 3 for a description of Citi's Business Segments.

Intangible Assets

The components of intangible assets were as follows:

	September 30, 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	**$ 5,636**	**$ 4,170**	**$ 1,466**	$ 5,676	$ 4,059	$ 1,617
Credit card contract-related intangibles[1]	**3,921**	**1,240**	**2,681**	5,393	3,069	2,324
Core deposit intangibles	**44**	**44**	**—**	434	433	1
Other customer relationships	**439**	**300**	**139**	424	275	149
Present value of future profits	**29**	**27**	**2**	34	31	3
Indefinite-lived intangible assets	**172**	**—**	**172**	228	—	228
Other	**71**	**61**	**10**	82	77	5
Intangible assets (excluding MSRs)	**$ 10,312**	**$ 5,842**	**$ 4,470**	$ 12,271	$ 7,944	$ 4,327
Mortgage servicing rights (MSRs)[2]	**334**	**—**	**334**	495	—	495
Total intangible assets	**$ 10,646**	**$ 5,842**	**$ 4,804**	$ 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 97% of the aggregate net carrying amount as of September 30, 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/ renewals/ divestitures**	**Amortization**	**Impairments**	**FX translation and other**	**Net carrying amount at September 30, 2020**
Purchased credit card relationships[1]	$ 1,617	**$ 11**	**$ (149)**	**$ (10)**	**$ (3)**	**$ 1,466**
Credit card contract-related intangibles[2]	2,324	**509**	**(150)**	**—**	**(2)**	**2,681**
Core deposit intangibles	1	**—**	**(1)**	**—**	**—**	**—**
Other customer relationships	149	**—**	**(18)**	**—**	**8**	**139**
Present value of future profits	3	**—**	**—**	**—**	**(1)**	**2**
Indefinite-lived intangible assets	228	**—**	**—**	**(28)**	**(28)**	**172**
Other	5	**7**	**(6)**	**—**	**4**	**10**
Intangible assets (excluding MSRs)	$ 4,327	**$ 527**	**$ (324)**	**$ (38)**	**$ (22)**	**$ 4,470**
Mortgage servicing rights (MSRs)[3]	495					**334**
Total intangible assets	$ 4,822					**$ 4,804**

(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 97% of the aggregate net carrying amount at September 30, 2020 and December 31, 2019. During the third quarter of 2020, Citi renewed its contract with American Airlines.

(3) For additional information on Citi's MSRs, including the rollforward for the three and nine months ended September 30, 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	**September 30, 2020**	December 31, 2019
Commercial paper		
Bank[1]	**$ 11,382**	$ 10,155
Broker-dealer and other[2]	**7,969**	6,321
Total commercial paper	**$ 19,351**	$ 16,476
Other borrowings[3]	**18,088**	28,573
Total	**$ 37,439**	$ 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 September 30, 2020 and December 31, 2019, collateralized short-term advances from the Federal Home Loan Banks were $9.8 billion and $17.6 billion, respectively.

Long-Term Debt

In millions of dollars	**September 30, 2020**	December 31, 2019
Citigroup Inc.[1]	**$ 168,712**	$ 150,477
Bank[2]	**48,786**	53,340
Broker-dealer and other[3]	**55,756**	44,943
Total	**$ 273,254**	$ 248,760

(1) Represents the parent holding company.
(2) Represents Citibank entities as well as other bank entities. At September 30, 2020 and December 31, 2019, collateralized long-term advances from the Federal Home Loan Banks were $14.7 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 September 30, 2020 and December 31, 2019.

The following table summarizes Citi's outstanding trust preferred securities at September 30, 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	129	3 mo. Sterling LIBOR + 88.75 bps	50	129	Jun. 28, 2067	Jun. 28, 2017
Total obligated			**$ 2,569**			**$ 2,575**		

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 and Nine Months Ended September 30, 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	Accumulated other comprehensive income (loss)
Three Months Ended September 30, 2020							
Balance, June 30, 2020	$ 3,700	$ (36)	$ 2,094	$ (7,172)	$ (31,939)	$ 8	$ (33,345)
Other comprehensive income before reclassifications	(72)	(313)	(41)	189	897	(39)	621
Increase (decrease) due to amounts reclassified from *AOCI*	(210)	6	(194)	57	—	—	(341)
Change, net of taxes	$ (282)	$ (307)	$ (235)	$ 246	$ 897	$ (39)	$ 280
Balance at September 30, 2020	**$ 3,418**	**$ (343)**	**$ 1,859**	**$ (6,926)**	**$ (31,042)**	**$ (31)**	**$ (33,065)**
Nine Months Ended September 30, 2020							
Balance, December 31, 2019	$ (265)	$ (944)	$ 123	$ (6,809)	$ (28,391)	$ (32)	$ (36,318)
Other comprehensive income before reclassifications	4,735	599	2,083	(287)	(2,651)	1	4,480
Increase (decrease) due to amounts reclassified from *AOCI*	(1,052)	2	(347)	170	—	—	(1,227)
Change, net of taxes	$ 3,683	$ 601	$ 1,736	$ (117)	$ (2,651)	$ 1	$ 3,253
Balance at September 30, 2020	**$ 3,418**	**$ (343)**	**$ 1,859**	**$ (6,926)**	**$ (31,042)**	**$ (31)**	**$ (33,065)**

Footnotes to the table above appear on the following page.

Three and Nine Months Ended September 30, 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	Accumulated other comprehensive income (loss)
Three Months Ended September 30, 2019							
Balance, June 30, 2019	$ (412)	$ (376)	$ 75	$ (6,574)	$ (27,921)	$ 5	$ (35,203)
Other comprehensive income before reclassifications	566	215	172	(300)	(1,442)	(10)	(799)
Increase (decrease) due to amounts reclassified from *AOCI*	(259)	(5)	81	50	—	—	(133)
Change, net of taxes	$ 307	$ 210	$ 253	$ (250)	$ (1,442)	$ (10)	$ (932)
Balance at September 30, 2019	$ (105)	$ (166)	$ 328	$ (6,824)	$ (29,363)	$ (5)	$ (36,135)
Nine Months Ended September 30, 2019							
Balance, December 31, 2019	$ (2,250)	$ 192	$ (728)	$ (6,257)	$ (28,070)	$ (57)	$ (37,170)
Other comprehensive income before reclassifications	2,842	(374)	772	(715)	(1,293)	52	1,284
Increase (decrease) due to amounts reclassified from *AOCI*	(697)	16	284	148	—	—	(249)
Change, net of taxes	$ 2,145	$ (358)	$ 1,056	$ (567)	$ (1,293)	$ 52	$ 1,035
Balance at September 30, 2019	$ (105)	$ (166)	$ 328	$ (6,824)	$ (29,363)	$ (5)	$ (36,135)

(1) Reflects the after-tax valuation of Citi's fair value options liabilities. See "Market Valuation Adjustments" in Note 20 to the Consolidated Financial Statements.
(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, Euro, South Korean won, Australian dollar and Chinese yuan against the U.S. dollar and changes in related tax effects and hedges for the three months ended September 30, 2020. Primarily reflects the movements in (by order of impact) the Mexican peso, Brazilian real, Indian rupee, Russian ruble and South African rand against the U.S. dollar and changes in related tax effects and hedges for the nine months ended September 30, 2020. Primarily reflects the movements in (by order of impact) the Mexican peso, Brazilian real, Euro, South Korean won and Chilean peso against the U.S. dollar and changes in related tax effects and hedges for the three months ended September 30, 2019. Primarily reflects the movements in (by order of impact) the South Korean won, Euro, Brazilian real, Mexican peso and Indian rupee against the U.S. dollar and changes in related tax effects and hedges for the nine months ended September 30, 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 and Nine Months Ended September 30, 2020

In millions of dollars	Pretax	Tax effect	After-tax
Three Months Ended September 30, 2020			
Balance, June 30, 2020	$ (37,678)	$ 4,333	$ (33,345)
Change in net unrealized gains (losses) on debt securities	(393)	111	(282)
Debt valuation adjustment (DVA)	(452)	145	(307)
Cash flow hedges	(307)	72	(235)
Benefit plans	344	(98)	246
Foreign currency translation adjustment	918	(21)	897
Excluded component of fair value hedges	(51)	12	(39)
Change	$ 59	$ 221	$ 280
Balance at September 30, 2020	**$ (37,619)**	**$ 4,554**	**$ (33,065)**
Nine Months Ended September 30, 2020			
Balance, December 31, 2019	$ (42,772)	$ 6,454	$ (36,318)
Change in net unrealized gains (losses) on debt securities	4,905	(1,222)	3,683
Debt valuation adjustment (DVA)	801	(200)	601
Cash flow hedges	2,267	(531)	1,736
Benefit plans	(166)	49	(117)
Foreign currency translation adjustment	(2,652)	1	(2,651)
Excluded component of fair value hedges	(2)	3	1
Change	$ 5,153	$ (1,900)	$ 3,253
Balance at September 30, 2020	**$ (37,619)**	**$ 4,554**	**$ (33,065)**

Three and Nine Months Ended September 30, 2019

In millions of dollars	Pretax	Tax effect	After-tax
Three Months Ended September 30, 2019			
Balance, June 30, 2019	$ (41,472)	$ 6,269	$ (35,203)
Change in net unrealized gains (losses) on debt securities	419	(112)	307
Debt valuation adjustment (DVA)	273	(63)	210
Cash flow hedges	333	(80)	253
Benefit plans	(356)	106	(250)
Foreign currency translation adjustment	(1,442)	—	(1,442)
Excluded component of fair value hedges	(10)	—	(10)
Change	$ (783)	$ (149)	$ (932)
Balance, September 30, 2019	**$ (42,255)**	**$ 6,120**	**$ (36,135)**
Nine Months Ended September 30, 2019			
Balance, December 31, 2018	$ (44,082)	$ 6,912	$ (37,170)
Change in net unrealized gains (losses) on debt securities	2,855	(710)	2,145
Debt valuation adjustment (DVA)	(449)	91	(358)
Cash flow hedges	1,391	(335)	1,056
Benefit plans	(753)	186	(567)
Foreign currency translation adjustment	(1,290)	(3)	(1,293)
Excluded component of fair value hedges	73	(21)	52
Change	$ 1,827	$ (792)	$ 1,035
Balance, September 30, 2019	**$ (42,255)**	**$ 6,120**	**$ (36,135)**

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 September 30,		**Nine Months Ended September 30,**	
In millions of dollars	**2020**	2019	**2020**	2019
Realized (gains) losses on sales of investments	**$ (304)**	$ (361)	**$ (1,484)**	$ (959)
Gross impairment losses	**30**	13	**101**	18
Subtotal, pretax	**$ (274)**	$ (348)	**$ (1,383)**	$ (941)
Tax effect	**64**	89	**331**	244
Net realized (gains) losses on investments after-tax[(1)]	**$ (210)**	$ (259)	**$ (1,052)**	$ (697)
Realized DVA (gains) losses on fair value option liabilities, pretax	**$ 8**	$ (6)	**$ 3**	$ 21
Tax effect	**(2)**	1	**(1)**	(5)
Net realized debt valuation adjustment, after-tax	**$ 6**	$ (5)	**$ 2**	$ 16
Interest rate contracts	**$ (256)**	$ 96	**$ (459)**	$ 360
Foreign exchange contracts	**1**	2	**3**	6
Subtotal, pretax	**$ (255)**	$ 98	**$ (456)**	$ 366
Tax effect	**61**	(17)	**109**	(82)
Amortization of cash flow hedges, after-tax[(2)]	**$ (194)**	$ 81	**$ (347)**	$ 284
Amortization of unrecognized:				
Prior service cost (benefit)	**$ (4)**	$ (3)	**$ (10)**	$ (9)
Net actuarial loss	**85**	73	**239**	207
Curtailment/settlement impact[(3)]	**(5)**	(4)	**(2)**	(2)
Subtotal, pretax	**$ 76**	$ 66	**$ 227**	$ 196
Tax effect	**(19)**	(16)	**(57)**	(48)
Amortization of benefit plans, after-tax[(3)]	**$ 57**	$ 50	**$ 170**	$ 148
Excluded component of fair value hedges, pretax	**$ —**	$ —	**$ —**	$ —
Tax effect	**—**	—	**—**	—
Excluded component of fair value hedges, after-tax	**$ —**	$ —	**$ —**	$ —
Foreign currency translation adjustment, pretax	**$ —**	$ —	**$ —**	$ —
Tax effect	**—**	—	**—**	—
Foreign currency translation adjustment, after-tax	**$ —**	$ —	**$ —**	$ —
Total amounts reclassified out of *AOCI*, pretax	**$ (445)**	$ (190)	**$ (1,609)**	$ (358)
Total tax effect	**104**	57	**382**	109
Total amounts reclassified out of *AOCI*, after-tax	**$ (341)**	$ (133)	**$ (1,227)**	$ (249)

(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 September 30, 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	$ 32,275	$ 32,275	$ —	$ —	$ —	$ —	$ —	$ —
Mortgage securitizations[4]								
U.S. agency-sponsored	**119,320**	**—**	**119,320**	**2,078**	**—**	**—**	**75**	**2,153**
Non-agency-sponsored	**41,951**	**934**	**41,017**	**1,194**	**—**	**—**	**1**	**1,195**
Citi-administered asset-backed commercial paper conduits	**16,457**	**16,457**	**—**	**—**	**—**	**—**	**—**	**—**
Collateralized loan obligations (CLOs)	**19,071**	**—**	**19,071**	**4,331**	**—**	**—**	**—**	**4,331**
Asset-based financing[5]	**213,880**	**7,311**	**206,569**	**24,620**	**1,133**	**9,748**	**—**	**35,501**
Municipal securities tender option bond trusts (TOBs)	**3,867**	**843**	**3,024**	**—**	**—**	**1,869**	**—**	**1,869**
Municipal investments	**19,987**	**—**	**19,987**	**2,429**	**4,167**	**2,763**	**—**	**9,359**
Client intermediation	**1,074**	**652**	**422**	**88**	**—**	**—**	**36**	**124**
Investment funds	**472**	**132**	**340**	**1**	**—**	**16**	**1**	**18**
Other	**1**	**1**	**—**	**—**	**—**	**—**	**—**	**—**
Total	**$ 468,355**	**$ 58,605**	**$ 409,750**	**$ 34,741**	**$ 5,300**	**$ 14,396**	**$ 113**	**$ 54,550**

	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[5]	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	1,535	1,391	144	8	—	—	—	8
Investment funds	827	174	653	5	—	16	1	22
Other	352	1	351	169	—	39	—	208
Total	$ 460,237	$ 69,506	$ 390,731	$ 34,324	$ 5,425	$ 16,157	$ 74	$ 55,980

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

(2) Included on Citigroup's September 30, 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.

(5) Included within this line are loans to third-party sponsored private equity funds, which represent $74.8 billion and $69 billion in unconsolidated VIE assets and $710 million and $711 million in maximum exposure to loss as of September 30, 2020 and December 31, 2019, respectively.

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. As of September 30, 2020 and December 31, 2019, the Company's maximum exposure to loss related to these deals was $53.7 billion and $52.5 billion, respectively. (for more information on these positions, see Note 13 to the Consolidated Financial Statements and Note 26 to the Consolidated Financial Statements in Citigroup's 2019 Annual Report on Form 10-K);
- 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 13 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 $5.4 billion and $6 billion at September 30, 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:

In millions of dollars	**September 30, 2020**		December 31, 2019	
	Liquidity facilities	**Loan/equity commitments**	Liquidity facilities	Loan/equity commitments
Asset-based financing	**$ —**	**$ 9,748**	$ —	$ 9,524
Municipal securities tender option bond trusts (TOBs)	**1,869**	**—**	3,544	—
Municipal investments	**—**	**2,763**	—	3,034
Investment funds	**—**	**16**	—	16
Other	**—**	**—**	—	39
Total funding commitments	**$ 1,869**	**$ 12,527**	$ 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	**September 30, 2020**	December 31, 2019
Cash	**$ —**	$ —
Trading account assets	**2.1**	2.6
Investments	**10.1**	9.9
Total loans, net of allowance	**27.5**	26.7
Other	**0.3**	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	**September 30, 2020**	December 31, 2019
Ownership interests in principal amount of trust credit card receivables		
Sold to investors via trust-issued securities	**$ 15.4**	$ 19.7
Retained by Citigroup as trust-issued securities	**5.2**	6.2
Retained by Citigroup via non-certificated interests	**14.1**	17.8
Total	**$ 34.7**	$ 43.7

The following tables summarize selected cash flow information related to Citigroup's credit card securitizations:

In billions of dollars	**Three Months Ended September 30,**	
	2020	2019
Proceeds from new securitizations	**$ —**	$ —
Pay down of maturing notes	**(1.1)**	(3.1)

In billions of dollars	**Nine Months Ended September 30,**	
	2020	2019
Proceeds from new securitizations	**$ —**	$ —
Pay down of maturing notes	**(4.3)**	(5.6)

Master Trust Liabilities (at Par Value)

The weighted average maturity of the third-party term notes issued by the Master Trust was 3.1 years as of September 30, 2020 and 3.1 years as of December 31, 2019.

In billions of dollars	**Sept. 30, 2020**	Dec. 31, 2019
Term notes issued to third parties	**$ 13.9**	$ 18.2
Term notes retained by Citigroup affiliates	**3.4**	4.3
Total Master Trust liabilities	**$ 17.3**	$ 22.5

Omni Trust Liabilities (at Par Value)

The weighted average maturity of the third-party term notes issued by the Omni Trust was 0.92 years as of September 30, 2020 and 1.6 years as of December 31, 2019.

In billions of dollars	**Sept. 30, 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 September 30,			
	2020		2019	
In billions of dollars	**U.S. agency-sponsored mortgages**	**Non-agency-sponsored mortgages**	U.S. agency-sponsored mortgages	Non-agency-sponsored mortgages
Principal securitized	**$ 2.7**	**$ 2.9**	$ 1.7	$ 3.8
Proceeds from new securitizations	**2.9**	**4.5**	1.7	4.0
Purchases of previously transferred financial assets	**0.2**	**—**	—	—

	Nine Months Ended September 30,			
	2020		2019	
In billions of dollars	**U.S. agency-sponsored mortgages**	**Non-agency-sponsored mortgages**	U.S. agency-sponsored mortgages	Non-agency-sponsored mortgages
Principal securitized	**$ 7.2**	**$ 5.4**	$ 3.8	$ 12.6
Proceeds from new securitizations	**7.6**	**7.9**	3.9	12.8
Purchases of previously transferred financial assets	**0.3**	**—**	0.1	—

Note: Excludes re-securitization transactions.

Gains recognized on the securitization of U.S. agency-sponsored mortgages were $82.6 million and $87.1 million for the three and nine months ended September 30, 2020, respectively. For the three and nine months ended September 30, 2020, gains recognized on the securitization of non-agency sponsored mortgages were $50.8 million and $116.2 million, respectively.

Gains recognized on the securitization of U.S. agency-sponsored mortgages were $9 million and $14 million for the three and nine months ended September 30, 2019. Gains recognized on the securitization of non-agency sponsored mortgages were $16 million and $59 million for the three and nine months ended September 30, 2019, respectively.

	September 30, 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[2]**	**Subordinated interests**	U.S. agency-sponsored mortgages	Senior interests	Subordinated interests
Carrying value of retained interests[3]	**$ 315**	**$ 1,049**	**$ 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) Senior interests in non-agency-sponsored mortgages include $116 million related to personal loan securitizations at September 30, 2020.
(3) 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.

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 September 30, 2020		
		Non-agency-sponsored mortgages[1]	
	U.S. agency-sponsored mortgages	Senior interests	Subordinated interests
Weighted average discount rate	**3.5%**	**1.8 %**	**NM**
Weighted average constant prepayment rate	**29.7%**	**2.5 %**	**NM**
Weighted average anticipated net credit losses[2]	**NM**	**0.2 %**	**NM**
Weighted average life	**4.2 years**	**3.9 years**	**NM**

	Three Months Ended September 30, 2019		
		Non-agency-sponsored mortgages[1]	
	U.S. agency-sponsored mortgages	Senior interests	Subordinated interests
Weighted average discount rate	11.4%	3.7 %	4.0 %
Weighted average constant prepayment rate	14.6%	17.6 %	8.4 %
Weighted average anticipated net credit losses[2]	NM	2.6 %	2.7 %
Weighted average life	6.6 years	5.4 years	11.0 years

	Nine Months Ended September 30, 2020		
		Non-agency-sponsored mortgages[1]	
	U.S. agency-sponsored mortgages	Senior interests	Subordinated interests
Weighted average discount rate	**5.2%**	**1.8 %**	**3.0 %**
Weighted average constant prepayment rate	**27.9%**	**1.8 %**	**25.0 %**
Weighted average anticipated net credit losses[2]	**NM**	**0.7 %**	**0.5 %**
Weighted average life	**4.5 years**	**4.2 years**	**2.3 years**

	Nine Months Ended September 30, 2019		
		Non-agency-sponsored mortgages[1]	
	U.S. agency-sponsored mortgages	Senior interests	Subordinated interests
Weighted average discount rate	8.4%	3.6 %	4.3 %
Weighted average constant prepayment rate	14.8%	11.3 %	7.8 %
Weighted average anticipated net credit losses[2]	NM	3.6 %	2.8 %
Weighted average life	6.2 years	6.1 years	12.0 years

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

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

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

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

	September 30, 2020		
		Non-agency-sponsored mortgages[1]	
	U.S. agency-sponsored mortgages	**Senior interests**	**Subordinated interests**
Weighted average discount rate	**1.9%**	**7.4 %**	**2.7 %**
Weighted average constant prepayment rate	**25.0%**	**3.8 %**	**6.2 %**
Weighted average anticipated net credit losses[2]	**NM**	**1.2 %**	**1.6 %**
Weighted average life	**3.9 years**	**8.9 years**	**35.7 years**

	December 31, 2019		
		Non-agency-sponsored mortgages[1]	
	U.S. agency-sponsored mortgages	Senior interests	Subordinated interests
Weighted average discount rate	9.8%	7.6 %	4.2 %
Weighted average constant prepayment rate	10.1%	3.6 %	6.1 %
Weighted average anticipated net credit losses[2]	NM	5.2 %	2.7 %
Weighted average life	6.6 years	5.9 years	29.3 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, is 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.

	September 30, 2020		
		Non-agency-sponsored mortgages	
In millions of dollars	**U.S. agency-sponsored mortgages**	**Senior interests**	**Subordinated interests**
Discount rate			
Adverse change of 10%	**$ (4)**	**$ —**	**$ (1)**
Adverse change of 20%	**(9)**	**(1)**	**(1)**
Constant prepayment rate			
Adverse change of 10%	**(26)**	**—**	**—**
Adverse change of 20%	**(48)**	**—**	**—**
Anticipated net credit losses			
Adverse change of 10%	**NM**	**—**	**—**
Adverse change of 20%	**NM**	**—**	**—**

In millions of dollars	December 31, 2019		
		Non-agency-sponsored mortgages	
	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:

In billions of dollars, except liquidation losses in millions	Securitized assets		90 days past due		Liquidation losses			
					Three Months Ended September 30,		Nine Months Ended September 30,	
	Sept. 30, 2020	Dec. 31, 2019	**Sept. 30, 2020**	Dec. 31, 2019	**2020**	2019	**2020**	2019
Securitized assets								
Residential mortgages[1]	**$ 11.7**	$ 11.7	**$ 0.4**	$ 0.4	**$ 5**	$ 20	**$ 23**	$ 40
Commercial and other	**23.1**	22.3	**—**	—	**—**	—	**—**	—
Total	**$ 34.8**	$ 34.0	**$ 0.4**	$ 0.4	**$ 5**	$ 20	**$ 23**	$ 40

(1) Securitized assets include $0.2 billion of personal loan securitizations as of September 30, 2020.

Mortgage Servicing Rights (MSRs)

The fair value of Citi's capitalized MSRs was $334 million and $472 million at September 30, 2020 and 2019, respectively. The MSRs correspond to principal loan balances of $56 billion and $59 billion as of September 30, 2020 and 2019, respectively. The following table summarizes the changes in capitalized MSRs:

In millions of dollars	Three Months Ended September 30,	
	2020	2019
Balance, beginning of period	**$ 345**	$ 508
Originations	**31**	19
Changes in fair value of MSRs due to changes in inputs and assumptions	**(22)**	(35)
Other changes[1]	**(20)**	(20)
Sales of MSRs	**—**	—
Balance, as of September 30	**$ 334**	$ 472

In millions of dollars	Nine Months Ended September 30,	
	2020	2019
Balance, beginning of year	**$ 495**	$ 584
Originations	**87**	47
Changes in fair value of MSRs due to changes in inputs and assumptions	**(191)**	(99)
Other changes[1]	**(57)**	(60)
Sales of MSRs	**—**	—
Balance, as of September 30	**$ 334**	$ 472

(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:

In millions of dollars	Three Months Ended September 30, 2020	Three Months Ended September 30, 2019	Nine Months Ended September 30, 2020	Nine Months Ended September 30, 2019
Servicing fees	**$ 29**	$ 36	**$ 102**	$ 112
Late fees	**1**	2	**4**	6
Ancillary fees	**—**	—	**—**	1
Total MSR fees	**$ 30**	$ 38	**$ 106**	$ 119

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 September 30, 2020 and 2019. These securities are backed by either residential or commercial mortgages and are often structured on behalf of clients.

As of September 30, 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 and nine months ended September 30, 2020, Citi transferred agency securities with a fair value of approximately $10.7 billion and $30.1 billion to re-securitization entities compared to approximately $8.9 billion and $23.4 billion for the three and nine months ended September 30, 2019.

As of September 30, 2020, the fair value of Citi-retained interests in agency re-securitization transactions structured by Citi totaled approximately $1.8 billion (including $1.0 billion 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 September 30, 2020 and December 31, 2019 were approximately $76.9 billion and $73.5 billion, respectively.

As of September 30, 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 September 30, 2020 and December 31, 2019, the commercial paper conduits administered by Citi had approximately $16.5 billion and $15.6 billion of purchased assets outstanding, respectively, and had incremental funding commitments with clients of approximately $17.4 billion and $16.3 billion, respectively.

Substantially all of the funding of the conduits is in the form of short-term commercial paper. At September 30, 2020 and December 31, 2019, the weighted average remaining lives of the commercial paper issued by the conduits were approximately 63 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 $1.5 billion and $1.4 billion as of September 30, 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 September 30, 2020 and December 31, 2019, the Company owned $5.0 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)

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

	Three Months Ended September 30,	
In billions of dollars	**2020**	2019
Proceeds from new securitizations	**$ —**	$ —

	Nine Months Ended September 30,	
In billions of dollars	**2020**	2019
Proceeds from new securitizations	**$ 0.1**	$ —

In millions of dollars	**Sept. 30, 2020**	Dec. 31, 2019
Carrying value of retained interests	**$ 1,612**	$ 1,404

The key assumptions used to value retained interests in CLOs, and the sensitivity of the fair value to adverse changes of 10% and 20% are set forth in the tables below:

	Three Months Ended September 30,	
	2020	2019
Weighted average discount rate	**— %**	— %
Weighted average life	**0 years**	0 years

	Nine Months Ended September 30,	
	2020	2019
Weighted average discount rate	**1.8 %**	— %
Weighted average life	**4.2 years**	0 years

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.

	September 30, 2020	
In millions of dollars	**Total unconsolidated VIE assets**	**Maximum exposure to unconsolidated VIEs**
Type		
Commercial and other real estate	**$ 32,186**	**$ 7,465**
Corporate loans	**12,151**	**8,097**
Other (including investment funds, airlines and shipping)	**162,232**	**19,939**
Total	**$ 206,569**	**$ 35,501**

	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 September 30, 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 September 30, 2020 and December 31, 2019, liquidity agreements provided with respect to customer TOB trusts totaled $1.9 billion and $3.5 billion, respectively, of which $1.0 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 $4.7 billion and $7 billion as of September 30, 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	
	September 30, 2020	December 31, 2019	**September 30, 2020**	December 31, 2019
Interest rate contracts				
Swaps	**$ 347,587**	$ 318,089	**$ 17,709,922**	$ 17,063,272
Futures and forwards	**—**	—	**4,894,587**	3,636,658
Written options	**—**	—	**1,590,805**	2,114,511
Purchased options	**—**	—	**1,428,928**	1,857,770
Total interest rate contracts	**$ 347,587**	$ 318,089	**$ 25,624,242**	$ 24,672,211
Foreign exchange contracts				
Swaps	**$ 64,986**	$ 63,104	**$ 6,104,059**	$ 6,063,853
Futures, forwards and spot	**34,616**	38,275	**4,275,082**	3,979,188
Written options	**753**	80	**981,562**	908,061
Purchased options	**766**	80	**981,998**	959,149
Total foreign exchange contracts	**$ 101,121**	$ 101,539	**$ 12,342,701**	$ 11,910,251
Equity contracts				
Swaps	**$ —**	$ —	**$ 237,127**	$ 197,893
Futures and forwards	**—**	—	**67,470**	66,705
Written options	**—**	—	**525,911**	560,571
Purchased options	**—**	—	**393,130**	422,393
Total equity contracts	**$ —**	$ —	**$ 1,223,638**	$ 1,247,562
Commodity and other contracts				
Swaps	**$ —**	$ —	**$ 79,079**	$ 69,445
Futures and forwards	**784**	1,195	**163,925**	137,192
Written options	**—**	—	**95,573**	91,587
Purchased options	**—**	—	**93,328**	86,631
Total commodity and other contracts	**$ 784**	$ 1,195	**$ 431,905**	$ 384,855
Credit derivatives[1]				
Protection sold	**$ —**	$ —	**$ 621,099**	$ 603,387
Protection purchased	**—**	—	**699,908**	703,926
Total credit derivatives	**$ —**	$ —	**$ 1,321,007**	$ 1,307,313
Total derivative notionals	**$ 449,492**	$ 420,823	**$ 40,943,493**	$ 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 September 30, 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 $270 billion and $180 billion as of September 30, 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 September 30, 2020	Derivatives classified in Trading account assets/liabilities[1][2]	
Derivatives instruments designated as ASC 815 hedges	**Assets**	**Liabilities**
Over-the-counter	$ 1,755	$ 110
Cleared	—	327
Interest rate contracts	$ 1,755	$ 437
Over-the-counter	$ 1,307	$ 1,167
Cleared	—	—
Foreign exchange contracts	$ 1,307	$ 1,167
Total derivatives instruments designated as ASC 815 hedges	$ 3,062	$ 1,604
Derivatives instruments not designated as ASC 815 hedges		
Over-the-counter	$ 235,886	$ 217,733
Cleared	13,487	10,979
Exchange traded	39	32
Interest rate contracts	$ 249,412	$ 228,744
Over-the-counter	$ 108,487	$ 109,809
Cleared	553	819
Exchange traded	4	5
Foreign exchange contracts	$ 109,044	$ 110,633
Over-the-counter	$ 18,281	$ 28,181
Cleared	5	2
Exchange traded	23,506	24,416
Equity contracts	$ 41,792	$ 52,599
Over-the-counter	$ 13,987	$ 17,880
Exchange traded	1,010	1,145
Commodity and other contracts	$ 14,997	$ 19,025
Over-the-counter	$ 9,469	$ 9,685
Cleared	1,415	1,809
Credit derivatives	$ 10,884	$ 11,494
Total derivatives instruments not designated as ASC 815 hedges	$ 426,129	$ 422,495
Total derivatives	$ 429,191	$ 424,099
Cash collateral paid/received[3]	$ 23,159	$ 17,054
Less: Netting agreements[4]	(330,993)	(330,993)
Less: Netting cash collateral received/paid[5]	(54,089)	(53,126)
Net receivables/payables included on the Consolidated Balance Sheet[6]	$ 67,268	$ 57,034
Additional amounts subject to an enforceable master netting agreement, but not offset on the Consolidated Balance Sheet		
Less: Cash collateral received/paid	$ (901)	$ (305)
Less: Non-cash collateral received/paid	(9,778)	(13,835)
Total net receivables/payables[6]	$ 56,589	$ 42,894

(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 $76,285 million and $71,143 million of gross cash collateral paid and received, respectively. Of the gross cash collateral paid, $53,126 million was used to offset trading derivative liabilities. Of the gross cash collateral received, $54,089 million was used to offset trading derivative assets.
(4) Represents the netting of balances with the same counterparty under enforceable netting agreements. Approximately $299 billion, $10 billion and $22 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 $5 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 and nine months ended September 30, 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 September 30,		Nine Months Ended September 30,	
In millions of dollars	**2020**	2019	**2020**	2019
Interest rate contracts	**$ (3)**	$ 14	**$ 171**	$ 76
Foreign exchange	**19**	22	**(18)**	35
Total	**$ 16**	$ 36	**$ 153**	$ 111

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.

Citigroup has 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.

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 September 30,				Nine Months Ended September 30,			
	2020		2019		**2020**		2019	
In millions of dollars	**Other revenue**	**Net interest revenue**	Other revenue	Net interest revenue	**Other revenue**	**Net interest revenue**	Other revenue	Net interest revenue
Gain (loss) on the hedging derivatives included in assessment of the effectiveness of fair value hedges								
Interest rate hedges	**$ —**	**$ (1,121)**	$ —	$ 1,363	**$ —**	**$ 5,965**	$ —	$ 4,179
Foreign exchange hedges	**1,235**	**—**	(1,180)	—	**(242)**	**—**	(1,192)	—
Commodity hedges	**(3)**	**—**	60	—	**(94)**	**—**	(42)	—
Total gain (loss) on the hedging derivatives included in assessment of the effectiveness of fair value hedges	**$ 1,232**	**$ (1,121)**	$ (1,120)	$ 1,363	**$ (336)**	**$ 5,965**	$ (1,234)	$ 4,179
Gain (loss) on the hedged item in designated and qualifying fair value hedges								
Interest rate hedges	**$ —**	**$ 955**	$ —	$ (1,320)	**$ —**	**$ (6,173)**	$ —	$ (3,982)
Foreign exchange hedges	**(1,235)**	**—**	1,180	—	**242**	**—**	1,192	—
Commodity hedges	**3**	**—**	60	—	**94**	**—**	42	—
Total gain (loss) on the hedged item in designated and qualifying fair value hedges	**$ (1,232)**	**$ 955**	$ 1,240	$ (1,320)	**$ 336**	**$ (6,173)**	$ 1,234	$ (3,982)
Net gain (loss) on the hedging derivatives excluded from assessment of the effectiveness of fair value hedges								
Interest rate hedges	**$ —**	**$ —**	$ —	$ (4)	**$ —**	**$ (23)**	$ —	$ (8)
Foreign exchange hedges[2]	**(24)**	**—**	25	—	**(65)**	**—**	(96)	—
Commodity hedges	**91**	**—**	11	—	**81**	**—**	34	—
Total net gain (loss) on the hedging derivatives excluded from assessment of the effectiveness of fair value hedges	**$ 67**	**$ —**	$ 36	$ (4)	**$ 16**	**$ (23)**	$ (62)	$ (8)

(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 $(51) million and $(2) million for the three and nine months ended September 30, 2020 and $(10) million and $73 million for the three and nine months ended September 30, 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 September 30, 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 September 30, 2020			
Debt securities AFS[1][3]	**$ 99,152**	**$ 22**	**$ 385**
Long-term debt	**170,069**	**7,811**	**4,197**
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 $7 million for active hedges and $74 million for de-designated hedges as of September 30, 2020 related to certain prepayable financial assets previously designated as the hedged item in a fair value hedge using the last-of-layer approach. The Company designated approximately $1,768 million as the hedged amount (from a closed portfolio of prepayable financial assets with a carrying value of $20 billion as of September 30, 2020) in a last-of-layer hedging relationship.

(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.

(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 September 30, 2020 is approximately $988 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 September 30,				**Nine Months Ended September 30,**			
In millions of dollars	**2020**		2019		**2020**		2019	
Amount of gain (loss) recognized in *AOCI* on derivatives								
Interest rate contracts		**$ (52)**		$ 241		**$ 2,739**		$ 1,040
Foreign exchange contracts		**—**		(6)		**(16)**		(15)
Total gain (loss) recognized in *AOCI*		**$ (52)**		$ 235		**$ 2,723**		$ 1,025
Amount of gain (loss) reclassified from *AOCI* to earnings[(1)]	**Other revenue**	**Net interest revenue**	Other revenue	Net interest revenue	**Other revenue**	**Net interest revenue**	Other revenue	Net interest revenue
Interest rate contracts	**$ —**	**$ 256**	$ —	$ (96)	**$ —**	**$ 459**	$ —	$ (360)
Foreign exchange contracts	**(1)**	**—**	(2)	—	**(3)**	**—**	(6)	—
Total gain (loss) reclassified from *AOCI* into earnings	**$ (1)**	**$ 256**	$ (2)	$ (96)	**$ (3)**	**$ 459**	$ (6)	$ (360)
Net pretax change in cash flow hedges included within *AOCI*		**$ (307)**		$ 333		**$ 2,267**		$ 1,391

(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 $(450) million and $882 million for the three and nine months ended September 30, 2020 and $472 million and $177 million for the three and nine months ended September 30, 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 September 30, 2020	Receivable[1]	Payable[2]	Protection purchased	Protection sold
By industry of counterparty				
Banks	$ 3,447	$ 3,624	$ 144,438	$ 150,070
Broker-dealers	2,186	1,457	52,326	48,749
Non-financial	117	102	4,615	2,423
Insurance and other financial institutions	5,134	6,311	498,529	419,857
Total by industry of counterparty	$ 10,884	$ 11,494	$ 699,908	$ 621,099
By instrument				
Credit default swaps and options	$ 10,388	$ 10,272	$ 687,113	$ 616,677
Total return swaps and other	496	1,222	12,795	4,422
Total by instrument	$ 10,884	$ 11,494	$ 699,908	$ 621,099
By rating of reference entity				
Investment grade	$ 4,116	$ 3,960	$ 551,117	$ 479,872
Non-investment grade	6,768	7,534	148,791	141,227
Total by rating of reference entity	$ 10,884	$ 11,494	$ 699,908	$ 621,099
By maturity				
Within 1 year	$ 901	$ 1,785	$ 171,025	$ 147,613
From 1 to 5 years	6,145	6,134	435,061	397,139
After 5 years	3,838	3,575	93,822	76,347
Total by maturity	$ 10,884	$ 11,494	$ 699,908	$ 621,099

(1) The fair value amount receivable is composed of $6,158 million under protection purchased and $4,726 million under protection sold.
(2) The fair value amount payable is composed of $5,655 million under protection purchased and $5,839 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 million 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 September 30, 2020 and December 31, 2019 was $28 billion and $30 billion, respectively. The Company posted $24 billion and $28 billion as collateral for this exposure in the normal course of business as of September 30, 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 September 30, 2020, the Company could be required to post an additional $0.8 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 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 $1.5 billion and $5.8 billion as of September 30, 2020 and December 31, 2019, respectively.

At September 30, 2020, the fair value of these previously derecognized assets was $1.6 billion. The fair value of the total return swaps as of September 30, 2020 was $41 million recorded as gross derivative assets and $23 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 September 30, 2020 and December 31, 2019:

	Credit and funding valuation adjustments contra-liability (contra-asset)	
In millions of dollars	**September 30, 2020**	December 31, 2019
Counterparty CVA	**$ (1,031)**	$ (705)
Asset FVA	**(746)**	(530)
Citigroup (own-credit) CVA	**482**	341
Liability FVA	**160**	72
Total CVA—derivative instruments	**$ (1,135)**	$ (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 September 30,		**Nine Months Ended September 30,**	
In millions of dollars	**2020**	2019	**2020**	2019
Counterparty CVA	**$ 104**	$ 2	**$ (134)**	$ 104
Asset FVA	**105**	(78)	**(316)**	(97)
Own-credit CVA	**(62)**	85	**200**	(20)
Liability FVA	**(36)**	14	**87**	(16)
Total CVA—derivative instruments	**$ 111**	$ 23	**$ (163)**	$ (29)
DVA related to own FVO liabilities[1]	**$ (452)**	$ 273	**$ 801**	$ (449)
Total CVA and DVA	**$ (341)**	$ 296	**$ 638**	$ (478)

(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 September 30, 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 September 30, 2020	Level 1	Level 2	Level 3	Gross inventory	Netting[1]	Net balance
Assets						
Securities borrowed and purchased under agreements to resell	$ —	$ 285,666	$ 330	$ 285,996	$ (110,370)	$ 175,626
Trading non-derivative assets						
Trading mortgage-backed securities						
U.S. government-sponsored agency guaranteed	—	37,144	266	37,410	—	37,410
Residential	7	362	269	638	—	638
Commercial	—	1,012	181	1,193	—	1,193
Total trading mortgage-backed securities	$ 7	$ 38,518	$ 716	$ 39,241	$ —	$ 39,241
U.S. Treasury and federal agency securities	$ 64,967	$ 2,133	$ —	$ 67,100	$ —	$ 67,100
State and municipal	—	1,260	76	1,336	—	1,336
Foreign government	70,610	16,533	41	87,184	—	87,184
Corporate	2,100	17,967	274	20,341	—	20,341
Equity securities	40,357	10,481	65	50,903	—	50,903
Asset-backed securities	—	787	1,828	2,615	—	2,615
Other trading assets[2]	456	10,971	794	12,221	—	12,221
Total trading non-derivative assets	$ 178,497	$ 98,650	$ 3,794	$ 280,941	$ —	$ 280,941
Trading derivatives						
Interest rate contracts	$ 44	$ 247,968	$ 3,155	$ 251,167		
Foreign exchange contracts	1	109,729	621	110,351		
Equity contracts	62	41,199	531	41,792		
Commodity contracts	—	13,813	1,184	14,997		
Credit derivatives	—	9,519	1,365	10,884		
Total trading derivatives	$ 107	$ 422,228	$ 6,856	$ 429,191		
Cash collateral paid[3]				$ 23,159		
Netting agreements					$ (330,993)	
Netting of cash collateral received					(54,089)	
Total trading derivatives	$ 107	$ 422,228	$ 6,856	$ 452,350	$ (385,082)	$ 67,268
Investments						
Mortgage-backed securities						
U.S. government-sponsored agency guaranteed	$ —	$ 42,688	$ 30	$ 42,718	$ —	$ 42,718
Residential	—	581	—	581	—	581
Commercial	—	61	—	61	—	61
Total investment mortgage-backed securities	$ —	$ 43,330	$ 30	$ 43,360	$ —	$ 43,360
U.S. Treasury and federal agency securities	$ 159,944	$ 173	$ —	$ 160,117	$ —	$ 160,117
State and municipal	—	3,291	825	4,116	—	4,116
Foreign government	76,172	44,202	189	120,563	—	120,563
Corporate	6,545	4,129	56	10,730	—	10,730
Marketable equity securities	346	347	—	693	—	693
Asset-backed securities	—	273	2	275	—	275
Other debt securities	—	4,529	—	4,529	—	4,529
Non-marketable equity securities[4]	—	13	350	363	—	363
Total investments	$ 243,007	$ 100,287	$ 1,452	$ 344,746	$ —	$ 344,746

Table continues on the next page.

In millions of dollars at September 30, 2020	Level 1	Level 2	Level 3	Gross inventory	Netting[1]	Net balance
Loans	$ —	$ 3,843	$ 1,681	$ 5,524	$ —	$ 5,524
Mortgage servicing rights	—	—	334	334	—	334
Non-trading derivatives and other financial assets measured on a recurring basis	$ 4,349	$ 7,343	$ —	$ 11,692	$ —	$ 11,692
Total assets	$ 425,960	$ 918,017	$ 14,447	$ 1,381,583	$ (495,452)	$ 886,131
Total as a percentage of gross assets[5]	31.4%	67.6%	1.1%			
Liabilities						
Interest-bearing deposits	$ —	$ 2,331	$ 213	$ 2,544	$ —	$ 2,544
Securities loaned and sold under agreements to repurchase	—	134,052	659	134,711	(73,833)	60,878
Trading account liabilities						
Securities sold, not yet purchased	78,119	11,653	141	89,913	—	89,913
Other trading liabilities	—	—	43	43	—	43
Total trading liabilities	$ 78,119	$ 11,653	$ 184	$ 89,956	$ —	$ 89,956
Trading derivatives						
Interest rate contracts	$ 35	$ 227,527	$ 1,619	$ 229,181		
Foreign exchange contracts	1	111,203	596	111,800		
Equity contracts	38	49,371	3,190	52,599		
Commodity contracts	—	17,816	1,209	19,025		
Credit derivatives	—	10,280	1,214	11,494		
Total trading derivatives	$ 74	$ 416,195	$ 7,828	$ 424,099		
Cash collateral received[6]				$ 17,054		
Netting agreements					$ (330,993)	
Netting of cash collateral paid					(53,126)	
Total trading derivatives	$ 74	$ 416,195	$ 7,828	$ 441,153	$ (384,119)	$ 57,034
Short-term borrowings	$ —	$ 5,780	$ 201	$ 5,981	$ —	$ 5,981
Long-term debt	—	39,940	23,116	63,056	—	63,056
Total non-trading derivatives and other financial liabilities measured on a recurring basis	$ 4,888	$ 177	$ 2	$ 5,067	$ —	$ 5,067
Total liabilities	$ 83,081	$ 610,128	$ 32,203	$ 742,468	$ (457,952)	$ 284,516
Total as a percentage of gross liabilities[5]	11.5 %	84.1 %	4.4 %			

(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 $76,285 million of gross cash collateral paid, of which $53,126 million was used to offset trading derivative liabilities.

(4) Amounts exclude $0.1 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 $71,143 million of gross cash collateral received, of which $54,089 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 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 and nine months ended September 30, 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

		Net realized/unrealized gains (losses) incl. in		Transfers							
In millions of dollars	Jun. 30, 2020	Principal transactions	Other[1][2]	into Level 3	out of Level 3	Purchases	Issuances	Sales	Settlements	Sept. 30, 2020	Unrealized gains (losses) still held[3]
Assets											
Securities borrowed and purchased under agreements to resell	$ 326	$ 4	$ —	$ —	$ —	$ 43	$ —	$ —	$ (43)	$ 330	$ 4
Trading non-derivative assets											
Trading mortgage-backed securities											
U.S. government-sponsored agency guaranteed	96	9	—	5	—	182	—	(26)	—	266	9
Residential	433	64	—	10	(17)	67	—	(288)	—	269	(1)
Commercial	217	1	—	13	—	24	—	(74)	—	181	—
Total trading mortgage-backed securities	$ 746	$ 74	$ —	$ 28	$ (17)	$ 273	$ —	$ (388)	$ —	$ 716	$ 8
U.S. Treasury and federal agency securities	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —
State and municipal	117	—	—	—	—	—	—	(41)	—	76	—
Foreign government	26	1	—	4	—	26	—	(16)	—	41	—
Corporate	399	(25)	—	22	(57)	160	2	(227)	—	274	(16)
Marketable equity securities	92	(31)	—	2	—	15	—	(13)	—	65	(25)
Asset-backed securities	1,785	14	—	167	(1)	351	—	(488)	—	1,828	4
Other trading assets	797	(24)	—	140	(102)	66	5	(84)	(4)	794	(29)
Total trading non-derivative assets	$ 3,962	$ 9	$ —	$ 363	$ (177)	$ 891	$ 7	$ (1,257)	$ (4)	$ 3,794	$ (58)
Trading derivatives, net[4]											
Interest rate contracts	$ 1,968	$ 70	$ —	$ (17)	$ (7)	$ 31	$ 78	$ (62)	$ (525)	$ 1,536	$ 50
Foreign exchange contracts	(26)	122	—	(23)	29	3	—	(6)	(74)	25	47
Equity contracts	(2,235)	(183)	—	(41)	(69)	1	—	(12)	(120)	(2,659)	(160)
Commodity contracts	(278)	172	—	48	(5)	29	—	(15)	24	(25)	151
Credit derivatives	402	(271)	—	(33)	19	—	—	—	34	151	(274)
Total trading derivatives, net[4]	$ (169)	$ (90)	$ —	$ (66)	$ (33)	$ 64	$ 78	$ (95)	$ (661)	$ (972)	$ (186)

Table continues on the next page.

In millions of dollars	Jun. 30, 2020	Net realized/unrealized gains (losses) incl. in		Transfers		Purchases	Issuances	Sales	Settlements	Sept. 30, 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	$ 30	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ 30	$ (27)
Residential	—	—	—	—	—	—	—	—	—	—	8
Commercial	—	—	—	—	—	—	—	—	—	—	—
Total investment mortgage-backed securities	$ 30	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ 30	$ (19)
U.S. Treasury and federal agency securities	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —
State and municipal	825	—	(5)	2	—	19	—	(16)	—	825	25
Foreign government	196	—	3	—	—	66	—	(76)	—	189	—
Corporate	106	—	—	—	—	—	—	(50)	—	56	—
Marketable equity securities	1	—	(1)	—	—	—	—	—	—	—	(1)
Asset-backed securities	6	—	(4)	—	—	—	—	—	—	2	—
Other debt securities	—	—	—	—	—	—	—	—	—	—	—
Non-marketable equity securities	332	—	17	—	(2)	—	3	—	—	350	16
Total investments	$ 1,496	$ —	$ 10	$ 2	$ (2)	$ 85	$ 3	$ (142)	$ —	$ 1,452	$ 21
Loans	$ 978	$ —	$ 567	$ 138	$ —	$ —	$ —	$ —	$ (2)	$ 1,681	$ 573
Mortgage servicing rights	345	—	(22)	—	—	—	31	—	(20)	334	(14)
Other financial assets measured on a recurring basis	—	—	(3)	19	—	—	(13)	(3)	—	—	(11)
Liabilities											
Interest-bearing deposits	$ 237	$ —	$ 26	$ —	$ —	$ —	$ 4	$ —	$ (2)	$ 213	$ 23
Securities loaned and sold under agreements to repurchase	625	(34)	—	—	—	—	—	—	—	659	(126)
Trading account liabilities											
Securities sold, not yet purchased	104	3	—	54	(3)	—	—	—	(11)	141	—
Other trading liabilities	—	(16)	—	27	—	—	—	—	—	43	(15)
Short-term borrowings	128	9	—	78	—	—	11	—	(7)	201	13
Long-term debt	21,633	(394)	—	1,139	(12)	—	684	—	(722)	23,116	(211)
Other financial liabilities measured on a recurring basis	—	—	—	—	—	—	2	—	—	2	3

(1) Changes in fair value of available-for-sale debt securities are recorded in *AOCI*, unless related to credit 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 September 30, 2020.
(4) Total Level 3 trading derivative assets and liabilities have been netted in these tables for presentation purposes only.

		Net realized/unrealized gains (losses) incl. in		Transfers							
In millions of dollars	Dec. 31, 2019	Principal transactions	Other[1][2]	into Level 3	out of Level 3	Purchases	Issuances	Sales	Settlements	Sept. 30, 2020	Unrealized gains (losses) still held[3]
Assets											
Securities borrowed or purchased under agreements to resell	303	18	—	—	—	151	—	—	(142)	330	4
Trading non-derivative assets											
Trading mortgage-backed securities											
U.S. government-sponsored agency guaranteed	10	(65)	—	21	(9)	390	—	(81)	—	266	14
Residential	123	70	—	214	(60)	341	—	(419)	—	269	(6)
Commercial	61	5	—	156	(17)	113	—	(137)	—	181	(13)
Total trading mortgage-backed securities	194	10	—	391	(86)	844	—	(637)	—	716	(5)
U.S. Treasury and federal agency securities	—	—	—	—	—	—	—	—	—	—	—
State and municipal	64	2	—	15	(3)	62	—	(64)	—	76	1
Foreign government	52	(27)	—	6	(2)	130	—	(118)	—	41	—
Corporate	313	265	—	108	(127)	579	2	(860)	(6)	274	7
Equity securities	100	(22)	—	40	(3)	221	—	(271)	—	65	(33)
Asset-backed securities	1,177	(88)	—	663	(61)	1,091	—	(954)	—	1,828	(208)
Other trading assets	555	196	—	321	(254)	297	19	(321)	(19)	794	(63)
Total trading non-derivative assets	2,455	336	—	1,544	(536)	3,224	21	(3,225)	(25)	3,794	(301)
Trading derivatives, net[4]											
Interest rate contracts	1	445	—	1,597	(9)	33	134	(49)	(616)	1,536	365
Foreign exchange contracts	(5)	70	—	(56)	40	52	—	(19)	(57)	25	339
Equity contracts	(1,596)	(747)	—	(432)	167	25	—	(18)	(58)	(2,659)	(658)
Commodity contracts	(59)	(34)	—	85	(75)	95	—	(59)	22	(25)	(34)
Credit derivatives	(56)	308	—	138	(339)	—	—	—	100	151	49
Total trading derivatives, net[4]	(1,715)	42	—	1,332	(216)	205	134	(145)	(609)	(972)	61
Investments											
Mortgage-backed securities											
U.S. government-sponsored agency guaranteed	32	—	(5)	1	1	1	—	—	—	30	(64)
Residential	—	—	—	—	—	—	—	—	—	—	8
Commercial	—	—	—	—	—	—	—	—	—	—	—
Total investment mortgage-backed securities	32	—	(5)	1	1	1	—	—	—	30	(56)
U.S. Treasury and federal agency securities	—	—	—	—	—	—	—	—	—	—	—
State and municipal	623	—	(12)	312	(131)	114	—	(81)	—	825	50
Foreign government	96	—	8	27	(64)	274	—	(152)	—	189	—
Corporate	45	—	2	49	(152)	162	—	(50)	—	56	—
Equity securities	—	—	(1)	1	—	—	—	—	—	—	(1)
Asset-backed securities	22	—	(1)	—	—	—	—	(19)	—	2	6
Other debt securities	—	—	—	—	—	—	—	—	—	—	—
Non-marketable equity securities	441	—	(36)	—	(2)	2	3	(3)	(55)	350	24
Total investments	1,259	—	(45)	390	(348)	553	3	(305)	(55)	1,452	23

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	Sept. 30, 2020	Unrealized gains (losses) still held[3]
		Principal transactions	Other[1][2]	into Level 3	out of Level 3						
Loans	$ 402	$ —	$ 935	$ 355	$ (6)	$ —	$ —	$ —	$ (5)	$ 1,681	$ 1,026
Mortgage servicing rights	495	—	(191)	—	—	—	87	—	(57)	334	(161)
Other financial assets measured on a recurring basis	1	—	11	19	—	—	(19)	(8)	(4)	—	9
Liabilities											
Interest-bearing deposits	$ 215	$ —	$ 15	$ 278	$ (151)	$ —	$ 34	$ —	$ (148)	$ 213	$ (122)
Securities loaned or sold under agreements to repurchase	757	(7)	—	—	—	—	—	—	(105)	659	(159)
Trading account liabilities										—	
Securities sold, not yet purchased	48	(126)	—	171	(21)	—	9	—	(192)	141	(40)
Other trading liabilities	—	(16)	—	27	—	—	—	—	—	43	(15)
Short-term borrowings	13	28	—	164	(6)	—	72	—	(14)	201	15
Long-term debt	17,169	(714)	—	5,762	(2,795)	—	5,493	—	(3,227)	23,116	(4,084)
Other financial liabilities measured on a recurring basis	—	—	—	—	—	—	4	—	(2)	2	—

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(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 investments), attributable to the change in fair value relating to assets and liabilities classified as Level 3 that are still held at September 30, 2020.

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

In millions of dollars	Jun. 30, 2019	Net realized/unrealized gains (losses) incl. in		Transfers		Purchases	Issuances	Sales	Settlements	Sept. 30, 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	$ 122	$ (5)	$ —	$ —	$ —	$ 51	$ —	$ —	$ (50)	$ 118	$ 5
Trading non-derivative assets											
Trading mortgage-backed securities											
U.S. government-sponsored agency guaranteed	187	2	—	53	—	70	—	(40)	—	272	2
Residential	131	8	—	29	(21)	65	—	(48)	—	164	7
Commercial	53	5	—	127	(3)	52	—	(22)	—	212	(2)
Total trading mortgage-backed securities	$ 371	$ 15	$ —	$ 209	$ (24)	$ 187	$ —	$ (110)	$ —	$ 648	$ 7
U.S. Treasury and federal agency securities	$ —	$ (14)	$ —	$ —	$ —	$ 20	$ —	$ —	$ —	$ 6	$ (2)
State and municipal	177	—	—	1	—	1	—	(1)	—	178	—
Foreign government	20	(12)	—	—	—	81	—	(5)	—	84	—
Corporate	454	(14)	—	111	(17)	79	4	(204)	(7)	406	(45)
Marketable equity securities	123	(23)	—	6	3	53	—	(51)	—	111	(16)
Asset-backed securities	1,411	(96)	—	31	(8)	191	—	(192)	—	1,337	(42)
Other trading assets	740	(46)	—	9	(114)	46	17	(163)	(10)	479	(4)
Total trading non-derivative assets	$ 3,296	$ (190)	$ —	$ 367	$ (160)	$ 658	$ 21	$ (726)	$ (17)	$ 3,249	$ (102)
Trading derivatives, net[4]											
Interest rate contracts	$ (109)	$ 295	$ —	$ (50)	$ 56	$ 15	$ (2)	$ (9)	$ (64)	$ 132	$ 143
Foreign exchange contracts	(97)	249	—	74	(150)	15	—	(36)	(4)	51	206
Equity contracts	(1,194)	102	—	(32)	163	(119)	—	(1)	(116)	(1,197)	249
Commodity contracts	147	(29)	—	(5)	(49)	83	—	(95)	(93)	(41)	32
Credit derivatives	86	(78)	—	(108)	(13)	—	—	—	83	(30)	(70)
Total trading derivatives, net[4]	$ (1,167)	$ 539	$ —	$ (121)	$ 7	$ (6)	$ (2)	$ (141)	$ (194)	$ (1,085)	$ 560
Investments											
Mortgage-backed securities											
U.S. government-sponsored agency guaranteed	$ 31	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ 31	$ —
Residential	—	—	—	—	—	—	—	—	—	—	—
Commercial	—	—	—	—	—	—	—	—	—	—	—
Total investment mortgage-backed securities	$ 31	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ 31	$ —
U.S. Treasury and federal agency securities	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —
State and municipal	1,026	—	16	—	(153)	9	—	(17)	—	881	26
Foreign government	77	—	(1)	—	—	56	—	(20)	—	112	(2)
Corporate	56	—	(9)	—	—	—	—	—	—	47	—
Marketable equity securities	—	—	—	—	—	—	—	—	—	—	—
Asset-backed securities	59	—	(8)	27	(27)	—	—	(10)	—	41	—
Other debt securities	—	—	—	—	—	—	—	—	—	—	—
Non-marketable equity securities	448	—	(27)	13	—	2	—	(1)	—	435	(7)
Total investments	$ 1,697	$ —	$ (29)	$ 40	$ (180)	$ 67	$ —	$ (48)	$ —	$ 1,547	$ 17

In millions of dollars	Jun. 30, 2019	Net realized/unrealized gains (losses) incl. in Principal transactions	Other[1][2]	Transfers into Level 3	Transfers out of Level 3	Purchases	Issuances	Sales	Settlements	Sept. 30, 2019	Unrealized gains (losses) still held[3]
Loans	$ 419	$ —	$ (5)	$ 20	$ (117)	$ —	$ —	$ —	$ (2)	$ 315	$ 5
Mortgage servicing rights	508	—	(35)	—	—	—	19	—	(20)	472	(27)
Other financial assets measured on a recurring basis	—	—	1	6	(6)	2	37	(4)	(34)	2	(7)
Liabilities											
Interest-bearing deposits	$ 1,182	$ —	$ (1)	$ —	$ (20)	$ —	$ 33	$ —	$ (54)	$ 1,142	$ 14
Securities loaned and sold under agreements to repurchase	1,085	82	—	—	—	—	—	(169)	—	834	(8)
Trading account liabilities											
Securities sold, not yet purchased	28	9	—	20	(1)	19	—	(12)	(3)	42	7
Other trading liabilities	—	—	—	—	—	—	—	—	—	—	—
Short-term borrowings	154	4	—	3	(6)	—	1	—	(130)	18	134
Long-term debt	14,938	(320)	—	879	(860)	3	651	(1)	(64)	15,866	(507)
Other financial liabilities measured on a recurring basis	1	—	—	—	—	—	2	—	—	3	—

(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 September 30, 2019.
(4) Total Level 3 trading derivative assets and liabilities have been netted in these tables for presentation purposes only.

		Net realized/unrealized gains (losses) incl. in		Transfers							
In millions of dollars	Dec. 31, 2018	Principal transactions	Other[1][2]	into Level 3	out of Level 3	Purchases	Issuances	Sales	Settlements	Sept. 30, 2019	Unrealized gains (losses) still held[3]
Assets											
Securities borrowed and purchased under agreements to resell	$ 115	$ (4)	$ —	$ 5	$ (4)	$ 145	$ —	$ —	$ (139)	$ 118	$ 3
Trading non-derivative assets											
Trading mortgage-backed securities											
U.S. government-sponsored agency guaranteed	156	8	—	54	(27)	160	(1)	(78)	—	272	9
Residential	268	19	—	51	(61)	195	—	(308)	—	164	10
Commercial	77	9	—	132	(38)	114	—	(82)	—	212	(7)
Total trading mortgage-backed securities	$ 501	$ 36	$ —	$ 237	$ (126)	$ 469	$ (1)	$ (468)	$ —	$ 648	$ 12
U.S. Treasury and federal agency securities	$ 1	$ (14)	$ —	$ —	$ —	$ 20	$ —	$ —	$ (1)	$ 6	$ (2)
State and municipal	200	(1)	—	1	(19)	2	—	(5)	—	178	—
Foreign government	31	(11)	—	9	—	84	—	(29)	—	84	1
Corporate	360	331	—	173	(48)	257	(29)	(629)	(9)	406	(20)
Marketable equity securities	153	(20)	—	5	(8)	110	—	(129)	—	111	(48)
Asset-backed securities	1,484	(102)	—	44	(55)	654	—	(688)	—	1,337	(19)
Other trading assets	818	4	—	24	(281)	483	27	(577)	(19)	479	(4)
Total trading non-derivative assets	$ 3,548	$ 223	$ —	$ 493	$ (537)	$ 2,079	$ (3)	$ (2,525)	$ (29)	$ 3,249	$ (80)
Trading derivatives, net[4]											
Interest rate contracts	$ (154)	$ 176	$ —	$ (124)	$ 220	$ —	$ 29	$ (1)	$ (14)	$ 132	$ (27)
Foreign exchange contracts	(6)	200	—	74	(126)	18	—	(42)	(67)	51	(22)
Equity contracts	(784)	(9)	—	(224)	272	(118)	(147)	(1)	(186)	(1,197)	(153)
Commodity contracts	(18)	8	—	1	(43)	203	—	(141)	(51)	(41)	178
Credit derivatives	61	(338)	—	(127)	181	—	—	14	179	(30)	(355)
Total trading derivatives, net[4]	$ (901)	$ 37	$ —	$ (400)	$ 504	$ 103	$ (118)	$ (171)	$ (139)	$ (1,085)	$ (379)
Investments											
Mortgage-backed securities											
U.S. government-sponsored agency guaranteed	$ 32	$ —	$ (1)	$ —	$ —	$ —	$ —	$ —	$ —	$ 31	$ (3)
Residential	—	—	—	—	—	—	—	—	—	—	—
Commercial	—	—	—	—	—	—	—	—	—	—	—
Total investment mortgage-backed securities	$ 32	$ —	$ (1)	$ —	$ —	$ —	$ —	$ —	$ —	$ 31	$ (3)
U.S. Treasury and federal agency securities	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —
State and municipal	708	—	110	14	(153)	430	—	(228)	—	881	110
Foreign government	68	—	—	—	—	112	—	(68)	—	112	(2)
Corporate	156	—	(9)	—	(94)	—	—	(6)	—	47	—
Marketable equity securities	—	—	—	—	—	—	—	—	—	—	—
Asset-backed securities	187	—	—	122	(612)	550	—	(206)	—	41	2
Other debt securities	—	—	—	—	—	—	—	—	—	—	—
Non-marketable equity securities	586	—	(7)	19	—	9	—	(151)	(21)	435	2
Total investments	$ 1,737	$ —	$ 93	$ 155	$ (859)	$ 1,101	$ —	$ (659)	$ (21)	$ 1,547	$ 109

Table continues on the next page.

In millions of dollars	Dec. 31, 2018	Net realized/unrealized gains (losses) incl. in Principal transactions	Other[1][2]	Transfers into Level 3	Transfers out of Level 3	Purchases	Issuances	Sales	Settlements	Sept. 30, 2019	Unrealized gains (losses) still held[3]
Loans	$ 277	$ —	$ 103	$ 148	$ (187)	$ 11	$ —	$ (35)	$ (2)	$ 315	$ 191
Mortgage servicing rights	584	—	(99)	—	—	—	47	—	(60)	472	(60)
Other financial assets measured on a recurring basis	—	—	26	6	(2)	2	32	(12)	(50)	2	(65)
Liabilities											
Interest-bearing deposits	$ 495	$ —	$ (50)	$ 3	$ (42)	$ —	$ 836	$ —	$ (200)	$ 1,142	$ (201)
Securities loaned and sold under agreements to repurchase	983	44	—	1	4	—	—	(168)	58	834	(35)
Trading account liabilities											
Securities sold, not yet purchased	586	127	—	36	(448)	19	—	(12)	(12)	42	10
Other trading liabilities	—	—	—	—	—	—	—	—	—	—	—
Short-term borrowings	37	29	—	12	(37)	—	166	—	(131)	18	130
Long-term debt	12,570	(1,546)	—	2,503	(3,821)	23	7,501	(5)	(4,451)	15,866	(3,337)
Other financial liabilities measured on a recurring basis	—	—	4	5	—	—	2	—	—	3	(9)

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(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 September 30, 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 from December 31, 2019 to September 30, 2020:

- During the nine months ended September 30, 2020, transfers of *Interest rate contracts* of $1.6 billion from Level 2 to Level 3 were 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.
- During the three and nine months ended September 30, 2020, $1.1 billion and $5.8 billion, respectively, of *Long-term debt* containing embedded derivatives was transferred from Level 2 to Level 3, as a result of interest rate option volatility, equity correlation and credit derivative inputs becoming unobservable and/or significant relative to the overall valuation of certain structured long-term debt products. In other instances, market changes resulted in unobservable volatility inputs becoming insignificant 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 $2.8 billion of certain structured long-term debt products being transferred from Level 3 to Level 2 during the nine months ended September 30, 2020.

The following were the significant Level 3 transfers from December 31, 2018 to September 30, 2019:

- During the three and nine months ended September 30, 2019, transfers of *Long-term debt* of $0.9 billion and $2.5 billion from Level 2 to Level 3, and of $0.9 billion and $3.8 billion from Level 3 to Level 2, respectively, 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 September 30, 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	$ 330	Model-based	Credit spread	15 bps	15 bps	15 bps
			Interest rate	0.12 %	1.75 %	0.55 %
Mortgage-backed securities	$ 519	Price-based	Price	$ 17.25	$ 118.70	$ 91.64
	207	Yield analysis	Yield	1.66 %	24.47 %	8.23 %
State and municipal, foreign government, corporate and other debt securities	$ 1,222	Price-based	Price	$ —	$ 149.00	$ 84.32
	900	Model-based	Credit spread	35 bps	375 bps	224 bps
Marketable equity securities[5]	$ 33	Price-based	Price	$ 0.14	$ 26,900	$ 5,155
	32	Model-based	Recovery *(in millions)*	$ 5,733	$ 5,733	$ 5,733
			WAL	1.73 years	1.73 years	1.73 years
Asset-backed securities	$ 1,016	Price-based	Price	$ 3.28	$ 159.89	$ 59.76
	797	Yield analysis	Yield	3.34 %	21.99 %	8.67 %
Non-marketable equities	$ 168	Comparables analysis	Illiquidity discount	10.00 %	50.00 %	28.46 %
	150	Price-based	PE ratio	10.89x	25.80x	16.56x
			Appraised value *(in thousands)*	$ 484	$ 29,416	$ 20,000
			EBITDA Multiples	4.30x	35.50x	13.86x
			Cost of capital	13.00 %	20.00 %	17.01 %
Derivatives—gross[6]						
Interest rate contracts (gross)	$ 4,719	Model-based	Inflation volatility	0.25 %	2.41 %	0.78 %
			IR normal volatility	0.14 %	0.82 %	0.55 %
Foreign exchange contracts (gross)	$ 1,218	Model-based	FX volatility	0.58 %	14.25 %	5.95 %
			Interest rate	0.84 %	91.93 %	16.34 %
			IR-FX correlation	40.00 %	60.00 %	50.00 %
			IR-IR correlation	(21.71)%	40.00 %	36.50 %
			IR normal volatility	0.13 %	0.79 %	0.42 %
Equity contracts (gross)[7]	$ 3,712	Model-based	Equity volatility	4.97 %	89.52 %	40.08 %
			Forward price	63.56 %	104.27 %	90.80 %
Commodity and other contracts (gross)	$ 2,393	Model-based	Commodity correlation	(40.95)%	88.77 %	60.85 %
			Commodity volatility	0.13 %	50.84 %	9.79 %
			Forward price	50.33 %	423.75 %	122.21 %
Credit derivatives (gross)	$ 2,126	Model-based	Credit spread	10 bps	504 bps	170 bps

As of September 30, 2020	Fair value[1] *(in millions)*	Methodology	Input	Low[2][3]	High[2][3]	Weighted average[4]
	453	Price-based	Credit correlation	**25.00 %**	**85.00 %**	**42.34 %**
			Upfront points	**4.00 %**	**98.97 %**	**44.31 %**
			Recovery rate	**20.00 %**	**65.00 %**	**40.61 %**
Loans and leases	**$ 1,622**	Model-based	Equity volatility	**23.81 %**	**86.80 %**	**61.79 %**
Mortgage servicing rights	**$ 258**	Cash flow	Yield	**— %**	**14.44 %**	**3.05 %**
	76	Model-based	WAL	**2.71 years**	**5.21 years**	**3.91 years**
Liabilities						
Interest-bearing deposits	**$ 213**	Model-based	IR normal volatility	**0.15 %**	**0.82 %**	**0.55 %**
Securities loaned and sold under agreement to repurchase	**$ 659**	Model-based	Interest rate	**0.12 %**	**1.75 %**	**0.64 %**
Trading account liabilities						
Securities sold, not yet purchased	**$ 74**	Price-based	Price	**$ 0.14**	**$ 865.86**	**$ 82.49**
	66	Model-based	IR Lognormal volatility	**56.96 %**	**133.48 %**	**110.48 %**
			Interest rate	**10.93 %**	**22.93 %**	**15.87 %**
Short-term borrowings and long-term debt	**$ 23,317**	Model-based	IR normal volatility	**0.14 %**	**0.82 %**	**0.52 %**
			Forward price	**62.38 %**	**189.25 %**	**93.58 %**

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
September 30, 2020			
Loans HFS[1]	**$ 3,808**	**$ 571**	**$ 3,237**
Other real estate owned	**13**	**5**	**8**
Loans[2]	**839**	**509**	**330**
Non-marketable equity securities measured using the measurement alternative	**196**	**193**	**3**
Total assets at fair value on a nonrecurring basis	**$ 4,856**	**$ 1,278**	**$ 3,578**

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 September 30, 2020	**Fair value[(1)]** *(in millions)*	**Methodology**	**Input**	**Low[(2)]**	**High**	**Weighted average[(3)]**
Loans held-for-sale	**$ 3,136**	Price-based	Price	**$ 88.07**	**$ 100.00**	**$ 97.54**
Other real estate owned	**$ 7**	Price-based	Appraised value[(4)]	**$ 1,333,375**	**$ 4,107,890**	**$ 3,561,024**
	1	Recovery analysis	Price	**50.95**	**50.95**	**50.95**
Loans[(5)]	**$ 278**	Price-based	Price	**$ 2.20**	**$ 51.00**	**$ 24.20**
	51	Recovery analysis	Recovery rate	**1.10 %**	**55.50 %**	**42.07 %**

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 September 30,	
In millions of dollars	**2020**	2019
Loans HFS	**$ (26)**	$ (12)
Other real estate owned	**—**	(1)
Loans[(1)]	**(31)**	(41)
Non-marketable equity securities measured using the measurement alternative	**37**	18
Total nonrecurring fair value gains (losses)	**$ (20)**	$ (36)

	Nine Months Ended September 30,	
In millions of dollars	**2020**	2019
Loans HFS	**$ (133)**	$ —
Other real estate owned	**(1)**	(2)
Loans[(1)]	**(131)**	(50)
Non-marketable equity securities measured using the measurement alternative	**8**	83
Total nonrecurring fair value gains (losses)	**$ (257)**	$ 31

(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.

	September 30, 2020		Estimated fair value		
In billions of dollars	Carrying value	Estimated fair value	Level 1	Level 2	Level 3
Assets					
Investments	**$ 101.8**	**$ 104.8**	**$ 16.7**	**$ 85.3**	**$ 2.8**
Securities borrowed and purchased under agreements to resell	**113.7**	**113.7**	**—**	**113.7**	**—**
Loans[1][2]	**634.2**	**658.3**	**—**	**0.5**	**657.8**
Other financial assets[2][3]	**403.0**	**403.0**	**305.6**	**18.1**	**79.3**
Liabilities					
Deposits	**$ 1,260.1**	**$ 1,260.0**	**$ —**	**$ 1,067.4**	**$ 192.6**
Securities loaned and sold under agreements to repurchase	**146.3**	**146.3**	**—**	**146.3**	**—**
Long-term debt[4]	**210.2**	**223.8**	**—**	**195.7**	**28.1**
Other financial liabilities[5]	**112.9**	**112.9**	**—**	**20.4**	**92.5**

	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 $26.4 billion for September 30, 2020 and $12.8 billion for December 31, 2019. In addition, the carrying values exclude $0.8 billion and $1.4 billion of lease finance receivables at September 30, 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 September 30, 2020 and December 31, 2019 were liabilities of $9.4 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 September 30,		**Nine Months Ended September 30,**	
In millions of dollars	**2020**	2019	**2020**	2019
Assets				
Securities borrowed and purchased under agreements to resell	**$ (27)**	$ (14)	**$ 17**	$ 21
Trading account assets	**183**	2	**(278)**	214
Investments	**—**	—	**—**	—
Loans				
Certain corporate loans	**1,003**	(320)	**973**	(533)
Certain consumer loans	**—**	—	**—**	—
Total loans	**$ 1,003**	$ (320)	**$ 973**	$ (533)
Other assets				
MSRs	**$ (22)**	$ (35)	**$ (191)**	$ (99)
Certain mortgage loans HFS[1]	**74**	30	**208**	67
Total other assets	**$ 52**	$ (5)	**$ 17**	$ (32)
Total assets	**$ 1,211**	$ (337)	**$ 729**	$ (330)
Liabilities				
Interest-bearing deposits	**$ (53)**	$ (24)	**$ (105)**	$ (158)
Securities loaned and sold under agreements to repurchase	**482**	172	**390**	258
Trading account liabilities	**16**	8	**(1)**	21
Short-term borrowings[2]	**(60)**	102	**937**	21
Long-term debt[2]	**(1,098)**	(225)	**865**	(4,019)
Total liabilities	**$ (713)**	$ 33	**$ 2,086**	$ (3,877)

(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 loss of $452 million and a gain of $273 million for the three months ended September 30, 2020 and 2019, and a gain of $801 million and a loss of $449 million for the nine months ended September 30, 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:

	September 30, 2020		December 31, 2019	
In millions of dollars	**Trading assets**	**Loans**	Trading assets	Loans
Carrying amount reported on the Consolidated Balance Sheet	**$ 7,411**	**$ 5,524**	$ 8,320	$ 4,086
Aggregate unpaid principal balance in excess of (less than) fair value	**38**	**9**	410	315
Balance of non-accrual loans or loans more than 90 days past due	**—**	**4**	—	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 September 30, 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 nine months ended September 30, 2020 and 2019 due to instrument-specific credit risk totaled to a loss of $(23) million and a gain of $95 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 $0.5 billion and $0.2 billion at September 30, 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 September 30, 2020, there were approximately $13.9 billion and $11.0 billion of notional amounts of such forward purchase and forward sale derivative contracts outstanding, respectively.

Certain Investments in Private Equity and Real Estate Ventures

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	**September 30, 2020**	December 31, 2019
Carrying amount reported on the Consolidated Balance Sheet	**$ 1,069**	$ 1,254
Aggregate fair value in excess of (less than) unpaid principal balance	**60**	(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 nine months ended September 30, 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	**September 30, 2020**	December 31, 2019
Interest rate linked	**$ 20.1**	$ 22.6
Foreign exchange linked	**1.1**	0.7
Equity linked	**25.2**	23.7
Commodity linked	**2.0**	1.8
Credit linked	**2.5**	0.9
Total	**$ 50.9**	$ 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	**September 30, 2020**	December 31, 2019
Carrying amount reported on the Consolidated Balance Sheet	**$ 63,056**	$ 55,783
Aggregate unpaid principal balance in excess of (less than) fair value	**(1,178)**	(2,967)

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

In millions of dollars	**September 30, 2020**	December 31, 2019
Carrying amount reported on the Consolidated Balance Sheet	**$ 5,981**	$ 4,946
Aggregate unpaid principal balance in excess of (less than) fair value	**86**	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 September 30, 2020 and December 31, 2019:

	Maximum potential amount of future payments			
In billions of dollars at September 30, 2020	**Expire within 1 year**	**Expire after 1 year**	**Total amount outstanding**	**Carrying value** *(in millions of dollars)*
Financial standby letters of credit	**$ 23.8**	**$ 67.7**	**$ 91.5**	**$ 1,201**
Performance guarantees	**7.1**	**5.8**	**12.9**	**88**
Derivative instruments considered to be guarantees	**20.2**	**53.7**	**73.9**	**925**
Loans sold with recourse	**—**	**1.2**	**1.2**	**6**
Securities lending indemnifications(1)	**102.0**	**—**	**102.0**	**—**
Credit card merchant processing(1)(2)	**96.6**	**—**	**96.6**	**4**
Credit card arrangements with partners	**—**	**1.1**	**1.1**	**7**
Custody indemnifications and other	**—**	**34.7**	**34.7**	**40**
Total	**$ 249.7**	**$ 164.2**	**$ 413.9**	**$ 2,271**

	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	$ 61.4	$ 93.3	$ 581
Performance guarantees	6.9	5.5	12.4	36
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	$ 163.0	$ 416.6	$ 1,162

(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 September 30, 2020 and December 31, 2019, this maximum potential exposure was estimated to be $97 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 sellers 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 $33 million and $37 million at September 30, 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 one 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 September 30, 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 September 30, 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 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 September 30, 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 $16.4 billion and $13.3 billion as of September 30, 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 September 30, 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 $2.3 billion and $1.2 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 $47.5 billion and $46.7 billion at September 30, 2020 and December 31, 2019, respectively. Securities and other marketable assets held as collateral amounted to $72.0 billion and $58.6 billion at September 30, 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 $6.5 billion and $4.4 billion at September 30, 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 September 30, 2020	**Investment grade**	**Non-investment grade**	**Not rated**	**Total**
Financial standby letters of credit	**$ 76.3**	**$ 14.9**	**$ 0.3**	**$ 91.5**
Performance guarantees	**9.2**	**3.3**	**0.4**	**12.9**
Derivative instruments deemed to be guarantees	**—**	**—**	**73.9**	**73.9**
Loans sold with recourse	**—**	**—**	**1.2**	**1.2**
Securities lending indemnifications	**—**	**—**	**102.0**	**102.0**
Credit card merchant processing	**—**	**—**	**96.6**	**96.6**
Credit card arrangements with partners	**—**	**—**	**1.1**	**1.1**
Custody indemnifications and other	**22.4**	**12.3**	**—**	**34.7**
Total	**$ 107.9**	**$ 30.5**	**$ 275.5**	**$ 413.9**

	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	$ 81.2	$ 11.6	$ 0.5	$ 93.3
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	$ 112.2	$ 26.3	$ 278.1	$ 416.6

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 September 30, 2020. The operating lease ROU asset and lease liability were $2.9 billion and $3.1 billion, respectively, as of September 30, 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.	September 30, 2020	December 31, 2019
Commercial and similar letters of credit	$ 643	$ 3,933	$ 4,576	$ 4,533
One- to four-family residential mortgages	3,298	2,106	5,404	3,721
Revolving open-end loans secured by one- to four-family residential properties	8,622	1,286	9,908	10,799
Commercial real estate, construction and land development	12,126	1,664	13,790	12,981
Credit card lines	612,777	99,085	711,862	708,023
Commercial and other consumer loan commitments	201,036	113,013	314,049	324,359
Other commitments and contingencies	2,270	602	2,872	1,948
Total	$ 840,772	$ 221,689	$ 1,062,461	$ 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 September 30, 2020 and December 31, 2019, Citigroup had approximately $68.8 billion and $34.0 billion of unsettled reverse repurchase and securities borrowing agreements, and approximately $62.0 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	September 30, 2020	December 31, 2019
Cash and due from banks	$ 3,055	$ 3,758
Deposits with banks, net of allowance	12,233	26,493
Total	$ 15,288	$ 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 September 30, 2020.

23. CONTINGENCIES

The following information supplements and amends, as applicable, the disclosure in Note 23 to the Consolidated Financial Statements of Citigroup's Second Quarter of 2020 Form 10-Q and First Quarter of 2020 Form 10-Q and 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, in Note 23 to the Consolidated Financial Statements of Citigroup's Second Quarter of 2020 Form 10-Q and First Quarter of 2020 Form 10-Q, or 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 September 30, 2020, Citigroup's estimate of the reasonably possible unaccrued loss for these matters was approximately $1.3 billion in the aggregate.

As available information changes, the matters for which Citigroup is able to estimate will change, and the estimates themselves will change. In addition, while many estimates presented in financial statements and other financial disclosures involve significant judgment and may be subject to significant uncertainty, estimates of the range of reasonably possible loss arising from litigation, regulatory, tax, or other matters are subject to particular uncertainties. For example, at the time of making an estimate, Citigroup may have only preliminary, incomplete, or inaccurate information about the facts underlying the claim; its assumptions about the future rulings of the court or other tribunal on significant issues, or the behavior and incentives of adverse parties, regulators, or tax authorities may prove to be wrong; and the outcomes it is attempting to predict are often not amenable to the use of statistical or other quantitative analytical tools. In addition, from time to time an outcome may occur that Citigroup had not accounted for in its estimates because it had deemed such an outcome to be remote. For all these reasons, the amount of loss in excess of accruals ultimately incurred for the matters as to which an estimate has been made could be substantially higher or lower than the range of loss included in the estimate.

Subject to the foregoing, it is the opinion of Citigroup's management, based on current knowledge and after taking into account its current legal accruals, that the eventual outcome of all matters described in this Note would not be likely to have a material adverse effect on the consolidated financial condition of Citigroup. Nonetheless, given the substantial or indeterminate amounts sought in certain of these matters and the inherent unpredictability of such matters, an adverse outcome in certain of these matters could, from time to time, have a material adverse effect on Citigroup's consolidated results of operations or cash flows in particular quarterly or annual periods.

For further information on ASC 450 and Citigroup's accounting and disclosure framework for contingencies, including for 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

Antitrust and Other Litigation: On July 28, 2020, in ALLIANZ GLOBAL INVESTORS, ET AL. v. BANK OF AMERICA CORPORATION, ET AL., plaintiffs filed a third amended complaint. On September 4, 2020, defendants filed an answer. Additional information concerning this action is publicly available in court filings under the docket number 18 Civ. 10364 (S.D.N.Y.) (Schofield, J.).

On May 26, 2020, in GERTLER, ET AL. v. DEUTSCHE BANK AG, the amended motion for certification was served on Citigroup and Citicorp. On August 11, 2020, Citibank moved to dismiss the petition for certification. Additional information concerning this action is publicly available in court filings under the docket number CA 29013-09-18.

Interbank Offered Rates–Related Litigation and Other Matters

Antitrust and Other Litigation: On September 17, 2020, in IN RE LIBOR-BASED FINANCIAL INSTRUMENTS ANTITRUST LITIGATION, the court granted final approval of a settlement between Citigroup, Citibank, and 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 August 18, 2020, individual borrowers and consumers of loans and credit cards filed an action against Citigroup, Citibank, CGMI, and other defendants, captioned MCCARTHY, ET AL. v. INTERCONTINENTAL EXCHANGE, INC., ET AL., in the United States District Court for the Northern District of California. Plaintiffs allege that defendants conspired to fix ICE LIBOR, assert claims under the Sherman Act and the Clayton Act, and seek declaratory relief, injunctive relief, and treble damages. Additional information concerning this action is publicly available in court filings under the docket number 20 Civ. 5832 (N.D. Cal.) (Donato, J.).

Revlon Credit Facility Litigation
On August 12, 2020, Citibank and numerous other parties were named as defendants in an action filed in the United States District Court for the Southern District of New York under the caption UMB BANK, NATIONAL ASSOCIATION V. REVLON, INC., ET AL. Plaintiff alleges that, with respect to a 2016 credit agreement between Revlon and various lenders for which Citibank served as administrative and collateral agent, the defendants deprived lenders of the collateral securing loans they made to Revlon under the credit agreement. The claims against Citibank include breach of the implied covenant of good faith and fair dealing, aiding and abetting conversion, breach of contract, tortious interference with contract, and actual and constructive fraudulent transfer. Additional information concerning this action is publicly available in court filings under the docket number 20-CV-6352 (S.D.N.Y.) (Schofield, J.).

Shareholder Derivative and Securities Litigation
On October 16, 2020, a derivative action captioned ANDERSEN V. CORBAT, ET AL. was filed in the United States District Court for the Southern District of New York on behalf of Citigroup (as nominal defendant) against Citigroup's directors. Plaintiff asserts claims for breach of fiduciary duty and unjust enrichment in connection with defendants' alleged failures to implement adequate internal controls. Plaintiff also asserts claims for violations of Section 14(a) of the Securities Exchange Act of 1934 in connection with statements in Citigroup's 2019 and 2020 Proxy Statements. Additional information concerning this action is publicly available in court filings under the docket number 1:20-cv-08669 (S.D.N.Y.) (Marrero, J.).

On October 30, 2020, a putative class action complaint captioned CITY OF SUNRISE FIREFIGHTERS' PENSION FUND v. CITIGROUP INC., ET AL., was filed in the United States District Court for the Southern District of New York against Citigroup and certain of its officers or former officers, asserting violations of Sections 10(b) and 20(a) of the Securities Exchange Act of 1934 in connection with defendants' alleged misstatements concerning Citigroup's internal controls. The complaint seeks compensatory damages, equitable and injunctive relief, and costs. Additional information concerning this action is publicly available in court filings under the docket number 1:20-CV-9132 (S.D.N.Y.) (Marrero, J.).

Sovereign Securities Matters
Antitrust and Other Litigation: On September 21, 2020, the City of New Orleans and related entities filed an action against CGMI and other defendants, captioned CITY OF NEW ORLEANS, ET AL. v. BANK OF AMERICA CORPORATION, ET AL., in the United States District Court for the Eastern District of Louisiana. Plaintiffs allege that defendants conspired to manipulate the market for bonds issued by U.S. government-sponsored agencies. Plaintiffs assert claims for violations of the Sherman Act and seek treble damages and injunctive relief. Additional information concerning this action is publicly available in court filings under the docket number 20 Civ. 2570 (E.D. La.) (Vitter, J.).

Tribune Company Bankruptcy
On July 6, 2020, the Tribune noteholders filed a petition for a writ of certiorari in the United States Supreme Court. Additional information concerning this action is publicly available in court filings under the docket numbers 12 MC 2296 (S.D.N.Y.) (Cote, J.), 13-3992 (2d Cir.), and 20-8 (U.S.).

Variable Rate Demand Obligation Litigation
On November 2, 2020, in CITY OF PHILADELPHIA v. BANK OF AMERICA CORP., ET AL. and MAYOR AND CITY COUNCIL OF BALTIMORE v. BANK OF AMERICA CORP., ET AL., the court granted in part and denied in part defendants' motion to dismiss the consolidated complaint. Additional information concerning this action is publicly available in court filings under the docket numbers 19-CV-1608 (S.D.N.Y.) (Furman, J.) and 19-CV-2667 (S.D.N.Y.) (Furman, J.).

Wire Transfer Litigation
On August 17, 18, and 20, 2020, Citibank filed actions in the United States District Court for the Southern District of New York, which have been consolidated under the caption IN RE CITIBANK AUGUST 11, 2020 WIRE TRANSFERS. The actions relate to a payment erroneously made by Citibank on August 11, 2020, in its capacity as administrative agent for a Revlon credit facility. The action seeks the return of the erroneously transferred funds from certain fund managers. Citibank has asserted claims for unjust enrichment, conversion, money had and received, and payment by mistake. The court issued temporary restraining orders related to the subject funds, and trial is scheduled for December 9 and 10, 2020. Additional information concerning this action is publicly available in court filings under the docket number 20-CV-6539 (S.D.N.Y.) (Furman, J.).

Settlement Payments
Payments required in settlement agreements described above have been made or are covered by existing litigation or other accruals.

24. CONDENSED CONSOLIDATING FINANCIAL STATEMENTS

Citigroup amended its Registration Statement on Form S-3 on file with the SEC (File No. 33-192302) to add its wholly owned subsidiary, Citigroup Global Markets Holdings Inc. (CGMHI), as a co-registrant. Any securities issued by CGMHI under the Form S-3 will be fully and unconditionally guaranteed by Citigroup.

The following are the Condensed Consolidating Statements of Income and Comprehensive Income for the three and nine months ended September 30, 2020 and 2019, Condensed Consolidating Balance Sheet as of September 30, 2020 and December 31, 2019 and Condensed Consolidating Statement of Cash Flows for the nine months ended September 30, 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 September 30, 2020				
In millions of dollars	Citigroup parent company	CGMHI	Other Citigroup subsidiaries and eliminations	Consolidating adjustments	Citigroup consolidated
Revenues					
Dividends from subsidiaries	$ 2,250	$ —	$ —	$ (2,250)	$ —
Interest revenue	—	1,128	12,186	—	13,314
Interest revenue—intercompany	991	153	(1,144)	—	—
Interest expense	1,267	274	1,280	—	2,821
Interest expense—intercompany	61	416	(477)	—	—
Net interest revenue	$ (337)	$ 591	$ 10,239	$ —	$ 10,493
Commissions and fees	$ —	$ 1,494	$ 1,259	$ —	$ 2,753
Commissions and fees—intercompany	—	30	(30)	—	—
Principal transactions	(169)	(3,779)	6,456	—	2,508
Principal transactions—intercompany	42	4,350	(4,392)	—	—
Other income	(90)	208	1,430	—	1,548
Other income—intercompany	78	12	(90)	—	—
Total non-interest revenues	$ (139)	$ 2,315	$ 4,633	$ —	$ 6,809
Total revenues, net of interest expense	$ 1,774	$ 2,906	$ 14,872	$ (2,250)	$ 17,302
Provisions for credit losses and for benefits and claims	$ —	$ (1)	$ 2,263	$ —	$ 2,262
Operating expenses					
Compensation and benefits	$ (21)	$ 1,165	$ 4,451	$ —	$ 5,595
Compensation and benefits—intercompany	44	—	(44)	—	—
Other operating	5	597	4,767	—	5,369
Other operating—intercompany	4	772	(776)	—	—
Total operating expenses	$ 32	$ 2,534	$ 8,398	$ —	$ 10,964
Equity in undistributed income of subsidiaries	$ 1,140	$ —	$ —	$ (1,140)	$ —
Income (loss) from continuing operations before income taxes	$ 2,882	$ 373	$ 4,211	$ (3,390)	$ 4,076
Provision (benefit) for income taxes	(348)	165	998	—	815
Income (loss) from continuing operations	$ 3,230	$ 208	$ 3,213	$ (3,390)	$ 3,261
Income (loss) from discontinued operations, net of taxes	—	—	(7)	—	(7)
Net income before attribution of noncontrolling interests	$ 3,230	$ 208	$ 3,206	$ (3,390)	$ 3,254
Noncontrolling interests	—	—	24	—	24
Net income (loss)	$ 3,230	$ 208	$ 3,182	$ (3,390)	$ 3,230
Comprehensive income					
Add: Other comprehensive income (loss)	$ 280	$ (51)	$ (2,178)	$ 2,229	$ 280
Total Citigroup comprehensive income (loss)	$ 3,510	$ 157	$ 1,004	$ (1,161)	$ 3,510
Add: Other comprehensive income attributable to noncontrolling interests	$ —	$ —	$ 19	$ —	$ 19
Add: Net income attributable to noncontrolling interests	—	—	24	—	24
Total comprehensive income (loss)	$ 3,510	$ 157	$ 1,047	$ (1,161)	$ 3,553

Condensed Consolidating Statements of Income and Comprehensive Income

	Nine Months Ended September 30, 2020				
In millions of dollars	Citigroup parent company	CGMHI	Other Citigroup subsidiaries and eliminations	Consolidating adjustments	Citigroup consolidated
Revenues					
Dividends from subsidiaries	$ 2,355	$ —	$ —	$ (2,355)	$ —
Interest revenue	—	4,340	40,702	—	45,042
Interest revenue—intercompany	3,202	776	(3,978)	—	—
Interest expense	3,675	1,795	6,507	—	11,977
Interest expense—intercompany	451	1,819	(2,270)	—	—
Net interest revenue	$ (924)	$ 1,502	$ 32,487	$ —	$ 33,065
Commissions and fees	$ —	$ 4,815	$ 3,892	$ —	$ 8,707
Commissions and fees—intercompany	(19)	267	(248)	—	—
Principal transactions	(1,099)	(518)	13,543	—	11,926
Principal transactions—intercompany	606	4,849	(5,455)	—	—
Other income	(24)	468	3,657	—	4,101
Other income—intercompany	16	38	(54)	—	—
Total non-interest revenues	$ (520)	$ 9,919	$ 15,335	$ —	$ 24,734
Total revenues, net of interest expense	$ 911	$ 11,421	$ 47,822	$ (2,355)	$ 57,799
Provisions for credit losses and for benefits and claims	$ —	$ (1)	$ 17,193	$ —	$ 17,192
Operating expenses					
Compensation and benefits	$ 112	$ 3,806	$ 12,955	$ —	$ 16,873
Compensation and benefits—intercompany	119	—	(119)	—	—
Other operating	37	1,789	13,274	—	15,100
Other operating—intercompany	12	1,629	(1,641)	—	—
Total operating expenses	$ 280	$ 7,224	$ 24,469	$ —	$ 31,973
Equity in undistributed income of subsidiaries	$ 5,615	$ —	$ —	$ (5,615)	$ —
Income (loss) from continuing operations before income taxes	$ 6,246	$ 4,198	$ 6,160	$ (7,970)	$ 8,634
Provision (benefit) for income taxes	(822)	1,217	1,127	—	1,522
Income (loss) from continuing operations	$ 7,068	$ 2,981	$ 5,033	$ (7,970)	$ 7,112
Income (loss) from discontinued operations, net of taxes	—	—	(26)	—	(26)
Net income before attribution of noncontrolling interests	$ 7,068	$ 2,981	$ 5,007	$ (7,970)	$ 7,086
Noncontrolling interests	—	—	18	—	18
Net income (loss)	$ 7,068	$ 2,981	$ 4,989	$ (7,970)	$ 7,068
Comprehensive income					
Add: Other comprehensive income (loss)	$ 3,253	$ 277	$ 10,058	$ (10,335)	$ 3,253
Total Citigroup comprehensive income (loss)	$ 10,321	$ 3,258	$ 15,047	$ (18,305)	$ 10,321
Add: Other comprehensive income attributable to noncontrolling interests	$ —	$ —	$ 7	$ —	$ 7
Add: Net income attributable to noncontrolling interests	—	—	18	—	18
Total comprehensive income (loss)	$ 10,321	$ 3,258	$ 15,072	$ (18,305)	$ 10,346

Condensed Consolidating Statements of Income and Comprehensive Income

	Three Months Ended September 30, 2019				
In millions of dollars	Citigroup parent company	CGMHI	Other Citigroup subsidiaries and eliminations	Consolidating adjustments	Citigroup consolidated
Revenues					
Dividends from subsidiaries	$ 4,829	$ —	$ —	$ (4,829)	$ —
Interest revenue	2	2,595	16,580	—	19,177
Interest revenue—intercompany	1,240	502	(1,742)	—	—
Interest expense	1,214	1,831	4,491	—	7,536
Interest expense—intercompany	246	1,088	(1,334)	—	—
Net interest revenue	$ (218)	$ 178	$ 11,681	$ —	$ 11,641
Commissions and fees	$ —	$ 1,296	$ 1,610	$ —	$ 2,906
Commissions and fees—intercompany	(19)	39	(20)	—	—
Principal transactions	(1,535)	291	4,046	—	2,802
Principal transactions—intercompany	284	693	(977)	—	—
Other income	1,213	67	(55)	—	1,225
Other income—intercompany	(95)	30	65	—	—
Total non-interest revenues	$ (152)	$ 2,416	$ 4,669	$ —	$ 6,933
Total revenues, net of interest expense	$ 4,459	$ 2,594	$ 16,350	$ (4,829)	$ 18,574
Provisions for credit losses and for benefits and claims	$ —	$ —	$ 2,088	$ —	$ 2,088
Operating expenses					
Compensation and benefits	$ (6)	$ 1,277	$ 4,058	$ —	$ 5,329
Compensation and benefits—intercompany	54	—	(54)	—	—
Other operating	(38)	571	4,602	—	5,135
Other operating—intercompany	6	625	(631)	—	—
Total operating expenses	$ 16	$ 2,473	$ 7,975	$ —	$ 10,464
Equity in undistributed income of subsidiaries	$ 328	$ —	$ —	$ (328)	$ —
Income (loss) from continuing operations before income taxes	$ 4,771	$ 121	$ 6,287	$ (5,157)	$ 6,022
Provision (benefit) for income taxes	(142)	12	1,209	—	1,079
Income (loss) from continuing operations	$ 4,913	$ 109	$ 5,078	$ (5,157)	$ 4,943
Income (loss) from discontinued operations, net of taxes	—	—	(15)	—	(15)
Net income (loss) before attribution of noncontrolling interests	$ 4,913	$ 109	$ 5,063	$ (5,157)	$ 4,928
Noncontrolling interests	—	—	15	—	15
Net income (loss)	$ 4,913	$ 109	$ 5,048	$ (5,157)	$ 4,913
Comprehensive income					
Add: Other comprehensive income (loss)	$ (932)	$ 41	$ 2,895	$ (2,936)	$ (932)
Total Citigroup comprehensive income (loss)	$ 3,981	$ 150	$ 7,943	$ (8,093)	$ 3,981
Add: Other comprehensive income attributable to noncontrolling interests	$ —	$ —	$ (33)	$ —	$ (33)
Add: Net income attributable to noncontrolling interests	—	—	15	—	15
Total comprehensive income (loss)	$ 3,981	$ 150	$ 7,925	$ (8,093)	$ 3,963

Condensed Consolidating Statements of Income and Comprehensive Income

In millions of dollars	Nine Months Ended September 30, 2019				
	Citigroup parent company	CGMHI	Other Citigroup subsidiaries and eliminations	Consolidating adjustments	Citigroup consolidated
Revenues					
Dividends from subsidiaries	$ 19,045	$ —	$ —	$ (19,045)	$ —
Interest revenue	2	8,351	49,612	—	57,965
Interest revenue—intercompany	3,892	1,523	(5,415)	—	—
Interest expense	3,763	5,566	13,286	—	22,615
Interest expense—intercompany	760	3,315	(4,075)	—	—
Net interest revenue	$ (629)	$ 993	$ 34,986	$ —	$ 35,350
Commissions and fees	$ —	$ 3,912	$ 4,801	$ —	$ 8,713
Commissions and fees—intercompany	(20)	254	(234)	—	—
Principal transactions	(2,925)	399	10,006	—	7,480
Principal transactions—intercompany	1,522	2,054	(3,576)	—	—
Other income	1,164	664	2,537	—	4,365
Other income—intercompany	(120)	86	34	—	—
Total non-interest revenues	$ (379)	$ 7,369	$ 13,568	$ —	$ 20,558
Total revenues, net of interest expense	$ 18,037	$ 8,362	$ 48,554	$ (19,045)	$ 55,908
Provisions for credit losses and for benefits and claims	$ —	$ —	$ 6,161	$ —	$ 6,161
Operating expenses					
Compensation and benefits	$ 31	$ 3,727	$ 12,610	$ —	$ 16,368
Compensation and benefits—intercompany	97	—	(97)	—	—
Other operating	(24)	1,664	13,540	—	15,180
Other operating—intercompany	16	1,789	(1,805)	—	—
Total operating expenses	$ 120	$ 7,180	$ 24,248	$ —	$ 31,548
Equity in undistributed income of subsidiaries	$ (4,021)	$ —	$ —	$ 4,021	$ —
Income (loss) from continuing operations before income taxes	$ 13,896	$ 1,182	$ 18,145	$ (15,024)	$ 18,199
Provision (benefit) for income taxes	(526)	160	4,093	—	3,727
Income (loss) from continuing operations	$ 14,422	$ 1,022	$ 14,052	$ (15,024)	$ 14,472
Income (loss) from discontinued operations, net of taxes	—	—	—	—	—
Net income (loss) before attribution of noncontrolling interests	$ 14,422	$ 1,022	$ 14,052	$ (15,024)	$ 14,472
Noncontrolling interests	—	—	50	—	50
Net income (loss)	$ 14,422	$ 1,022	$ 14,002	$ (15,024)	$ 14,422
Comprehensive income					
Add: Other comprehensive income (loss)	$ 1,035	$ (260)	$ 4,628	$ (4,368)	$ 1,035
Total Citigroup comprehensive income (loss)	$ 15,457	$ 762	$ 18,630	$ (19,392)	$ 15,457
Add: Other comprehensive income attributable to noncontrolling interests	$ —	$ —	$ (26)	$ —	$ (26)
Add: Net income attributable to noncontrolling interests	—	—	50	—	50
Total comprehensive income (loss)	$ 15,457	$ 762	$ 18,654	$ (19,392)	$ 15,481

Condensed Consolidating Balance Sheet

In millions of dollars	Citigroup parent company	CGMHI	Other Citigroup subsidiaries and eliminations	Consolidating adjustments	Citigroup consolidated
	September 30, 2020				
Assets					
Cash and due from banks	$ —	$ 971	$ 24,337	$ —	$ 25,308
Cash and due from banks—intercompany	12	4,989	(5,001)	—	—
Deposits with banks, net of allowance	—	4,303	294,084	—	298,387
Deposits with banks—intercompany	3,000	7,135	(10,135)	—	—
Securities borrowed and purchased under resale agreements	—	228,207	61,151	—	289,358
Securities borrowed and purchased under resale agreements—intercompany	—	24,108	(24,108)	—	—
Trading account assets	282	211,853	136,074	—	348,209
Trading account assets—intercompany	359	4,713	(5,072)	—	—
Investments, net of allowance	1	458	447,065	—	447,524
Loans, net of unearned income	—	2,149	664,762	—	666,911
Loans, net of unearned income—intercompany	—	—	—	—	—
Allowance for credit losses on loans (ACLL)	—	—	(26,426)	—	(26,426)
Total loans, net	$ —	$ 2,149	$ 638,336	$ —	$ 640,485
Advances to subsidiaries	$ 150,617	$ —	$ (150,617)	$ —	$ —
Investments in subsidiaries	207,335	—	—	(207,335)	—
Other assets, net of allowance[1]	12,383	66,708	106,097	—	185,188
Other assets—intercompany	5,165	49,896	(55,061)	—	—
Total assets	$ 379,154	$ 605,490	$ 1,457,150	$ (207,335)	$ 2,234,459
Liabilities and equity					
Deposits	$ —	$ —	$ 1,262,623	$ —	$ 1,262,623
Deposits—intercompany	—	—	—	—	—
Securities loaned and sold under repurchase agreements	—	191,425	15,802	—	207,227
Securities loaned and sold under repurchase agreements—intercompany	—	66,606	(66,606)	—	—
Trading account liabilities	—	101,134	45,856	—	146,990
Trading account liabilities—intercompany	341	5,165	(5,506)	—	—
Short-term borrowings	22	11,884	25,533	—	37,439
Short-term borrowings—intercompany	—	9,241	(9,241)	—	—
Long-term debt	168,712	45,595	58,947	—	273,254
Long-term debt—intercompany	—	69,761	(69,761)	—	—
Advances from subsidiaries	13,290	—	(13,290)	—	—
Other liabilities, including allowance	2,838	55,990	53,503	—	112,331
Other liabilities—intercompany	75	12,795	(12,870)	—	—
Stockholders' equity	193,876	35,894	172,160	(207,335)	194,595
Total liabilities and equity	$ 379,154	$ 605,490	$ 1,457,150	$ (207,335)	$ 2,234,459

(1) *Other assets* for Citigroup parent company at September 30, 2020 included $37.0 billion of placements to Citibank and its branches, of which $31.8 billion had a remaining term of less than 30 days.

Condensed Consolidating Balance Sheet

	December 31, 2019				
In millions of dollars	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

In millions of dollars	Nine Months Ended September 30, 2020 Citigroup parent company	CGMHI	Other Citigroup subsidiaries and eliminations	Consolidating adjustments	Citigroup consolidated
Net cash provided by (used in) operating activities of continuing operations	**$ 3,605**	**$ (36,465)**	**$ 10,606**	**$ —**	**$ (22,254)**
Cash flows from investing activities of continuing operations					
Purchases of investments	$ —	$ —	$ (276,084)	$ —	$ (276,084)
Proceeds from sales of investments	—	—	130,237	—	130,237
Proceeds from maturities of investments	—	—	78,476	—	78,476
Change in loans	—	—	23,488	—	23,488
Proceeds from sales and securitizations of loans	—	—	924	—	924
Change in securities borrowed and purchased under agreements to resell	—	(35,332)	(2,704)	—	(38,036)
Changes in investments and advances—intercompany	(5,179)	(5,532)	10,711	—	—
Other investing activities	—	—	(2,205)	—	(2,205)
Net cash provided by (used in) investing activities of continuing operations	**$ (5,179)**	**$ (40,864)**	**$ (37,157)**	**$ —**	**$ (83,200)**
Cash flows from financing activities of continuing operations					
Dividends paid	$ (4,024)	$ (168)	$ 168	$ —	$ (4,024)
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	16,136	6,606	(4,664)	—	18,078
Proceeds (repayments) from issuance of long-term debt—intercompany, net	—	1,607	(1,607)	—	—
Change in deposits	—	—	192,033	—	192,033
Change in securities loaned and sold under agreements to repurchase	—	75,977	(35,089)	—	40,888
Change in short-term borrowings	—	788	(8,398)	—	(7,610)
Net change in short-term borrowings and other advances—intercompany	(7,214)	(6,524)	13,738	—	—
Other financing activities	(408)	—	—	—	(408)
Net cash provided by financing activities of continuing operations	**$ 1,565**	**$ 78,286**	**$ 156,181**	**$ —**	**$ 236,032**
Effect of exchange rate changes on cash and due from banks	$ —	$ —	$ (802)	$ —	$ (802)
Change in cash and due from banks and deposits with banks	**$ (9)**	**$ 957**	**$ 128,828**	**$ —**	**$ 129,776**
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	**$ 3,012**	**$ 17,398**	**$ 303,285**	**$ —**	**$ 323,695**
Cash and due from banks	$ 12	$ 5,960	$ 19,336	$ —	$ 25,308
Deposits with banks, net of allowance	3,000	11,438	283,949	—	298,387
Cash and due from banks and deposits with banks at end of period	**$ 3,012**	**$ 17,398**	**$ 303,285**	**$ —**	**$ 323,695**
Supplemental disclosure of cash flow information for continuing operations					
Cash paid during the period for income taxes	$ (1,263)	$ 1,177	$ 3,923	$ —	$ 3,837
Cash paid during the period for interest	2,507	3,988	5,007	—	11,502
Non-cash investing activities					
Transfers to loans HFS from loans	$ —	$ —	$ 2,122	$ —	$ 2,122

Condensed Consolidating Statement of Cash Flows

	Nine Months Ended September 30, 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	$ 23,879	$ (51,748)	$ (7,489)	$ —	$ (35,358)
Cash flows from investing activities of continuing operations					
Purchases of investments	$ —	$ —	$ (196,733)	$ —	$ (196,733)
Proceeds from sales of investments	4	—	96,396	—	96,400
Proceeds from maturities of investments	—	—	91,656	—	91,656
Change in loans	—	—	(11,518)	—	(11,518)
Proceeds from sales and securitizations of loans	—	—	2,717	—	2,717
Change in securities borrowed and purchased under agreements to resell	—	8,914	645	—	9,559
Changes in investments and advances—intercompany	(2,045)	(6,204)	8,249	—	—
Other investing activities	—	(44)	(4,129)	—	(4,173)
Net cash provided by (used in) investing activities of continuing operations	$ (2,041)	$ 2,666	$ (12,717)	$ —	$ (12,092)
Cash flows from financing activities of continuing operations					
Dividends paid	$ (4,048)	$ (155)	$ 155	$ —	$ (4,048)
Issuance of preferred stock	1,496	—	—	—	1,496
Redemption of preferred stock	(480)	—	—	—	(480)
Treasury stock acquired	(12,495)	—	—	—	(12,495)
Proceeds (repayments) from issuance of long-term debt, net	(1,122)	10,136	(6,738)	—	2,276
Proceeds (repayments) from issuance of long-term debt—intercompany, net	—	(5,683)	5,683	—	—
Change in deposits	—	—	74,599	—	74,599
Change in securities loaned and sold under agreements to repurchase	—	25,598	(8,319)	—	17,279
Change in short-term borrowings	—	5,855	(2,971)	—	2,884
Net change in short-term borrowings and other advances—intercompany	(4,834)	15,211	(10,377)	—	—
Capital contributions from (to) parent	—	(74)	74	—	—
Other financing activities	(360)	—	—	—	(360)
Net cash provided by (used in) financing activities of continuing operations	$ (21,843)	$ 50,888	$ 52,106	$ —	$ 81,151
Effect of exchange rate changes on cash and due from banks	$ —	$ —	$ (1,363)	$ —	$ (1,363)
Change in cash and due from banks and deposits with banks	$ (5)	$ 1,806	$ 30,537	$ —	$ 32,338
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	$ 3,015	$ 17,483	$ 199,945	$ —	$ 220,443
Cash and due from banks	$ 15	$ 5,501	$ 18,570	$ —	$ 24,086
Deposits with banks, net of allowance	3,000	11,982	181,375	—	196,357
Cash and due from banks and deposits with banks at end of period	$ 3,015	$ 17,483	$ 199,945	$ —	$ 220,443
Supplemental disclosure of cash flow information for continuing operations					
Cash paid during the period for income taxes	$ (274)	$ 281	$ 3,728	$ —	$ 3,735
Cash paid during the period for interest	3,107	8,893	10,343	—	22,343
Non-cash investing activities					
Transfers to loans HFS from loans	$ —	$ —	$ 4,400	$ —	$ 4,400

UNREGISTERED SALES OF EQUITY SECURITIES, REPURCHASES OF EQUITY SECURITIES AND DIVIDENDS

Unregistered Sales of Equity Securities
None.

Equity Security Repurchases
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. In addition, based on measures announced by the Federal Reserve Board in September 2020, stock repurchases are prohibited through the end of the fourth quarter of 2020. This limitation on capital distributions may be extended by the Federal Reserve Board. For additional information, see "Capital Resources—Capital Plan Resubmission and Related Limitations on Capital Distributions" above. Accordingly, Citi did not have any stock repurchases in the third quarter of 2020, other than permitted repurchases relating to issuances of common stock related to employee stock ownership plans. During the quarter, pursuant to Citi's Board of Directors' authorization, Citi repurchased 24,227 shares (at an average price of $43.52) of common stock, added to treasury stock, related to activity on employee stock programs where shares were withheld to satisfy the employee tax requirements.

Dividends
Consistent with the regulatory capital framework, Citi declared common dividends of $0.51 per share for the fourth quarter of 2020 on October 22, 2020, and intends to maintain its planned capital actions, which include common dividends of $0.51 per share over the four-quarter window of fourth quarter of 2020 to third quarter of 2021 (the 2020 CCAR cycle), subject to approval of Citi's Board of Directors and the latest financial and macroeconomic conditions. For information on Citi's SCB, see "Capital Resources—Stress Capital Buffer" above.

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. In June 2020, the Federal Reserve Board determined that changes in financial markets and macroeconomic outlooks related to the COVID-19 pandemic could have a material effect on the risk profile and financial condition of each firm subject to its capital plan rule and, therefore, required updated capital plans. Citigroup resubmitted its capital plan on November 2, 2020.

Through the end of the fourth quarter of 2020, dividends continue to be capped and tied to a formula based on recent income. These limitations on capital distributions may be extended by the FRB. Citi's common dividends of $0.51 per share during the fourth quarter of 2020 are not impacted by the Federal Reserve Board's temporary limitations on capital distributions. For additional information on these capital distribution limitations, see "Capital Resources—Capital Plan Resubmission and Related Limitations on Capital Distributions" 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 November, 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, incorporated by reference to Exhibit 3.01 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2020 filed May 4, 2020 (File No. 1-9924).
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 September 30, 2020, filed on November 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.