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

Form 10-Q

(Mark One)

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

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

Commission File Number 001-36198

INTERCONTINENTAL EXCHANGE, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

46-2286804

(IRS Employer Identification Number)

5660 New Northside Drive, 30328 Atlanta, Georgia (Zip Code)

(Address of principal executive offices)

(770) 857-4700

Registrant's telephone number, including area code

Securities registered pursuant to Section 12(b) of the Act:

Title of Fook Class

	Common Stock, \$0.01 par value per share		New York Stock Exchange
•	or such shorter period the	·	by Section 13 or 15(d) of the Securities Exchange Act of 1934 le such reports); and (2) has been subject to such filing
			e Data File required to be submitted pursuant to Rule 405 of period that the registrant was required to submit such files).
			ler, a non-accelerated filer, a smaller reporting company or an ler reporting company" and "emerging growth company" in Rule
Large accelerated filer	\square	Accelerated filer	
Non-accelerated filer		Smaller reporting compar	ny \square
		Emerging growth compar	ny \square
If an emerging growth company, revised financial accounting standard	•	•	use the extended transition period for complying with any new or . $\hfill\Box$
•	· ·	company (as defined in Rule 12b-2 gistrant's Common Stock outstandi	2 of the Exchange Act). Yes □ No ☑ ng was 561,283,772 shares.

INTERCONTINENTAL EXCHANGE, INC.

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PART I. Financial Statements

Item 1. Consolidated Financial Statements (Unaudited)

Intercontinental Exchange, Inc. and Subsidiaries Consolidated Balance Sheets (In millions, except per share amounts) (Unaudited)

	Septe	As of ember 30, 2020	As of December 31, 2019		
Assets:					
Current assets:					
Cash and cash equivalents	\$	610	\$	841	
Short-term restricted cash and cash equivalents		993		943	
Customer accounts receivable, net of allowance for doubtful accounts of \$25 and \$8, respectively		1,310		988	
Margin deposits, guaranty funds and delivery contracts receivable		85,900		64,987	
Prepaid expenses and other current assets		324		220	
Total current assets		89,137		67,979	
Property and equipment, net	-	1,693		1,536	
Other non-current assets:		·		,	
Goodwill		21,243		13,342	
Other intangible assets, net		14,507		10,258	
Long-term restricted cash and cash equivalents		408		404	
Other non-current assets		1,092		974	
Total other non-current assets	-	37.250		24.978	
Total assets	\$	128,080	\$	94,493	
Liabilities and Equity:					
Current liabilities:					
Accounts payable and accrued liabilities	\$	594	\$	505	
Section 31 fees payable		53		138	
Accrued salaries and benefits		274		291	
Deferred revenue		267		129	
Short-term debt		2,463		2,569	
Margin deposits, guaranty funds and delivery contracts payable		85,900		64,987	
Other current liabilities		135		197	
Total current liabilities		89,686		68,816	
Non-current liabilities:			_		
Non-current deferred tax liability, net		3,567		2,314	
Long-term debt		14,869		5,250	
Accrued employee benefits		187		198	
Non-current operating lease liability		315		281	
Other non-current liabilities		310		270	
Total non-current liabilities	-	19,248		8,313	
Total liabilities		108,934		77,129	
Commitments and contingencies			-	,,,_,	
Redeemable non-controlling interest in consolidated subsidiaries		94		78	

Equity:		
Intercontinental Exchange, Inc. stockholders' equity:		
Preferred stock, \$0.01 par value; 100 shares authorized; none issued or outstanding at September 30, 2020 and December 31, 2019	_	_
Common stock, \$0.01 par value; 1,500 shares authorized; 628 and 607 issued at September 30, 2020 and December 31, 2019, respectively, and 561 and 554 shares outstanding at September 30, 2020 and December 31, 2019, respectively	6	6
		•
Treasury stock, at cost; 67 and 53 shares, respectively	(5,198) (3,879)
Additional paid-in capital	13,804	11,742
Retained earnings	10,682	9,629
Accumulated other comprehensive loss	(273) (243)
Total Intercontinental Exchange, Inc. stockholders' equity	19,021	17,255
Non-controlling interest in consolidated subsidiaries	31	31
Total equity	19,052	17,286
Total liabilities and equity	\$ 128,080	\$ 94,493

Intercontinental Exchange, Inc. and Subsidiaries Consolidated Statements of Income (In millions, except per share amounts) (Unaudited)

		Nine Mon Septen			Three Months Ended September 30,			
		2020		2019		2020		2019
Revenues:	Φ.	0.700	ው	2.000	ው	4 455	r.	000
Transaction and clearing, net	\$	3,726	\$	2,698	\$	1,155 589	\$	929
Data services		1,727 334		1,652 336		111		553 114
Listings		224		194		75		67
Other revenues Total revenues	_	6,011		4,880		1,930		1,663
Transaction-based expenses:		0,011		4,000		1,930		1,003
Section 31 fees		465		274		145		105
Cash liquidity payments, routing and clearing		1,181		702		374		222
Total revenues, less transaction-based expenses		4,365		3,904	_	1,411		1,336
Operating expenses:	_	4,303		3,904	_	1,411		1,330
Compensation and benefits		849		768		298		261
Professional services		100		97		37		35
Acquisition-related transaction and integration costs		90		1		76		_
Technology and communication		388		346		131		126
Rent and occupancy		59		52		19		17
Selling, general and administrative		132		116		43		33
Depreciation and amortization		494		473		180		158
Total operating expenses		2,112		1,853		784		630
Operating income		2,253		2,051		627		706
Other income (expense):		,		,	_		_	
Interest income		9		27		1		8
Interest expense		(245)		(214)		(89)		(72)
Other income, net		75		30		44		(2)
Other income (expense), net		(161)		(157)		(44)		(66)
Income before income tax expense		2,092		1,894		583		640
Income tax expense		512		387		189		103
Net income	\$	1,580	\$	1,507	\$	394	\$	537
Net income attributable to non-controlling interest	_	(17)		(22)	_	(4)		(8)
Net income attributable to Intercontinental Exchange, Inc.	\$	1,563	\$	1,485	\$	390	\$	529
Earnings per share attributable to Intercontinental Exchange, Inc. common stockholders:	<u> </u>	· ·	_	·			_	
Basic	\$	2.85	\$	2.64	\$	0.71	\$	0.95
Diluted	\$	2.83	\$	2.62	\$	0.71	\$	0.94
Weighted average common shares outstanding:	÷		÷		÷		÷	
Basic		549		563		548		559
Diluted	=	552	_	566	_	551		563
	_	552	_	500	_	001	_	503

Intercontinental Exchange, Inc. and Subsidiaries Consolidated Statements of Comprehensive Income (In millions) (Unaudited)

,	Nine Months Ended September 30,				Three Months E September 3			
		2020		2019	2020		2020	
Net income	\$	1,580	\$	1,507	\$	394	\$	537
Other comprehensive income (loss):								
Foreign currency translation adjustments, net of tax expense of \$1 for both the nine and three months ended September 30, 2020 and tax benefit of \$1 for both the nine and three months ended September 30, 2019		(30)		(32)		48		(39)
Change in equity method investment		(30)		(1)				(59)
Other comprehensive income (loss)		(30)		(33)		48		(39)
Comprehensive income	\$	1,550	\$	1,474	\$	442	\$	498
Comprehensive income attributable to non-controlling interest		(17)		(22)		(4)		(8)
Comprehensive income attributable to Intercontinental Exchange, Inc.	\$	1,533	\$	1,452	\$	438	\$	490

Intercontinental Exchange, Inc. and Subsidiaries Consolidated Statements of Changes in Equity and Redeemable Non-Controlling Interest (In millions) (Unaudited)

			Intercontin	ental Exchan	Non-					
	Comm	ck		ry Stock	Additional Paid-in	Retained	Accumulated Other Comprehensive	Controlling Interest in Consolidated	Total	Redeemable Non-Controlling
	Shares	Value	Shares	Value	Capital	Earnings	Income/(Loss)	Subsidiaries	Equity	Interest
Balance, as of December 31, 2019	607	\$ 6	(53)	\$ (3,879)	\$ 11,742	\$ 9,629	\$ (243)	\$ 31	\$ 17,286	\$ 78
Impact of adoption of ASU 2016-13, net of tax	_	_	_	_	_	(10)	_	_	(10)	_
Other comprehensive loss	_	_	_	_	_	_	(30)	_	(30)	_
Stock consideration issued for acquisition	18	_	_	_	1,895	_	_	_	1,895	_
Exercise of common stock options	1	_	_	_	26	_	_	_	26	_
Repurchases of common stock	_	_	(14)	(1,247)	_	_	_	_	(1,247)	_
Payments relating to treasury shares	_	_	_	(72)	_	_	_	_	(72)	_
Stock-based compensation	_	_	_	_	105	_	_	_	105	9
Issuance under the employee stock purchase plan	_	_	_	_	33	_	_	_	33	_
Warrants issued to minority interest holders	_	_	_	_	3	_	_	_	3	2
Issuance of restricted stock	2	_	_	_	_	_	_	_	_	_
Distributions of profits	_	_	_	_	_	_	_	(31)	(31)	_
Dividends paid to stockholders	_	_	_	_	_	(500)	_	_	(500)	_
Redeemable non-controlling interest	_	_	_	_	_	_	_	_	_	10
Issuance of non-controlling interest	_	_	_	_	_	_	_	9	9	_
Net income (loss) attributable to non- controlling interest	_	_	_	_	_	(17)	_	22	5	(5)
Net income						1,580			1,580	
Balance, as of September 30, 2020	628	\$ 6	(67)	\$ (5,198)	\$ 13,804	\$ 10,682	\$ (273)	\$ 31	\$ 19,052	\$ 94

	Intercontinental Exchange, Inc. Stockholders' Equity							Non-		
	Comr Sto		Treasu Shares	ry Stock Value	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Income/(Loss)	Controlling Interest in Consolidated Subsidiaries	Total Equity	Redeemable Non-Controlling Interest
Balance, as of June 30, 2020	609	\$ 6	(65)	\$ (5,050)	\$ 11,856	\$ 10,462	\$ (321)	\$ 41	\$ 16,994	\$ 95
Other comprehensive income	_	_	_	_	_	_	48	_	48	_
Stock consideration issued for acquisition	18	_	_	_	1,895	_	_	_	1,895	_
Exercise of common stock options	1	_	_	_	4	_	_	_	4	_
Repurchases of common stock	_	_	(2)	(148)	_	_	_	_	(148)	_
Stock-based compensation	_	_	_	_	32	_	_	_	32	1
Issuance under the employee stock purchase plan	_	_	_	_	17	_	_	_	17	_
Distributions of profits	_	_	_	_	_	_	_	(16)	(16)	_
Dividends paid to stockholders	_	_	_	_	_	(170)	_	_	(170)	_
Net income (loss) attributable to non- controlling interest	_	_	_	_	_	(4)	_	6	2	(2)
Net income	_	_	_	_	_	394	_	_	394	_
Balance, as of September 30, 2020	628	\$ 6	(67)	\$ (5,198)	\$ 13,804	\$ 10,682	\$ (273)	\$ 31	\$ 19,052	\$ 94

Intercontinental Exchange, Inc. and Subsidiaries Consolidated Statements of Changes in Equity and Redeemable Non-Controlling Interest — (Continued) (In millions) (Unaudited)

	Intercontinental Exchange, Inc. Stockholders' Equity									
	Comr Sto		Treasu	ry Stock	Additional Paid-in	Retained	Accumulated Other Comprehensive	- Non- Controlling Interest in Consolidated	Total	Redeemable Non-Controlling
	Shares	Value	Shares	Value	Capital	Earnings	Income/(Loss)	Subsidiaries	Equity	Interest
Balance, as of December 31, 2018	604	\$ 6	(35)	\$ (2,354)	\$ 11,547	\$ 8,317	\$ (315)	\$ 30	\$ 17,231	\$ 71
Other comprehensive loss	_	_	_	_	_	_	(33)	_	(33)	_
Exercise of common stock options	1	_	_	_	22	_	_	_	22	_
Repurchases of common stock	_	_	(14)	(1,120)	_	_	_	_	(1,120)	_
Payments relating to treasury shares	_	_	_	(64)	_	_	_	_	(64)	_
Stock-based compensation	_	_	_	_	109	_	_	_	109	3
Issuance under the employee stock purchase plan	_	_	_	_	28	_	_	_	28	_
Issuance of restricted stock	2	_	_	_	_	_	_	_	_	_
Distributions of profits	_	_	_	_	_	_	_	(29)	(29)	_
Dividends paid to stockholders	_	_	_	_	_	(467)	_	_	(467)	_
Net income attributable to non-controlling interest	_	_	_	_	_	(22)	_	23	1	(2)
Net income	_	_	_	_	_	1,507	_	_	1,507	_
Balance, as of September 30, 2019	607	\$ 6	(49)	\$ (3,538)	\$ 11,706	\$ 9,335	\$ (348)	\$ 24	\$ 17,185	\$ 72

	Intercontinental Exchange, Inc. Stockholders' Equity							Non-		
	Comr Sto			ıry Stock Value	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Income/(Loss)	Controlling Interest in Consolidated Subsidiaries	Total Equity	Redeemable Non-Controlling Interest
Balance, as of June 30, 2019	606	\$ 6	(45)	\$ (3,194)	\$ 11,651	\$ 8,961	\$ (309)	\$ 31	\$ 17,146	\$ 72
Other comprehensive loss	_	_	_	_	_	_	(39)	_	(39)	_
Exercise of common stock options	1	_	_	_	5	_	_	_	5	_
Repurchases of common stock	_	_	(4)	(340)	_	_	_	_	(340)	_
Payments relating to treasury shares	_	_	_	(4)	_	_	_	_	(4)	_
Stock-based compensation	_	_	_	_	36	_	_	_	36	1
Issuance under the employee stock purchase plan	_	_	_	_	14	_	_	_	14	_
Distributions of profits	_	_	_	_	_	_	_	(15)	(15)	_
Dividends paid to stockholders	_	_	_	_	_	(155)	_	_	(155)	_
Net income attributable to non-controlling interest	_	_	_	_	_	(8)	_	8	_	(1)
Net income	_	_	· _	_	_	537	_	_	537	_
Balance, as of September 30, 2019	607	\$ 6	(49)	\$ (3,538)	\$ 11,706	\$ 9,335	\$ (348)	\$ 24	\$ 17,185	\$ 72

Intercontinental Exchange, Inc. and Subsidiaries Consolidated Statements of Cash Flows (In millions) (Unaudited)

	Nine Months End September 30,			
		2020		2019
Operating activities:				
Net income	\$	1,580	\$	1,507
Adjustments to reconcile net income to net cash provided by operating activities:				
Depreciation and amortization		494		473
Stock-based compensation		105		100
Deferred taxes		67		(52)
Other		(48)		(34)
Changes in assets and liabilities:				(2.7)
Customer accounts receivable		(228)		(97)
Other current and non-current assets		(43)		22
Section 31 fees payable		(85)		(70)
Deferred revenue		120		114
Other current and non-current liabilities		(147)		(81)
Total adjustments		235		375
Net cash provided by operating activities		1,815		1,882
Investing activities:				
Capital expenditures		(114)		(87)
Capitalized software development costs		(154)		(116)
Cash paid for acquisitions, net of cash acquired		(9,439)		(352)
Return of capital from equity method investment		_		44
Proceeds from investments, net		5		(1)
Net cash used in investing activities		(9,702)		(512)
Financing activities:				
Proceeds from debt facilities, net		9,606		11
Repayments of debt facilities		(1,258)		_
Proceeds from/(redemption of) commercial paper, net		1,149		367
Repurchases of common stock		(1,247)		(1,120)
Dividends to stockholders		(500)		(467)
Payments relating to treasury shares received for restricted stock tax payments and stock option exercises		(72)		(64)
Other		31		22
Net cash provided by (used in) financing activities		7,709		(1,251)
Effect of exchange rate changes on cash, cash equivalents and restricted cash and cash equivalents		1		(2)
Net increase (decrease) in cash, cash equivalents, and restricted cash and cash equivalents		(177)		117
Cash, cash equivalents, and restricted cash and cash equivalents, beginning of period		2,188		1,872
Cash, cash equivalents, and restricted cash and cash equivalents, end of period	\$	2,011	\$	1,989
Supplemental cash flow disclosure:	<u>=</u>			
Common stock issued for acquisition	\$	1,895	\$	_
Cash paid for income taxes	\$	558	\$	457
Cash paid for interest	\$	209	\$	214

Intercontinental Exchange, Inc. and Subsidiaries Notes to Consolidated Financial Statements (Unaudited)

1. Description of Business

Nature of Business and Organization

We are a leading provider of marketplace infrastructure, data services and technology solutions to a broad range of customers including financial institutions, corporations and government entities. Through our markets, clearinghouses, listings, data and technology offerings, we provide comprehensive workflow solutions that enable our customers to manage risk, raise capital and operate their businesses more efficiently. We operate regulated marketplaces for listing, trading and clearing of a broad array of derivatives contracts and securities across major asset classes including: energy and agricultural commodities, metals, interest rates, equities, exchange-traded funds, or ETFs, credit derivatives, digital assets, bonds and currencies. In addition, we offer comprehensive data services to support the trading, investment, risk management and connectivity needs of customers around the world and across asset classes. We also offer technology solutions that support the United States, or U.S., residential mortgage industry from application and loan origination, through to final settlement. We operate marketplaces and provide data services in the U.S., United Kingdom, or U.K., European Union, or EU, Canada and Singapore, and offer technology and data solutions to the U.S. mortgage industry.

2. Summary of Significant Accounting Policies

Basis of Presentation

We prepared the accompanying unaudited consolidated financial statements in accordance with U.S. generally accepted accounting principles, or U.S. GAAP, pursuant to the rules and regulations of the Securities and Exchange Commission, or SEC, regarding interim financial reporting. Accordingly, the unaudited consolidated financial statements do not include all of the information and footnotes required by U.S. GAAP for complete financial statements and should be read in conjunction with our audited consolidated financial statements and related notes thereto for the year ended December 31, 2019. The accompanying unaudited consolidated financial statements reflect all adjustments that are, in our opinion, necessary for a fair presentation of results for the interim periods presented. We believe that these adjustments are of a normal recurring nature.

Preparing financial statements in conformity with U.S. GAAP requires us to make certain estimates and assumptions that affect the amounts that are reported in our consolidated financial statements and accompanying disclosures. Actual amounts could differ from those estimates. The results of operations for the nine and three months ended September 30, 2020 are not necessarily indicative of the results to be expected for any future period or the full fiscal year.

These statements include the accounts of our wholly-owned and controlled subsidiaries. All intercompany balances and transactions between us and our wholly-owned and controlled subsidiaries have been eliminated in consolidation. For consolidated subsidiaries in which our ownership is less than 100% and for which we have control over the assets and liabilities and the management of the entity, the outside stockholders' interests are shown as non-controlling interests. Where outside owners hold an option to require us to repurchase their interests, these amounts are shown as redeemable non-controlling interests and are subject to remeasurement when repurchase is probable.

Recently Adopted Accounting Pronouncements

Standard/Description	Effective Date and Adoption Considerations	Effect on Financial Statements
ASU No. 2016-13, Financial Instruments - Measurement of Credit Losses on Financial Instruments, applies to all financial instruments carried at amortized cost including held-to-maturity debt securities and accounts receivable. It requires financial assets carried at amortized cost to be presented at the net amount expected to be collected and requires entities to record credit losses through an allowance for credit losses on available-for-sale debt securities.	We adopted on January 1, 2020 on a modified retrospective basis.	We evaluated this guidance to determine the impact on our consolidated financial statements. Based on our assessment, we concluded the impact of adoption of this guidance was not material. Further disclosures and details on our adoption are discussed below.
ASU 2017-04, Simplifying the Test for Goodwill Impairment, removes the second step of the goodwill impairment test, which requires a hypothetical purchase price allocation if the fair value of a reporting unit is less than its carrying value. Goodwill impairment will now be measured using the difference between the carrying value and the fair value of the reporting unit, and any loss recognized should not exceed the total amount of goodwill allocated to that reporting unit.	We adopted on January 1, 2020 on a prospective basis.	We evaluated this guidance to determine the impact on our consolidated financial statements. Based on our assessment, we concluded the impact of adoption of this guidance was not material. The fair values of our reporting units have been greater than their corresponding carrying values in recent years. Changes in future projections, market conditions, and other factors may cause a change in the excess of fair value of our reporting units over their corresponding carrying values.
ASU 2018-15, Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement that is a Service Contract, helps entities evaluate the accounting for fees paid by a customer in a cloud computing arrangement by providing guidance for determining when an arrangement includes a software license and is solely a hosted service. Customers will now apply the same criteria for capitalizing implementation costs as they would for a software license arrangement. The guidance also prescribes the balance sheet, income statement, and cash flow classification of the capitalized implementation costs and related amortization expense, and requires additional quantitative and qualitative disclosures.	We adopted on January 1, 2020 and apply the rules prospectively to eligible costs incurred on or after the effective date.	We evaluated this guidance to determine the impact on our consolidated financial statements. Based on our assessment, we concluded the impact of adoption of this guidance was not material.
ASU No. 2019-12, Simplifying the Accounting for Income Taxes, eliminates certain exceptions related to the approach for intraperiod tax allocation, the methodology for calculating income taxes in an interim period and the recognition of deferred tax liabilities for outside basis differences. It clarifies that single-member limited liability companies, and other similar disregarded entities that are not subject to income tax, are not required to recognize an allocation of consolidated income tax expense in their separate financial statements. Further, it simplifies the accounting for franchise taxes, enacted changes in tax laws or rates and transactions that result in a step-up in the tax basis of goodwill.	Effective for fiscal years beginning after December 15, 2020 with early adoption permitted. We elected early adoption and adopted on January 1, 2020.	We evaluated this guidance to determine the impact on our consolidated financial statements. Based on our assessment, we concluded the impact of adoption of this guidance was not material.

Adoption of ASU 2016-13, Financial Instruments - Measurement of Credit Losses on Financial Instruments

On January 1, 2020, we adopted ASU 2016-13, *Financial Instruments - Measurement of Credit Losses on Financial Instruments*, or ASU 2016-13. This standard requires the application of a current expected credit loss, or CECL, impairment model to financial assets measured at amortized cost, including accounts receivable and certain off-balance-sheet credit exposures. The standard also amends the impairment model for available-for-sale debt securities requiring entities to record credit losses through an allowance account. The CECL model requires an entity to estimate its lifetime expected credit loss and record an allowance that, when deducted from the amortized cost basis of the financial asset, presents the net amount expected to be collected on the financial asset. Adoption of the standard requires more timely recognition of credit losses and credit loss estimates are required to use historical information, current information and reasonable and supportable forecasts of future events.

We adopted ASU 2016-13 using the modified retrospective approach through a cumulative-effect adjustment to retained earnings on January 1, 2020. ASU 2016-13 primarily impacted the calculation of our allowance for doubtful accounts on accounts receivable utilizing the expected credit losses model. Our adoption of ASU 2016-13 was subject to the same internal controls over financial reporting that we apply to our consolidated financial statements and the impact of our adoption was not material. We do not currently hold available-for-sale debt securities, off-balance-sheet credit exposures, or other material financial assets impacted by the standard, besides those mentioned below.

We considered our material financial assets within scope, including our cash equivalents, short-term and long-term restricted cash equivalents as well as our clearing members' cash equivalent and reverse repurchase receivables, and determined that such assets have a de minimis risk of credit loss. We invest our cash and clearing members' cash by placing it in highly-rated government securities, primarily U.S. Treasury securities and other sovereign debt with original maturities of less than three months which we consider to be cash equivalents, or into reverse repurchase agreements, referred to as reverse repos, with primarily overnight maturities. Reverse repos are valued daily and are subject to collateral maintenance provisions whereby the counterparty must provide additional collateral if the value of the underlying securities lose value, in an amount sufficient to maintain collateralization of at least 102%. Therefore, as of and for the nine months ended September 30, 2020 we have not recorded a credit loss for these financial assets.

Based on the high turnover and collectability of our accounts receivable, as well as the monthly billing process for the majority of revenue, we did not experience a significant increase in the loss provision recognized upon adoption of the CECL model. Accounts receivable in our futures and clearing businesses have minimal credit risk as all clearing members are pre-screened, collection periods occur within one month and the services to customers are completed almost instantaneously. Our accounts receivable related to revenues from market data, cash trading, listings, technology services, mortgage technology, CDS transactions and bilateral OTC energy transactions subject us to credit losses, but we expeditiously limit our risk of credit loss by taking action such as terminating trading or transaction access, terminating public listings or ceasing to distribute data for entities with delinquent accounts. The concentration of risk on our accounts receivable is also mitigated by the high quality and the large number of entities comprising our customer base.

We estimated our allowance for doubtful accounts using an aging method, disaggregated based on major revenue stream categories as well as other unique revenue stream factors. The factors for pooling our accounts receivable balances were specific to each revenue stream based on our risk assessment, past patterns of collectability, our knowledge of the business, and customer-specific situations. We apply estimated reserve percentages to the risk pools identified, which are derived from historical write-off factors that are based on the accounts receivable balance's delinquency status and adjusted as appropriate for our reasonable and supportable estimates of current and future economic conditions. We believe that historical write-off trends provide a basis for estimating future patterns of losses because there have been no significant changes in the mix or risk characteristics of the accounts receivable revenue stream pool populations from the risk pools used to calculate our historical write-off rates. At each measurement date we reassess whether our accounts receivable pools continue to exhibit similar risk characteristics. We then determine if assets need to be isolated further as part of their own specific line item reserve due to specific events, such as a customer's inability to meet its financial obligations (i.e. customer disputes, highly unresponsive customers, delinquency of the receivable, or other indicators of credit deterioration of customers). Lastly, the CECL standard is forward-looking and requires us to factor reasonable and supportable economic expectations into our allowance estimate for the asset's entire expected life, which is generally less than one year.

A reconciliation of the beginning and ending amount of allowance for doubtful accounts is as follows for the nine months ended September 30, 2020 (in millions):

	Allowance for Doubtful Accounts					
Beginning balance as of December 31, 2019	\$	8				
Impact of adoption of ASU 2016-13		13				
Bad debt expense		11				
Charge-offs		(7)				
Ending balance as of September 30, 2020	\$	25				

The impact of adoption of ASU 2016-13 was \$10 million, net of tax. We recorded this impact as an adjustment to retained earnings on January 1, 2020 as shown in our Consolidated Statement of Changes in Equity and Redeemable Non-Controlling Interest. We have included in our allowance assessment the impact of and our responses to the coronavirus, or COVID-19, pandemic. Our bad debt expense in the table above includes that assessment, the impact of which was not material for the nine and three months ended September 30, 2020. We will continue to review our accounts receivable and may incur future charge-offs as better estimates become available in future periods. Charge-offs in the table above represent the write-off of uncollectible receivables, net of recoveries. These amounts also include the impact of foreign currency translation adjustments.

3. Acquisitions

Ellie Mae

On September 4, 2020, we acquired Ellie Mae Intermediate Holdings I, Inc., and its indirect wholly owned subsidiary, Ellie Mae, Inc. (collectively, Ellie Mae), for aggregate consideration of \$11.4 billion from private equity firm Thoma Bravo. Ellie Mae is a cloud-based technology solution provider for the mortgage finance industry. Through its digital lending platform, Ellie Mae provides technology solutions to participants in the mortgage supply chain, including over 3,000 customers and thousands of partners and investors who participate on its open network. Originators rely on Ellie Mae to securely manage the exchange of data across the mortgage ecosystem to enable the origination of mortgages while adhering to various local, state and federal compliance requirements. Ellie Mae is a part of ICE Mortgage Technology and is included in our Trading and Clearing segment as of September 30, 2020. From the acquisition date through September 30, 2020, Ellie Mae revenues of \$75 million, which are included in our transaction and clearing revenues, and operating expenses of \$56 million were recorded for the nine and three months ended September 30, 2020.

The purchase price consisted of \$9.5 billion in cash, as adjusted for \$335 million of cash and cash equivalents held by Ellie Mae on the date of acquisition, and \$1.9 billion, or 18.4 million shares of our common stock, based on our stock price on the acquisition date. ICE funded the cash portion of the purchase price with net proceeds from our offering of new senior notes in August 2020, together with the issuance of commercial paper and borrowings under a new senior unsecured term loan facility (Note 8).

We are currently reviewing the impact of this acquisition under Accounting Standards Codification 805- *Business Combinations*. Any additional disclosures would not be practical for the nine and three months ending September 30, 2020. Such disclosures, if any, will be included in our Annual Report on Form 10-K for the fiscal year ending December 31, 2020.

The purchase price has been allocated to the net tangible and identifiable intangible assets and liabilities based on the preliminary respective estimated fair values on the date of acquisition. The excess of purchase price over the net tangible and identifiable intangible assets has been recorded as goodwill. Goodwill represents potential revenue synergies related to new product development, various expense synergies and opportunities to enter new markets. The preliminary purchase price allocation is as follows (in millions):

	Preliminary Purchase Price Allocation				
Cash and cash equivalents	\$	335			
Property and equipment		151			
Goodwill		7,688			
Identifiable intangibles		4,431			
Other assets and liabilities, net		54			
Deferred tax liabilities on identifiable intangibles		(1,241)			
Total preliminary purchase price allocation	\$	11,418			

In performing the preliminary purchase price allocation, we considered, among other factors, the intended future use of acquired assets, analysis of historical financial performance and estimates of future performance of the Ellie Mae business. We have not yet obtained all of the information related to the fair value of the acquired assets and liabilities.

The primary areas of the preliminary purchase price allocation that are not yet finalized relate to the valuation of the identifiable intangible assets, income taxes, and certain other tangible assets and liabilities. The allocation of the purchase price will be finalized upon the completion of the analysis of the acquired assets and liabilities within one year of the date of acquisition.

The following table sets forth the components of the preliminary intangible assets associated with the acquisition as of September 30, 2020 (in millions, except years):

	sition-Date ry Fair Value	Accumulated Amortization										Net Book Value		Useful Life (Years)
Customer relationships	\$ 3,125	\$	(11)	\$	3,114	10 to 20								
Backlog	300		(3)		297	5 to 7								
Trademark/Tradenames	200		(1)		199	5 to 20								
Developed Technology	739		(8)		731	7								
In-process Research & Development	67		_		67	N/A								
Total	\$ 4,431	\$	(23)	\$	4,408									

Bridge2 Solutions

On February 21, 2020, we acquired Bridge2 Solutions, a leading provider of loyalty solutions for merchants and consumers. Bridge2 Solutions enables some of the world's leading brands to engage customers and drive loyalty. It powers incentive and employee perk programs for companies across a wide spectrum of industries. The purchase price has been allocated to the net tangible and identifiable intangible assets and liabilities based on the respective estimated fair values on the date of acquisition. The excess of purchase price over the net tangible and identifiable intangible assets has been recorded as goodwill. Identified intangible assets primarily consist of customer relationships and developed technology, which have been assigned useful lives of twelve years and seven years, respectively. Bridge2 Solutions is included in our Trading and Clearing segment as part of the Bakkt ecosystem.

To fund the acquisition of Bridge2 Solutions, Bakkt completed a capital call for \$300 million in funding by ICE and the minority investors. This acquisition-related capital call triggered a market condition of certain Bakkt equity incentive awards, and as a result, during the nine months ended September 30, 2020 we incurred a \$10 million compensation expense related to these awards which has been recorded as an acquisition-related cost.

4. Investments

Our equity investments, including our investments in Euroclear plc, or Euroclear, and Coinbase Global, Inc., among others, are subject to valuation under ASU 2016-01, *Financial Instruments- Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities.* See Note 14 for a discussion of our determination of fair value of our financial instruments.

Investment in OCC

We own a 40% interest in the Options Clearing Corporation, or OCC, which is regulated by the SEC and the Commodity Futures Trading Commission, or CFTC, that we treat as an equity method investment. As of September 30, 2020, the OCC is our only equity method investment and is included in other non-current assets in the accompanying consolidated balance sheet. We recognized \$84 million and \$51 million during the nine months ended September 30, 2020 and 2019, respectively, and \$49 million and \$15 million during the three months ended September 30, 2020 and 2019, respectively, of equity earnings as our share of the OCC's estimated profits, which is included in other income. Included within the amounts recognized during the nine and three months ended September 30, 2020, is a \$36 million cumulative adjustment to increase our equity earnings for our share of the OCC's estimated profits due to an increase in the OCC's 2020 transaction revenues.

On February 13, 2019, the SEC disapproved the OCC capital plan that had been established in 2015. Following the SEC disapproval, the OCC also announced that it would not be providing a refund to clearing members or declaring a dividend to shareholders for the year ended December 31, 2018, which resulted in higher reported OCC 2018 net income than we

had estimated. Therefore, during the nine months ended September 30, 2019, we adjusted equity earnings in the OCC by \$19 million in other income to reflect our share of the OCC's 2018 net income. Refer to Note 4 to our consolidated financial statements included in our 2019 Form 10-K for additional details on our OCC investment.

Investment in BIDS

We hold a 9% ownership interest in BIDS Trading, LP, or BIDS, which we treat as an equity investment subject to valuation under ASU 2016-01 (Note 14). BIDS is a registered broker-dealer and the operator of the BIDS Alternative Trading System. In October 2020, Cboe Global Markets announced its intent to purchase BIDS. Details have not been made publicly available, other than that the sale is expected to close in 2021, at which time we will record our financial statement impact.

5. Revenue Recognition

Substantially all of our revenues are considered to be revenues from contracts with customers. The related accounts receivable balances are recorded in our balance sheets as customer accounts receivable. We do not have obligations for warranties, returns or refunds to customers, other than rebates, which are settled each period and therefore do not result in variable consideration. We do not have significant revenue recognized from performance obligations that were satisfied in prior periods, and we do not have any transaction price allocated to unsatisfied performance obligations other than in our deferred revenue. Deferred revenue represents our contract liabilities related to our annual, original and other listings revenues as well as certain data, clearing and mortgage services and other revenues. See Note 7 for our discussion of deferred revenue balances, activity, and expected timing of recognition. We have elected not to provide disclosures about the transaction price allocated to unsatisfied performance obligations if contract durations are less than one year, or if we are not required to estimate the transaction price. For all of our contracts with customers, except for listings and certain data, clearing and mortgage services, our performance obligations are short term in nature and there is no significant variable consideration. In addition, we have elected the practical expedient of excluding sales taxes from transaction prices. We have assessed the costs incurred to obtain or fulfill a contract with a customer and determined them to be immaterial.

Certain judgments and estimates are used in the identification and timing of satisfaction of performance obligations and the related allocation of transaction price. We believe that these represent a faithful depiction of the transfer of services to our customers. Refer to Note 5 to our consolidated financial statements included in our 2019 Form 10-K where our primary revenue contract classifications are described in detail.

The following table depicts the disaggregation of our revenue according to business line and segment (in millions). Amounts here have been aggregated as they follow consistent revenue recognition patterns, and are consistent with the segment information in Note 15:

	Trading and Clearing Segment				Total	Consolidated
Nine Months Ended September 30, 2020:						
Transaction and clearing, net	\$	3,726	\$	_	\$	3,726
Data services		_		1,727		1,727
Listings		_		334		334
Other revenues		224		_		224
Total revenues		3,950		2,061		6,011
Transaction-based expenses		1,646		_		1,646
Total revenues, less transaction-based expenses	\$	2,304	\$	2,061	\$	4,365
Timing of Revenue Recognition						
Services transferred at a point in time	\$	1,982	\$	_	\$	1,982
Services transferred over time		322		2,061		2,383
Total revenues, less transaction-based expenses	\$	2,304	\$	2,061	\$	4,365

		ading and ing Segment		and Listings egment	Total C	onsolidated
Nine Months Ended September 30, 2019:						
Transaction and clearing, net	\$	2,698	\$	_	\$	2,698
Data services		_		1,652		1,652
Listings				336		336
Other revenues		194				194
Total revenues		2,892		1,988		4,880
Transaction-based expenses		976			<u> </u>	976
Total revenues, less transaction-based expenses	\$	1,916	\$	1,988	\$	3,904
Timing of Revenue Recognition						
Services transferred at a point in time	\$	1,653	\$	_	\$	1,653
Services transferred over time		263		1,988		2,251
Total revenues, less transaction-based expenses	\$	1,916	\$	1,988	\$	3,904
		iding and ng Segment		and Listings egment	Total C	onsolidated
Three Months Ended September 30, 2020:						
Transaction and clearing, net	\$	1,155	\$	_	\$	1,155
Data services		_		589		589
Listings		_		111		111
Other revenues		75		_		75
Total revenues		1,230		700		1,930
Transaction-based expenses		519		_		519
Total revenues, less transaction-based expenses	\$	711	\$	700	\$	1,411
Timing of Revenue Recognition						
Services transferred at a point in time	\$	595	\$	_	\$	595
Services transferred over time		116		700		816
Total revenues, less transaction-based expenses	\$	711	\$	700	\$	1,411
	Tra Cleari	iding and ng Segment		and Listings egment	Total C	onsolidated
Three Months Ended September 30, 2019:		225	•		•	222
Transaction and clearing, net	\$	929	\$	_	\$	929
Data services				553		553
Listings		_		114		114
Other revenues		67				67
Total revenues		996		667		1,663
Transaction-based expenses		327				327
Total revenues, less transaction-based expenses	\$	669	\$	667	\$	1,336
Timing of Revenue Recognition						
Services transferred at a point in time	\$	578	\$	_	\$	578
Services transferred over time		91		667		758
Total revenues, less transaction-based expenses	\$	669	\$	667	\$	1,336

The Trading and Clearing segment revenues above include \$209 million and \$188 million for the nine months ended September 30, 2020 and 2019, respectively, and \$57 million and \$66 million for the three months ended September 30,

2020 and 2019, respectively, for services transferred over time related to risk management of open interest performance obligations. A majority of these performance obligations are performed over a short period of time of one month or less.

Beginning in the second quarter of 2019, we have reflected amounts owed under certain third-party revenue share arrangements as technology and communication operating expenses rather than as had been previously recorded net within transaction and clearing revenues. These are included within our Trading and Clearing segment.

6. Goodwill and Other Intangible Assets

The following is a summary of the activity in the goodwill balance for the nine months ended September 30, 2020 (in millions):

Goodwill balance at December 31, 2019	\$ 13,342
Acquisitions	7,907
Foreign currency translation	(11)
Other activity, net	5
Goodwill balance at September 30, 2020	\$ 21,243

The following is a summary of the activity in the other intangible assets balance for the nine months ended September 30, 2020 (in millions):

Other intangible assets balance at December 31, 2019	\$ 10,258
Acquisitions	4,498
Foreign currency translation	(13)
Amortization of other intangible assets	(236)
Other intangible assets balance at September 30, 2020	\$ 14,507

We completed our acquisitions of Ellie Mae and Bridge2 Solutions during the nine months ended September 30, 2020 (Note 3). Foreign currency translation adjustments result from a portion of our goodwill and other intangible assets being held at our U.K., EU and Canadian subsidiaries, whose functional currencies are not the U.S. dollar. The change in other activity, net, primarily relates to adjustments to the fair value of the net tangible and intangible assets relating to acquisitions, with a corresponding adjustment to goodwill. We have performed an analysis of impairment indicators, including the economic impact of and our responses to the COVID-19 pandemic, and did not recognize any impairment losses on goodwill or other intangible assets during the nine and three months ended September 30, 2020.

7. Deferred Revenue

Our contract liabilities, or deferred revenue, represent consideration received that is yet to be recognized as revenue. Total deferred revenue was \$360 million as of September 30, 2020, including \$267 million in current deferred revenue and \$93 million in other non-current liabilities. The changes in our deferred revenue during the nine months ended September 30, 2020 are as follows (in millions):

	Lis	nnual stings venues	Li	riginal istings venues	Other _istings evenues	and	Services d Other venues	ortgage chnology	7	Γotal
Deferred revenue balance at December 31, 2019	\$		\$	19	\$ 94	\$	88	\$ 	\$	201
Additions		384		9	34		367	25		819
Amortization		(288)		(15)	(31)		(326)	_		(660)
Deferred revenue balance at September 30, 2020	\$	96	\$	13	\$ 97	\$	129	\$ 25	\$	360

The changes in our deferred revenue during the nine months ended September 30, 2019 are as follows (in millions):

	Lis	nual tings enues	Original Listings Revenues	er Listings evenues	á	ita Services and Other Revenues	Total
Deferred revenue balance at December 31, 2018	\$		\$ 25	\$ 100	\$	92	\$ 217
Additions		387	11	30		300	728
Amortization		(289)	(17)	(30)		(277)	(613)
Deferred revenue balance at September 30, 2019	\$	98	\$ 19	\$ 100	\$	115	\$ 332

Included in the amortization recognized during the nine months ended September 30, 2020 is \$92 million related to the deferred revenue balance as of January 1, 2020. Included in the amortization recognized for the nine months ended September 30, 2019 is \$94 million related to the deferred revenue balance as of January 1, 2019. As of September 30, 2020, the remaining deferred revenue balance will be recognized over the period of time we satisfy our performance obligations as described in Note 5. Deferred revenue for mortgage technology is related to Ellie Mae and has been included as of September 30, 2020 following our September 2020 acquisition of Ellie Mae.

8. Debt

Our total debt, including short-term and long-term debt, consisted of the following as of September 30, 2020 and December 31, 2019 (in millions):

	As of S	As of September 30, 2020		mber 31,
Debt:				
Short-term debt:				
Commercial Paper	\$	2,460	\$	1,311
2020 Senior Notes (2.75% senior unsecured notes due December 1, 2020)		_		1,248
Other short-term debt		3		10
Total short-term debt		2,463		2,569
Long-term debt:				
2022 Term Loan		747		_
2022 Senior Notes (2.35% senior unsecured notes due September 15, 2022)		498		497
2023 Senior Notes (floating rate senior unsecured notes due June 15, 2023)		1,244		_
2023 Senior Notes (0.70% senior unsecured notes due June 15, 2023)		994		_
2023 Senior Notes (3.45% senior unsecured notes due September 21, 2023)		398		398
2023 Senior Notes (4.00% senior unsecured notes due October 15, 2023)		795		794
2025 Senior Notes (3.75% senior unsecured notes due December 1, 2025)		1,245		1,244
2027 Senior Notes (3.10% senior unsecured notes due September 15, 2027)		496		496
2028 Senior Notes (3.75% senior unsecured notes due September 21, 2028)		593		592
2030 Senior Notes (2.10% senior unsecured notes due June 15, 2030)		1,231		_
2032 Senior Notes (1.85% senior unsecured notes due September 15, 2032)		1,481		_
2040 Senior Notes (2.65% senior unsecured notes due September 15, 2040)		1,229		_
2048 Senior Notes (4.25% senior unsecured notes due September 21, 2048)		1,230		1,229
2050 Senior Notes (3.00% senior unsecured notes due June 15, 2050)		1,219		_
2060 Senior Notes (3.00% senior unsecured notes due September 15, 2060)		1,469		
Total long-term debt		14,869		5,250
Total debt	\$	17,332	\$	7,819

Credit Facilities

On August 21, 2020, we agreed with the lenders under our \$3.4 billion senior unsecured revolving credit facility, or the Credit Facility, to extend the maturity date of the Credit Facility to August 21, 2025, among other items. We also exercised our option to increase the amount of the Credit Facility to \$3.7 billion which reduced our future capacity to increase our borrowings under the Credit Facility to \$650 million, subject to the consent of the lenders funding the increase and certain other conditions. We incurred new debt issuance costs of \$9 million relating to the Credit Facility and these costs are represented in the accompanying consolidated balance sheet as other non-current assets and will be amortized over the

remaining life of the Credit Facility. The commitments under the Credit Facility will automatically reduce to \$3.6 billion on August 9, 2023. No amounts were outstanding under the Credit Facility as of September 30, 2020.

As of September 30, 2020, of the \$3.7 billion that is currently available for borrowing under the Credit Facility, \$2.5 billion is required to back-stop the amount outstanding under our U.S. dollar commercial paper program, or the Commercial Paper Program, and \$171 million is required to support certain broker-dealer and other subsidiary commitments. The amount required to back-stop the amounts outstanding under the Commercial Paper Program will fluctuate as we increase or decrease our commercial paper borrowings. The remaining \$1.0 billion is available for working capital and general corporate purposes including, but not limited to, acting as a back-stop to future increases in the amounts outstanding under the Commercial Paper Program.

On August 21, 2020, we entered into a \$750 million 18-month senior unsecured delayed draw term loan facility with a maturity date of February 21, 2022. We borrowed in full under the facility on September 3, 2020. Interest on borrowings under the term loan facility initially bear interest on the principal amount outstanding at the London Interbank Offered Rate, or LIBOR, plus an applicable margin, currently equal to 1.125%. We have the option to prepay the facility in whole or in part at any time. The proceeds from borrowings under this term loan facility were used to fund a portion of the purchase price for the Ellie Mae acquisition.

Our ICE India subsidiary maintains a \$20 million line of credit for its general corporate purposes. As of September 30, 2020, ICE India had borrowed \$3 million, which is reflected as "other short-term debt" in the table above.

Commercial Paper Program

Our Commercial Paper Program is currently backed by the borrowing capacity available under the Credit Facility, as described above. The effective interest rate of commercial paper issuances does not materially differ from short-term interest rates, which fluctuate due to market conditions and as a result may impact our interest expense. During the nine months ended September 30, 2020, we had net issuances of \$1.1 billion under the Commercial Paper Program that were primarily used to fund a portion of the purchase price for the Ellie Mae acquisition.

Commercial paper notes of \$2.5 billion with original maturities ranging from one to 358 days were outstanding as of September 30, 2020, with a weighted average interest rate of 0.39% per annum, and a weighted average remaining maturity of 53 days.

Senior Notes Issued in August 2020

On August 20, 2020, we issued \$6.5 billion in aggregate principal amount of new senior notes, comprised of \$1.25 billion in aggregate principal amount of floating rate senior notes due in 2023, \$1.0 billion in aggregate principal amount of 0.70% senior notes due in 2023, \$1.5 billion in aggregate principal amount of 1.85% senior notes due in 2032, \$1.25 billion in aggregate principal amount of 2.65% senior notes due in 2040, and \$1.5 billion in aggregate principal amount of 3.00% senior notes due in 2060 (collectively, the August 2020 Notes). We used the net proceeds from the offering to fund a portion of the purchase price for the Ellie Mae acquisition.

We incurred debt issuance costs of \$55 million relating to the issuance of the August 2020 Notes and these costs are presented in the accompanying consolidated balance sheet as a deduction from the carrying amount of the related debt liability and will be amortized over the remaining term of each series of the August 2020 Notes. The August 2020 Notes contain affirmative and negative covenants, including, but not limited to, certain redemption rights, limitations on liens and indebtedness and limitations on certain mergers, sales, dispositions and lease-back transactions.

Senior Notes Issued in May 2020

On May 26, 2020, we issued \$2.5 billion in aggregate principal amount of new senior notes. The senior notes comprise \$1.25 billion in aggregate principal amount of 2.10% senior notes due in 2030 and \$1.25 billion in aggregate principal amount of 3.00% senior notes due in 2050 (collectively, the May 2020 Notes).

We used the net proceeds from the offering of the May 2020 Notes for general corporate purposes, including to fund the redemption of our \$1.25 billion aggregate principal amount of 2.75% senior notes due in December 2020, which were redeemed in accordance with their terms on June 25, 2020, and to pay down a portion of our commercial paper outstanding. In connection with our issuance of the May 2020 Notes and our early redemption of the 2.75% senior notes due in December 2020, we recorded an extinguishment payment of \$14 million that includes both a make-whole redemption payment and duplicative interest. These costs are included in interest expense in our consolidated statements of income for the nine months ended September 30, 2020.

We incurred debt issuance costs of \$23 million relating to the issuance of the May 2020 Notes and these costs are presented in the accompanying consolidated balance sheet as a deduction from the carrying amount of the related debt liability and will be amortized over the remaining term of each series of the May 2020 Notes. The May 2020 Notes contain affirmative and negative covenants, including, but not limited to, certain redemption rights, limitations on liens and indebtedness and limitations on certain mergers, sales, dispositions and lease-back transactions.

9. Share-Based Compensation

We currently sponsor employee and director stock option, restricted stock and employee stock purchase plans. Stock options and restricted stock are granted at the discretion of the Compensation Committee of our Board of Directors, or Board, based on the estimated fair value on the date of grant. The fair value of the stock options and restricted stock on the date of grant is recognized as expense over the vesting period, net of forfeitures. The non-cash compensation expenses recognized in our consolidated statements of income for stock options, restricted stock and under our employee stock purchase plan, net of amounts classified as capitalized software, were \$105 million and \$100 million for the nine months ended September 30, 2020 and 2019, respectively, and \$32 million and \$36 million for the three months ended September 30, 2020 and 2019, respectively. This includes the expense related to the Bakkt Incentive Units, described below.

Stock Option Plans

The following is a summary of our stock option activity:

	Number of Options (in thousands)	Weighted Average Exercise Price per Option
Outstanding at December 31, 2019	3,501	\$ 51.87
Granted	413	92.63
Exercised	(592)	43.11
Forfeited	(13)	67.00
Outstanding at September 30, 2020	3,309	58.48

Details of stock options outstanding as of September 30, 2020 were as follows:

	Number of Options (in thousands)	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value (In millions)
Vested or expected to vest	3,309	\$58.48	6.1	\$138
Exercisable	2,407	\$49.62	5.1	\$121

Details of stock options exercised are as follows:

	Nine Mo Septe			Three Months Ended September 30						
Options exercised:	 2020		2019		2020					
Total intrinsic value of options exercised (in millions)	\$ 29	\$	25	\$	7	\$		7		

As of September 30, 2020, there were \$10 million in total unrecognized compensation costs related to stock options, which are expected to be recognized over a weighted average period of 1.6 years as the stock options vest.

We use the Black-Scholes option pricing model to value our stock option awards. During the nine months ended September 30, 2020 and 2019, we used the assumptions in the table below to compute the value:

	Nine Months End	led September 30,
Assumptions:	2020	2019
Risk-free interest rate	1.46%	2.49%
Expected life in years	5.8	5.9
Expected volatility	20%	20%
Expected dividend yield	1.30%	1.44%
Estimated weighted-average fair value of options granted per share	\$16.65	\$15.45

The risk-free interest rate is based on the zero-coupon U.S. Treasury yield curve in effect at the date of grant. The expected life is derived from historical and anticipated future exercise patterns. Expected volatility is based on historical volatility data of our stock.

Restricted Stock Plans

Restricted shares are used as an incentive to attract and retain qualified employees and to increase stockholder returns with actual performance linked to both short and long-term stockholder return as well as retention objectives. We issue awards which may contain a combination of time, performance and/or market conditions. The grant date fair value of each award is based on the closing stock price of our stock at the date of grant. For time-based restricted stock, we recognize expense ratably over the vesting period, which is typically three years, net of forfeitures.

In February 2020, we reserved a maximum of 0.9 million restricted shares for potential issuance as performance-based restricted shares to certain of our employees. The number of shares ultimately granted under this award will be based on our actual financial performance as compared to financial performance targets set by our Board and the Compensation Committee for the year ending December 31, 2020, and will also be subject to a market condition reduction based on how our 2020 total stockholder return, or TSR, compares to that of the S&P 500 Index. The maximum compensation expense to be recognized under these performance-based restricted shares is \$82 million if the maximum financial performance target is met and all 0.9 million shares vest. The compensation expense to be recognized under these performance-based restricted shares will be \$41 million if the target financial performance is met, which would result in 0.5 million shares vesting. For these awards with performance conditions, we recognize expense on an accelerated basis over the three-year vesting period based on our quarterly assessment of the probable 2020 actual financial performance as compared to the 2020 financial performance targets. As of September 30, 2020, our best estimate is that the financial performance level will be above target for 2020. Based on this assessment, we recorded non-cash compensation expense of \$21 million and \$8 million for the nine and three months ended September 30, 2020, respectively, related to these awards and the remaining \$33 million in non-cash compensation expense will be recorded on an accelerated basis over the remaining vesting period, including \$8 million which will be recorded over the remainder of 2020.

We also issue awards with a market condition but no performance condition. The fair value of these awards is estimated based on a simulation of various outcomes and includes inputs such as our stock price on the grant date, the valuation of historical awards with market conditions, the relatively low likelihood that the market condition will affect the number of shares granted (as the market condition only affects shares granted in excess of certain financial performance targets), and our expectation of achieving the financial performance targets.

The following is a summary of nonvested restricted shares under all plans discussed above for the nine months ended September 30, 2020:

	Number of Restricted Shares (in thousands)	Weighted Average Grant-Date Fair Value per Share
Nonvested at December 31, 2019	3,728	\$ 68.87
Granted	1,464	93.18
Vested	(1,986)	64.94
Forfeited	(83)	77.04
Nonvested at September 30, 2020	3,123	82.55

Performance-based restricted shares have been presented in the table above to reflect the actual shares issued based on the achievement of past performance targets, also considering the impact of any market conditions. Nonvested performance-based restricted shares granted are presented in the table above at the target number of restricted shares that would vest if the performance targets are met.

	Nin	e Months End	ded September 30,	
	202	20	2019	
Time-based restricted stock units granted (in thousands) (1)		891		975
Total fair value of restricted stock vested under all restricted stock plans (in millions)	\$	180	\$	166

⁽¹⁾ The remaining shares granted are performance-based.

As of September 30, 2020, there were \$143 million in total unrecognized compensation costs related to time-based and performance-based restricted stock. These costs are expected to be recognized over a weighted-average period of 1.5 years as the restricted stock vests. These unrecognized compensation costs assume that a target performance level will be met on the performance-based restricted shares granted in February 2020.

Bakkt Incentive Units

We sponsor the Bakkt Equity Incentive Plan under which Bakkt issues various Bakkt preferred, common and phantom, or participation, equity unit awards. These awards were made to certain employees and board members of Bakkt. The units are unvested at the issuance date, are subject to the vesting terms in the award agreements and upon vesting are converted into Bakkt equity or cash. During the nine months ended September 30, 2020, we issued additional preferred, common and participation unit awards as well as converted certain existing participation unit awards into common unit awards.

During the nine months ended September 30, 2020, the \$300 million capital call related to the acquisition of Bridge2 Solutions triggered a market condition of certain of these Bakkt equity incentive awards. The market condition is based on numerous possible Bakkt transaction or event scenarios established on the original date of grant, each of which have a fixed fair market value. Over the life of these awards, we are required to estimate the most likely outcome and reflect the cumulative financial statement impact of any changes between outcomes. As a result, during the nine months ended September 30, 2020, we incurred a \$10 million compensation expense related to these awards that has been recorded as an acquisition-related cost.

10. Equity

Stock Repurchase Program

In December 2019, our Board approved an aggregate of \$2.4 billion for future repurchases of our common stock with no fixed expiration date that became effective on January 1, 2020. The \$2.4 billion replaced the previous amount approved by the Board. During the nine months ended September 30, 2020, we repurchased 10.4 million shares of our outstanding common stock at a cost of \$948 million under our Rule 10b5-1 trading plan and 3.2 million shares at a cost of \$299 million on the open market during an open trading period. As of September 30, 2020, up to \$1.2 billion capacity remains from the Board authorization for repurchases of our common stock. We fund repurchases from our operating cash flow or borrowings under our debt facilities or our Commercial Paper Program. Repurchases may be made from time to time on the open market, through established trading plans, in privately-negotiated transactions or otherwise, in accordance with all applicable securities laws, rules and regulations. We may discontinue stock repurchases at any time and may amend or terminate a Rule 10b5-1 trading plan at any time or enter into additional plans. Prior to early August 2020, we had a Rule 10b5-1 trading plan that governed some of the repurchases of our shares of common stock, but in connection with the Ellie Mae acquisition, we discontinued stock repurchases and terminated our Rule 10b5-1 trading plan. The approval of our Board for the share repurchases does not obligate us to acquire any particular amount of our common stock. In addition, our Board may increase or decrease the amount available for repurchases from time to time.

Dividends

During the nine months ended September 30, 2020 and 2019, we declared and paid cash dividends per share of \$0.90 and \$0.825, respectively, for an aggregate payout of \$500 million and \$467 million, respectively. During the three months ended September 30, 2020 and 2019, we declared and paid cash dividends per share of \$0.30 and \$0.275, respectively, for an aggregate payout of \$170 million and \$155 million, respectively. The declaration of dividends is subject to the discretion of our Board, and may be affected by various factors, including our future earnings, financial condition, capital requirements, levels of indebtedness, credit ratings, our current and future planned strategic growth initiatives and other considerations that our Board deem relevant. Our Board has adopted a quarterly dividend declaration policy providing that the declaration of any dividends will be determined quarterly by the Board or the Audit Committee, taking into account such factors as our evolving business model, prevailing business conditions and our financial results and capital requirements, without a predetermined annual net income payout ratio.

Accumulated Other Comprehensive Income (Loss)

The following tables present changes in the accumulated balances for each component of other comprehensive income (loss) (in millions):

	Changes in Accumulated Other Comprehensive Income (Loss) by Component										
		ign currency ranslation ljustments		ve income from od investment		yee benefit adjustments		Total			
Balance, as of December 31, 2019	\$	(177)	\$	1	\$	(67)	\$	(243)			
Other comprehensive income (loss)		(29)		_			-	(29)			
Income tax benefit (expense)		(1)		_		_		(1)			
Net current period other comprehensive income (loss)		(30)		_		_		(30)			
Balance, as of September 30, 2020	\$	(207)	\$	1	\$	(67)	\$	(273)			

	Changes in Acc	cumulated C	ther Comprehensiv	e Income	(Loss) by Co	mpon	ent
	eign currency translation djustments		nsive income from ethod investment		yee benefit adjustments		Total
Balance, as of June 30, 2020	\$ (255)	\$	1	\$	(67)	\$	(321)
Other comprehensive income (loss)	 49		_				49
Income tax benefit (expense)	(1)		_		_		(1)
Net current period other comprehensive income (loss)	 48						48
Balance, as of September 30, 2020	\$ (207)	\$	1	\$	(67)	\$	(273)

		Changes in Acc	cumulated Othe	r Comprehensive	e Income	(Loss) by Co	mpo	nent
	tı	ign currency ranslation ljustments		ve income from	Employee benefit plans adjustments			Total
Balance, as of December 31, 2018	\$	(227)	\$	2	\$	(90)	\$	(315)
Other comprehensive income (loss)		(33)		(1)		_	-	(34)
Income tax benefit (expense)		1		_		_		1
Net current period other comprehensive income (loss)		(32)		(1)		_		(33)
Balance, as of September 30, 2019	\$	(259)	\$	1	\$	(90)	\$	(348)

	Changes in Accumulated Other Comprehensive Income (Loss) by Component										
	F	oreign currency translation adjustments	Comprehensive income from equity method investment			ployee benefit		Total			
Balance, as of June 30, 2019	\$	(220)	\$	1	\$	(90)	\$	(309)			
Other comprehensive income (loss)		(40)		_		_		(40)			
Income tax benefit (expense)		1		_		_		1			
Net current period other comprehensive income (loss)		(39)		_		_		(39)			
Balance, as of September 30, 2019	\$	(259)	\$	1	\$	(90)	\$	(348)			

11. Income Taxes

Our effective tax rate was 24% and 20% for the nine months ended September 30, 2020 and 2019, respectively, and 32% and 16% for the three months ended September 30, 2020 and 2019, respectively. The effective tax rates for the nine and three months ended September 30, 2020 are higher than the effective tax rates for the comparable periods in 2019 primarily due to U.K. tax law changes enacted in July 2020, partially offset by favorable state apportionment changes as a result of our acquisition of Ellie Mae, as well as favorable changes in certain international tax provisions as part of the U.S. Federal Tax Cuts and Jobs Act, or TCJA, during the three months ended September 30, 2019.

In 2015 and 2016, the U.K. enacted corporate income tax rate reductions from 19% to 17% to be effective prospectively on April 1, 2020 and we recorded associated deferred tax benefits in those years. In July 2020, the U.K. enacted a reinstatement of the U.K. corporate income tax rate back to 19%, effective April 1, 2020. As a result, we revalued our U.K. deferred tax assets and liabilities back to the rate of 19% and recorded an additional \$65 million deferred tax expense during the three months ended September 30, 2020. We also reflected the rate change in our estimated annual effective tax rate during the three months ended September 30, 2020.

On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security Act, or CARES Act, was enacted and certain income tax related relief was provided under the CARES Act. There is no material impact of the CARES Act on our income tax provision for the nine and three months ended September 30, 2020.

12. Clearing Operations

We operate six clearing houses, each of which acts as a central counterparty that becomes the buyer to every seller and the seller to every buyer for its clearing members or participants, or Members. Through this central counterparty function, the clearing houses provide financial security for each transaction for the duration of the position by limiting counterparty credit risk.

Our clearing houses are responsible for providing clearing services to each of our futures exchanges, and in some cases to third-party execution venues, and are as follows, referred to herein collectively as "the ICE Clearing Houses":

Clearing House	Products Cleared	Exchange where Executed	Location
ICE Clear Europe	Energy, agricultural, interest rates and equity index futures and options contracts and OTC European CDS instruments	ICE Futures Europe, ICE Futures U.S., ICE Endex and third-party venues	U.K.
ICE Clear U.S.	Agricultural, metals, and FX index futures and options contracts, equity futures contracts, and digital assets futures contracts	ICE Futures U.S.	U.S.
ICE Clear Credit	OTC North American, European, Asian-Pacific and Emerging Market CDS instruments	Creditex and third-party venues	U.S.
ICE Clear Netherlands	Derivatives on equities and equity indices traded on regulated markets	ICE Endex	The Netherlands
ICE Clear Singapore	Energy, metals and financial futures products and digital assets futures contracts	ICE Futures Singapore	Singapore
ICE NGX	Physical North American natural gas, electricity and oil futures	ICE NGX	Canada

Original & Variation Margin

Each of the ICE Clearing Houses generally requires all Members to deposit collateral in cash or certain pledged assets. The collateral deposits are known as "original margin." In addition, the ICE Clearing Houses may make intraday original margin calls in circumstances where market conditions require additional protection. The daily profits and losses to and from the ICE Clearing Houses due to the marking-to-market of open contracts is known as "variation margin." With the exception of ICE NGX's physical natural gas and physical power products discussed separately below, the ICE Clearing Houses mark all outstanding contracts to market, and therefore pay and collect variation margin, at least once daily.

The amounts that Members are required to maintain are determined by proprietary risk models established by each ICE Clearing House and reviewed by the relevant regulators, independent model validators, risk committees and the boards of directors of the respective ICE Clearing House. The amounts required may fluctuate over time. Each of the ICE Clearing Houses is a separate legal entity and is not subject to the liabilities of the others, or the obligations of Members of the other ICE Clearing Houses.

Should a particular Member fail to deposit its original margin or fail to make a variation margin payment, when and as required, the relevant ICE Clearing House may liquidate or hedge the defaulting Member's open positions and use their original margin and guaranty fund deposits to pay any amount owed. In the event that the defaulting Member's deposits are not sufficient to pay the amount owed in full, the ICE Clearing Houses will first use their respective contributions to the guaranty fund, often referred to as Skin In The Game, or SITG, to pay any remaining amount owed. In the event that the SITG is not sufficient, the ICE Clearing Houses may utilize the respective guaranty fund deposits, or collect limited additional funds from their respective non-defaulting Members on a pro-rate basis, to pay any remaining amount owed.

As of September 30, 2020 and December 31, 2019, the ICE Clearing Houses had received or had been pledged \$162.1 billion and \$126.0 billion, respectively, in cash and non-cash collateral in original margin and guaranty fund deposits to cover price movements of underlying contracts for both periods.

Guaranty Funds & ICE Contribution

As described above, mechanisms have been created, called guaranty funds, to provide partial protection in the event of a Member default. With the exception of ICE NGX, each of the ICE Clearing Houses requires that each Member make deposits into a guaranty fund.

In addition, we have contributed our own capital that could be used if a defaulting Member's original margin and guaranty fund deposits are insufficient. Such amounts are recorded as long-term restricted cash and cash equivalents in our balance sheets and are as follows (in millions):

	ICE Portion of Guarant	y Fund Contribution	Default ins	surance			
Clearing House	As of September 30, 2020	As of December 31, 2019	As of September 30, 2020	As of December 31, 2019			
ICE Clear Europe	\$237	\$233	\$75	\$75			
ICE Clear U.S.	103	103	25	25			
ICE Clear Credit	50	50	50	50			
ICE Clear Netherlands	2	2	N/A	N/A			
ICE Clear Singapore	1	1	N/A	N/A			
ICE NGX	15	15	100	100			
Total	\$408	\$404	\$250	\$250			

Of our total contribution to ICE Clear U.S. above, \$35 million is solely applicable to any losses associated with a default in Bitcoin contracts and other digital asset contracts that ICE Clear U.S. may clear in the future. In April 2020, we increased our contribution to ICE Clear Europe's guaranty fund by \$4 million.

In September 2019, we added a layer of insurance to our Member default protection. The default insurance has a three-year term for the following clearing houses in the following amounts: ICE Clear Europe - \$75 million; ICE Clear U.S. - \$25 million and ICE Clear Credit - \$50 million. The default insurance layer resides after and in addition to the ICE Clear Europe, ICE Clear U.S. and ICE Clear Credit SITG contributions and before the guaranty fund contributions of the non-defaulting Members.

Similar to SITG, the default insurance layer is not intended to replace or reduce the position risk-based amount of the guaranty fund. As a result, the default insurance layer is not a factor that is included in the calculation of the Members' guaranty fund contribution requirement. Instead, it serves as an additional, distinct, and separate default resource that should serve to further protect the non-defaulting Members' guaranty fund contributions from being mutualized in the event of a default.

As of September 30, 2020, ICE NGX maintains a guaranty fund utilizing a \$100 million letter of credit and a default insurance policy, discussed below.

Cash and Cash Equivalent Deposits

We have recorded cash and cash equivalent margin deposits and amounts due in our balance sheets as current assets with corresponding current liabilities to the Members. As of September 30, 2020, our cash and cash equivalent margin deposits are as follows (in millions):

	CE Clear Europe ⁽¹⁾	I	ICE Clear Credit	IC	E Clear U.S.	IC	E NGX	Other ICE Clearing Houses	Total
Original margin	\$ 34,666	\$	37,463	\$	5,815	\$		\$ 4	\$ 77,948
Unsettled variation margin, net	_		_		_		137	_	137
Guaranty fund	4,247		2,611		534		_	5	7,397
Delivery contracts receivable/payable, net	_		_		_		418	_	418
Total	\$ 38,913	\$	40,074	\$	6,349	\$	555	\$ 9	\$ 85,900

As of December 31, 2019, our cash and cash equivalent margin deposits, are as follows (in millions):

	CE Clear Europe ⁽²⁾	ı	CE Clear Credit	ICE	E Clear U.S.	ICI	E NGX	Other ICE Clearing Houses	Total
Original margin	\$ 28,318	\$	22,145	\$	6,802	\$	_	\$ 2	\$ 57,267
Unsettled variation margin, net	_		_		_		255	_	255
Guaranty fund	4,144		2,268		463		_	5	6,880
Delivery contracts receivable/payable, net	_		_		_		585	_	585
Total	\$ 32,462	\$	24,413	\$	7,265	\$	840	\$ 7	\$ 64,987

^{(1) \$32.3} billion and \$6.6 billion is related to futures/options and CDS, respectively.

Our cash and cash equivalent margin and guaranty fund deposits are maintained in accounts with national banks and reputable financial institutions or secured through direct investments, primarily in U.S. Treasury securities with original maturities of less than three months, or reverse repurchase agreements with primarily overnight maturities.

To provide a tool to address the liquidity needs of our clearing houses and manage the liquidation of margin and guaranty fund deposits held in the form of cash and high quality sovereign debt, ICE Clear Europe, ICE Clear Credit and ICE Clear U.S. have entered into Committed Repurchase Agreement Facilities, or Committed Repo. Additionally, ICE Clear Credit and ICE Clear Netherlands have entered into Committed FX Facilities to support these liquidity needs. As of September 30, 2020 the following facilities were in place:

• ICE Clear Europe: \$1.0 billion in Committed Repo to finance U.S. dollar, euro and pound sterling deposits.

^{(2) \$27.4} billion and \$5.1 billion is related to futures/options and CDS, respectively.

- ICE Clear Credit: \$300 million in Committed Repo to finance U.S. dollar and euro deposits, €250 million in Committed Repo to finance euro deposits, and €1.9 billion in Committed FX Facilities to finance euro payment obligations.
- ICE Clear U.S.: \$250 million in Committed Repo to finance U.S. dollar deposits.
- ICE Clear Netherlands: €10 million in Committed FX Facilities to finance euro payment obligations.

Details of our cash and cash equivalent deposits are as follows (in millions):

Clearing House	Investment Type	As of	September 30, 2020	As of December 31, 2019
ICE Clear Europe	National Bank Account (1)	\$	10,355	\$ 9,667
ICE Clear Europe	Reverse repo		25,328	19,187
ICE Clear Europe	Sovereign Debt		3,226	3,591
ICE Clear Europe	Demand deposits		4	17
ICE Clear Credit	National Bank Account		31,924	19,480
ICE Clear Credit	Reverse repo		4,630	2,411
ICE Clear Credit	Demand deposits		3,520	2,522
ICE Clear U.S.	Reverse repo		4,849	4,320
ICE Clear U.S.	Sovereign Debt		1,500	2,945
Other ICE Clearing Houses	Demand deposits		9	7
ICE NGX	Unsettled Variation Margin and Delivery Contracts Receivable/Payable		555	840
Total		\$	85,900	\$ 64,987

(¹) As of September 30, 2020, ICE Clear Europe held €6.6 billion (\$7.8 billion based on the euro/U.S. dollar exchange rate of 1.1721 as of September 30, 2020) at De Nederlandsche Bank, or DNB, £2.0 billion (\$2.6 billion based on the pound sterling/U.S. dollar exchange rate of 1.2923 as of September 30, 2020) at the Bank of England, or BOE, and €10 million (\$12 million based on the above exchange rate) at the BOE. As of December 31, 2019, ICE Clear Europe held €8.0 billion (\$9.0 billion based on the euro/U.S. dollar exchange rate of 1.1212 as of December 31, 2019) at DNB, £500 million (\$663 million based on the pound sterling/U.S. dollar exchange rate of 1.3260 as of December 31, 2019) at the BOE and €10 million (\$11 million based on the above exchange rate) at the BOE.

Other Deposits

In addition to the cash deposits above, the ICE Clearing Houses have also received other assets from Members, which include government obligations, and may include other non-cash collateral such as letters of credit at ICE NGX, or gold on rare occasions at ICE Clear Europe, to mitigate credit risk. For certain deposits, we may impose discount or "haircut" rates to ensure adequate collateral if market values fluctuate. The value-related risks and rewards of these assets remain with the Members. Any gain or loss accrues to the Member. The ICE Clearing Houses do not, in the ordinary course, rehypothecate or re-pledge these assets. These pledged assets are not reflected in our balance sheets, and are as follows (in millions):

,	As of September 30, 2020												
	 ICE Clear Europe		ICE Clear Credit ICE Clear U.S.		10	CE NGX		Total					
Original margin:													
Government securities at face value	\$ 42,022	\$	8,846	\$	21,528	\$	_	\$	72,396				
Letters of credit	_		_		_		2,172		2,172				
ICE NGX cash deposits	_		_		_		305		305				
Total	\$ 42,022	\$	8,846	\$	21,528	\$	2,477	\$	74,873				
Guaranty fund:													
Government securities at face value	\$ 502	\$	594	\$	199	\$		\$	1,295				

	As of December 31, 2019											
	ICE Clear Europe		ICE Clear Credit		ICE Clear U.S		S. ICE NGX			Total		
Original margin:		<u> </u>										
Government securities at face value	\$	30,635	\$	13,710	\$	12,633	\$	_	\$	56,978		
Letters of credit		_		_		_		2,469		2,469		
ICE NGX cash deposits		_		_		_		362		362		
Total	\$	30,635	\$	13,710	\$	12,633	\$	2,831	\$	59,809		
Guaranty fund:					_		_					
Government securities at face value	\$	475	\$	523	\$	243	\$		\$	1,241		

ICE NGX

ICE NGX is the central counterparty to Members on opposite sides of its physically-settled contracts, and the balance related to delivered but unpaid contracts is recorded as a delivery contract net receivable, with an offsetting delivery contract net payable in our balance sheets. Unsettled variation margin equal to the fair value of open contracts is recorded as of each balance sheet date. ICE NGX marks all outstanding contracts to market daily, but only collects variation margin when a Member's open position falls outside a specified percentage of its pledged collateral.

ICE NGX requires Members to maintain cash or letters of credit to serve as collateral in the event of default. The cash is maintained in a segregated bank account, held in trust and remains the property of the participant, therefore, it is not included in our balance sheets. ICE NGX maintains the following accounts with a third-party Canadian chartered bank which are available in the event of physical settlement shortfalls, subject to certain conditions:

Account Type	As of September 30, 2020 (In C\$ millions)	As of September 30, 2020 (In \$USD millions)
Daylight liquidity facility	C\$300	\$225
Overdraft facility	20	15
Total	C\$320	\$240

As of September 30, 2020, ICE NGX maintains a guaranty fund of \$100 million funded by a letter of credit issued by a major Canadian chartered bank, and backed by default insurance underwritten by Export Development Canada, or EDC, a Crown corporation operated at arm's length from the Canadian government. In the event of a participant default where the Member's collateral is depleted, the shortfall would be covered by a draw down on the letter of credit following which ICE NGX would file a claim under the default insurance to recover additional losses up to \$100 million beyond the \$15 million first-loss amount that ICE NGX is responsible for under the default insurance policy.

Clearing House Exposure

Each ICE Clearing House bears financial counterparty credit risk and provides a central counterparty guarantee, or performance guarantee, to its Members. To reduce their exposure, the ICE Clearing Houses have a risk management program with both initial and ongoing membership standards. Excluding the effects of original and variation margin, guaranty fund and collateral requirements, the ICE Clearing Houses' maximum estimated exposure for this guarantee is \$142.0 billion as of September 30, 2020, which represents the maximum estimated value by the ICE Clearing Houses of a hypothetical one-day movement in pricing of the underlying unsettled contracts. This value was determined using proprietary risk management software that simulates gains and losses based on historical market prices, volatility and other factors present at that point in time for those particular unsettled contracts. Future actual market price volatility could result in the exposure being significantly different than this amount.

13. Legal Proceedings

In the ordinary course of our business, from time to time we are subject to legal proceedings, lawsuits, government investigations and other claims with respect to a variety of matters. In addition, we are subject to periodic reviews, inspections, examinations and investigations by regulators in the U.S. and other jurisdictions, any of which may result in claims, legal proceedings, assessments, fines, penalties, restrictions on our business or other sanctions. We record estimated expenses and reserves for legal or regulatory matters or other claims when these matters present loss contingencies that are probable and the related amount is reasonably estimable. Any such accruals may be adjusted as circumstances change. Assessments of losses are inherently subjective and involve unpredictable factors. While the outcome of legal and regulatory matters is inherently difficult to predict and/or the range of loss often cannot be

reasonably estimable, we do not believe that the liabilities, if any, which may ultimately result from the resolution of the various legal and regulatory matters that arise in the ordinary course of our business, including the matters described below, are likely to have a material adverse effect on our consolidated financial condition, results of operations, or liquidity. It is possible, however, that future results of operations for any particular quarterly or annual period could be materially and adversely affected by any developments relating to these legal and regulatory matters. A range of possible losses related to the cases below cannot be reasonably estimated at this time, except as otherwise disclosed below.

ICE Data Pricing & Reference Data Matter

Our subsidiary ICE Data Pricing & Reference Data, LLC ("PRD") is a registered investment advisor in the business of, among other things, providing clients with evaluated pricing and other information for fixed-income securities. The staff of the Enforcement Division of the SEC is conducting fact-finding investigations that involve PRD's legacy business practices with respect to "broker quotes," which involved PRD's practice of passing through third-party price quotes in certain fixed income securities as-is to its clients when PRD did not believe it had the capability to model an evaluated price for such securities. Broker quoted securities were less than 2% of the securities PRD priced. A list of securities that were broker quoted, as distinguished from evaluated, was made available to PRD's clients every day. PRD first notified its clients on December 16, 2019 that it would cease providing broker quotes and did so as of October 1, 2020.

PRD has been cooperating fully in the SEC staff's investigation and is in discussions with the staff about a potential resolution of the investigation concerning the legacy broker quote business practices. Any potential agreement with the staff would require the approval of the SEC, and while the timing is uncertain, PRD expects that a settlement, if reached, would be finalized by year-end. PRD has accordingly made an accrual for its probable amount. Given PRD's understanding that the investigations concern only the legacy provision of broker quotes, PRD does not expect that any settlement would impact PRD's ongoing business.

Separately, PRD's business practices with respect to broker quotes are relevant to potential civil claims that relate to a now-bankrupt entity named Live Well Financial, Inc. ("Live Well"). Live Well was a broker quote provider to PRD for certain kinds of fixed-income securities. In August 2019, the SEC and the United States Department of Justice respectively filed civil and criminal charges against Live Well and certain of its executives, alleging that Live Well fraudulently provided over-stated "broker quotes" to a then-unnamed "industry-leading price service" (which was PRD). PRD has been contacted by certain financial institution creditors of Live Well, each of which alleges that PRD's publication of Live Well's broker quotes caused losses upon Live Well's default. The Chapter 7 Trustee appointed in the Live Well bankruptcy has also indicated its belief that it has claims against PRD related to PRD's provision of broker quotes from Live Well. PRD denies any wrongdoing in connection with Live Well's fraudulent scheme or in connection with PRD's provision of broker quoted prices from Live Well. These may become litigated matters. At this stage, it is too early to reasonably estimate the amount of damages, if any, that PRD may be required to pay. PRD plans to vigorously defend any litigation related to these claims.

SPAN Trademark Dispute

CME Group, Inc., or CME, filed suit against two of ICE's clearing houses (ICE Clear U.S. and ICE Clear Europe Limited) in 2018 in the U.S. District Court for the Northern District of Illinois, alleging infringement of CME's trademark for SPAN, which is a name generally used to refer to a type of initial margining approach that assesses risk for a variety of financial instruments on a portfolio-wide basis, as well as breach of contract and counterfeiting. The ICE clearing entities and CME were parties to 10-year license agreements that expired in 2017, pursuant to which the clearing entities paid CME a collective total of \$50,001 over a 10-year period for the right to use the SPAN trademark. The dispute underlying the claims relates to the period of time following expiration of the license agreements during which the ICE clearing entities continued to make some reference to SPAN.

In 2020, CME informed ICE and the court that it was not seeking compensatory damages based on the license fees but rather that the principal relief sought by CME at trial would be the disgorgement of profits of the ICE clearing entities over the approximate one-year period during which the mark was referenced following expiration of the formal agreements. In August 2020, the parties mediated the matter but were unable to reach an agreement. During the lawsuit and the September 2020 bench trial in this matter, the ICE clearing entities asserted various defenses to CME's claims, including an implied license defense; denied that the SPAN trademark has any value; and presented evidence and legal argument that disgorgement of ICE's clearing profits is not an appropriate equitable remedy, particularly because none of the ICE clearing entities' profits are attributable to the use of the SPAN trademark. The parties are awaiting a decision by the court and we cannot reasonably estimate an amount of damages, if any, at this time.

For further information on our legal and regulatory matters, please see Note 15 to the consolidated financial statements in Part II, Item 8 of our 2019 Form 10-K, as well as in the comparable sections of our Quarterly Reports on Form 10-Q for the guarters ended March 31, 2020 and June 30, 2020.

14. Fair Value Measurements

Fair value is the price that would be received from selling an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants at the measurement date. Our financial instruments consist primarily of certain short-term and long-term assets and liabilities, customer accounts receivable, margin deposits and guaranty funds, equity investments, and short-term and long-term debt.

The fair value of our financial instruments is measured based on a three-level hierarchy:

- Level 1 inputs quoted prices for identical assets or liabilities in active markets.
- Level 2 inputs observable inputs other than Level 1 inputs such as quoted prices for similar assets and liabilities in active markets or inputs other than quoted prices that are directly observable.
- Level 3 inputs unobservable inputs supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

Financial assets and liabilities recorded or disclosed at fair value in the accompanying consolidated balance sheets as of September 30, 2020 and December 31, 2019 were classified in their entirety based on the lowest level of input that is significant to the asset or liability's fair value measurement. As of September 30, 2020, we considered the impacts of the COVID-19 pandemic on our fair value assessments, and determined no impairment indicators to be present. We will continue to monitor these fair values in future periods if, or as, circumstances change.

Our mutual funds are equity and fixed income mutual funds held for the purpose of providing future payments for the supplemental executive savings plan and the supplemental executive retirement plan. These mutual funds are classified as equity investments and measured at fair value using Level 1 inputs with adjustments recorded in net income.

Mortgage Electronic Registration Systems, Inc., or MERS, is part of our ICE Mortgage Technology business and as of December 31, 2019, held fixed income investments as part of a reserve fund in order to satisfy the original terms of the governing documents of our June 2016 acquisition of a majority equity position in MERS. The majority of these investments were held in U.S. Treasuries and measured at fair value using Level 1 inputs with adjustments recorded to other current liabilities. The remaining amount of the reserve fund was held in other fixed income investments and measured using Level 2 inputs. In June 2020, we sold all of the remaining investments and distributed the proceeds to the original MERS shareholders.

Excluding our equity investments without a readily determinable fair value, all other financial instruments are determined to approximate carrying value due to the short period of time to their maturities.

We did not use Level 3 inputs to determine the fair value of assets or liabilities measured at fair value on a recurring basis as of September 30, 2020 or December 31, 2019.

We measure certain assets, such as fixed assets and intangible assets, at fair value on a non-recurring basis. These assets are recognized at fair value if they are deemed to be impaired. During the nine months ended September 30, 2020, we recorded certain fixed assets at fair value using Level 2 inputs. As of September 30, 2020 and December 31, 2019, none of our intangible assets were required to be recorded at fair value since no impairments were recorded.

We measure certain equity investments at fair value on a non-recurring basis using our policy election under ASU No. 2016-01, *Financial Instruments-Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities,* or ASU 2016-01. During the nine months ended September 30, 2020, we evaluated transactions involving these investments to identify any increase or decrease in the value of the investment, including qualitative considerations of impairment as discussed above, and concluded that no fair value adjustments were required under this election.

See Note 12 for the fair value considerations related to our margin deposits, guaranty funds and delivery contracts receivable.

The table below displays the fair value of our debt as of September 30, 2020. The fair values of our senior notes were estimated using quoted market prices for these instruments. The fair value of our commercial paper includes a discount and other short-term debt approximates par value since the interest rates on this short-term debt approximate market rates as of September 30, 2020. The fair value for our \$750 million term loan approximates par value since the interest rates on this debt approximate market rates as of September 30, 2020.

As of September 30, 2020

(in millions)

Debt:	Carrying Amount	Fair value
Commercial Paper	\$ 2,460	\$ 2,463
Other short-term debt	3	3
2022 Term Loan	747	750
2022 Senior Notes (2.35% senior unsecured notes due September 15, 2022)	498	518
2023 Senior Notes (floating rate senior unsecured notes due June 15, 2023)	1,244	1,258
2023 Senior Notes (0.70% senior unsecured notes due June 15, 2023)	994	1,004
2023 Senior Notes (3.45% senior unsecured notes due September 21, 2023)	398	433
2023 Senior Notes (4.00% senior unsecured notes due October 15, 2023)	795	881
2025 Senior Notes (3.75% senior unsecured notes due December 1, 2025)	1,245	1,419
2027 Senior Notes (3.10% senior unsecured notes due September 15, 2027)	496	553
2028 Senior Notes (3.75% senior unsecured notes due September 21, 2028)	593	696
2030 Senior Notes (2.10% senior unsecured notes due June 15, 2030)	1,231	1,293
2032 Senior Notes (1.85% senior unsecured notes due September 15, 2032)	1,481	1,497
2040 Senior Notes (2.65% senior unsecured notes due September 15, 2040)	1,229	1,253
2048 Senior Notes (4.25% senior unsecured notes due September 21, 2048)	1,230	1,553
2050 Senior Notes (3.00% senior unsecured notes due June 15, 2050)	1,219	1,316
2060 Senior Notes (3.00% senior unsecured notes due September 15, 2060)	1,469	1,519
Total debt	\$ 17,332	\$ 18,409

15. Segment Reporting

We operate two reportable business segments: our Trading and Clearing segment and our Data and Listings segment. This presentation is reflective of how our chief operating decision maker reviews and operates our business. Our Trading and Clearing segment comprises our transaction-based execution and clearing businesses as well as our mortgage technology business. Our Data and Listings segment comprises our data services and our securities listings businesses, which are both largely subscription-based. Our chief operating decision maker does not review total assets or statements of income below operating income by segments; therefore, such information is not presented below. Our two segments do not engage in intersegment transactions.

Financial data for our business segments is as follows for the nine and three months ended September 30, 2020 and 2019 (in millions):

Nine Months Ended September 30, 2020
Nine Months Ended September 30, 2019

	Nine Mont	hs Ended Septe	mber 30, 2020	Nine Months Ended September 30, 2019						
	Trading and Clearing Segment	Data and Listings Segment	Consolidated	Trading and Clearing Segment	Data and Listings Segment	Consolidated				
Revenues:										
Energy futures and options contracts	\$ 858	\$ —	\$ 858	\$ 749	\$ —	\$ 749				
Agricultural and metals futures and options contracts	197	_	197	194	_	194				
Financial futures and options contracts	275	_	275	252	_	252				
Cash equities and equity options	1,934	_	1,934	1,201	_	1,201				
Fixed income and credit	424	_	424	268	_	268				
OTC and other transactions	38	_	38	34	_	34				
Pricing and analytics	_	845	845	_	809	809				
Exchange data and feeds	_	552	552	_	528	528				
Desktops and connectivity	_	330	330	_	315	315				
Listings	_	334	334	_	336	336				
Other revenues	224		224	194		194				
Revenues	3,950	2,061	6,011	2,892	1,988	4,880				
Transaction-based expenses	1,646	_	1,646	976	_	976				
Revenues, less transaction-based expenses	2,304	2,061	4,365	1,916	1,988	3,904				
Operating expenses	998	1,114	2,112	732	1,121	1,853				
Operating income	\$ 1,306	\$ 947	\$ 2,253	\$ 1,184	\$ 867	\$ 2,051				

	Т	Three Months Ended September 30, 2020						Three Months Ended September 30, 20					
	Cle	ing and aring jment	L	ata and istings egment	С	onsolidated	Clearing Listir		Data and Listings Segment		Consolidated		
Revenues:													
Energy futures and options contracts	\$	229	\$	_	\$	229	\$	265	\$	_	\$	265	
Agricultural and metals futures and options contracts		54		_		54		60		_		60	
Financial futures and options contracts		76		_		76		91		_		91	
Cash equities and equity options		593		_		593		401		_		401	
Fixed income and credit		191		_		191		101		_		101	
OTC and other transactions		12		_		12		11		_		11	
Pricing and analytics		_		287		287		_		273		273	
Exchange data and feeds		_		189		189		_		172		172	
Desktops and connectivity		_		113		113		_		108		108	
Listings		_		111		111		_		114		114	
Other revenues		75		_		75		67		_		67	
Revenues		1,230		700		1,930		996		667		1,663	
Transaction-based expenses		519		_		519		327		_		327	
Revenues, less transaction-based expenses		711		700		1,411		669		667		1,336	
Operating expenses		406		378		784		255		375		630	
Operating income	\$	305	\$	322	\$	627	\$	414	\$	292	\$	706	

Revenue from one clearing member of the Trading and Clearing segment comprised \$276 million, or 12%, and \$76 million, or 11%, of our Trading and Clearing revenues, less transaction-based expenses, for the nine and three months ended September 30, 2020, respectively. Revenue from one clearing member of the Trading and Clearing segment comprised \$286 million, or 15% and \$92 million, or 14% of our Trading and Clearing revenues, less transaction-based expenses for the nine and three months ended September 30, 2019, respectively. Clearing members are primarily intermediaries and represent a broad range of principal trading firms. If a clearing member ceased its operations, we believe that the trading firms would continue to conduct transactions and would clear those transactions through another clearing member firm. No additional customers or clearing members accounted for more than 10% of our segment revenues or consolidated revenues for the nine and three months ended September 30, 2020 and 2019.

16. Earnings Per Common Share

The following is a reconciliation of the numerators and denominators of the basic and diluted earnings per common share computations for the nine and three months ended September 30, 2020 and 2019 (in millions, except per share amounts):

		Nine Months Ended September 30,					nths Ended nber 30,		
	2020	2019 2020		2020	2019				
Basic:									
Net income attributable to Intercontinental Exchange, Inc.	\$ 1,5	63 \$	1,485	\$	390	\$	529		
Weighted average common shares outstanding	5	49	563		548		559		
Basic earnings per common share	\$ 2	85 \$	2.64	\$	0.71	\$	0.95		
Diluted:									
Weighted average common shares outstanding	5	49	563		548		559		
Effect of dilutive securities - stock options and restricted shares		3	3		3		4		
Diluted weighted average common shares outstanding	5	52	566		551		563		
Diluted earnings per common share	\$ 2	83 \$	2.62	\$	0.71	\$	0.94		
						_			

Basic earnings per common share is calculated using the weighted average common shares outstanding during the period. Common equivalent shares from stock options and restricted stock awards, using the treasury stock method, are included in the diluted per share calculations unless the effect of their inclusion would be antidilutive. During the nine months ended September 30, 2020 and 2019, 358,000 and 437,000 outstanding stock options, respectively, were not included in the computation of diluted earnings per common share, because to do so would have had an antidilutive effect. In addition, we have excluded warrants and preferred and common incentive units under the Bakkt Equity Incentive Plan because they are also antidilutive. Certain figures in the table above may not recalculate due to rounding.

17. Subsequent Events

Effective October 1, 2020, we realigned our businesses as part of a review of, and changes in, our organizational structure following our acquisition of Ellie Mae. As a result, we changed our internal financial reporting and we determined that a change in reportable segments had occurred. Beginning October 1, 2020, we will report three segments: Exchanges, Fixed Income & Data Services, and Mortgage Technology.

Our new segment presentation is expected to be comprised of the following:

- Our Exchanges segment will include trade execution and clearing, exchange data, colocation and administration fees, ICE Benchmark Administration and NYSE listings.
- Our Fixed Income & Data Services segment will include ICE Bonds, CDS clearing, pricing and reference data, analytics, indices, consolidated feeds and ICE Global Network.
- · Our Mortgage Technology segment will include our MERS, Simplifile LC, or Simplifile, and Ellie Mae mortgage services businesses.

These changes are intended to better align our external reporting to our internal view of our businesses, including the view of our chief operating decision maker and how he manages our business. The impact of these changes will be reflected in our financial statements as of and for the year ended December 31, 2020. Prior year segment information will be reclassified to conform to the reporting structure change. We are also in the process of reassessing the composition of our reporting units and how we assess the related goodwill for impairment.

We have evaluated subsequent events and determined that no other events or transactions met the definition of a subsequent event for purposes of recognition or disclosure in the accompanying consolidated financial statements.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

In this Quarterly Report on Form 10-Q, unless otherwise indicated, the terms "Intercontinental Exchange," "ICE," "we," "us," "our," "our company" and "our business" refer to Intercontinental Exchange, Inc., together with its consolidated subsidiaries. References to "ICE Products" mean products listed on one or more of our markets. All references to "options" or "options contracts" in the context of our futures products refer to options on futures contracts. Solely for convenience, references in this Quarterly Report to any trademarks, service marks and trade names owned by ICE are listed without the ®, TM and © symbols, but we will assert, to the fullest extent under applicable law, our rights to these trademarks, service marks and trade names.

We also include references to third-party trademarks, trade names and service marks in this Quarterly Report. Except as otherwise expressly noted, our use or display of any such trademarks, trade names or service marks is not an endorsement or sponsorship and does not indicate any relationship between us and the parties who own such marks and names.

The following discussion should be read in conjunction with our consolidated financial statements and related notes included elsewhere in this Quarterly Report. Due to rounding, figures in tables may not sum exactly.

Forward-Looking Statements

This Quarterly Report on Form 10-Q, including the sections entitled "Notes to Consolidated Financial Statements," "Legal Proceedings" and "Management's Discussion and Analysis of Financial Condition and Results of Operations," contains "forward-looking statements" as defined in the Private Securities Litigation Reform Act of 1995. Any statements contained herein that are not statements of historical fact may be forward-looking statements.

These forward-looking statements relate to future events or our future financial performance and are based on our present beliefs and assumptions as well as the information currently available to us. They involve known and unknown risks, uncertainties and other factors that may cause our results, levels of activity, performance, cash flows, financial position or achievements to differ materially from those expressed or implied by these statements.

Forward-looking statements may be introduced by or contain terminology such as "may," "will," "should," "could," "would," "targets," "goal," "expect," "intend," "plan," "anticipate," "believe," "estimate," "predict," "potential," "continue," or the antonyms of these terms or other comparable terminology. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance, cash flows, financial position or achievements. Accordingly, we caution you not to place undue reliance on any forward-looking statements we may make.

Factors that may affect our performance and the accuracy of any forward-looking statements include, but are not limited to, those listed below:

- conditions in global financial markets and domestic and international economic, political and social conditions;
- the impacts of the COVID-19 pandemic on our business, results of operations and financial condition as well as the broader business environment:
- the impact of the introduction of or any changes in laws, regulations, rules or government policies with respect to financial markets, climate change, increased regulatory scrutiny or enforcement actions and our ability to comply with these requirements;
- volatility in commodity prices, equity prices and price volatility of financial benchmarks and instruments such as interest rates, credit spreads, equity indices, foreign exchange rates, and mortgage origination and refinancing trends;
- the business environment in which we operate and trends in our industry, including trading volumes, clearing, data services, mortgage lending volumes, fees, changing regulations, competition and consolidation;
- our ability to minimize the risks associated with operating clearing houses in multiple jurisdictions;
- our equity and options exchanges' compliance with their respective regulatory and oversight responsibilities;
- the resilience of our electronic platforms and soundness of our business continuity and disaster recovery plans;
- · changes in renewal rates of subscription-based data revenues;
- our ability to execute our growth strategy, identify and effectively pursue, implement and integrate acquisitions and strategic alliances and realize the synergies and benefits of such transactions within the expected time frame;
- the performance and reliability of our trading, clearing and mortgage technologies and those of third-party service providers;
- our ability to keep pace with technological developments and client preferences;

- our ability to ensure that the technology we utilize is not vulnerable to cyber-attacks, hacking and other cybersecurity risks or other disruptive events or to minimize the impact of any such events;
- our ability to keep information and data relating to the customers of the users of the software and services provided by our ICE Mortgage Technology business confidential;
- our ability to identify trends and adjust our business to benefit from such trends, including trends in the U.S. mortgage industry such as interest rates, new home purchases, refinancing activity, and home builder and buyer sentiment, among others;
- · our ability to evolve our benchmarks and indices in a manner that maintains or enhances their reliability and relevance;
- the accuracy of our cost and other financial estimates and our belief that cash flows from operations will be sufficient to service our debt and
 to fund our operational and capital expenditure needs;
- our ability to incur additional debt;
- our ability to maintain existing market participants and data and mortgage technology customers, and to attract new ones;
- our ability to offer additional products and services, leverage our risk management capabilities and enhance our technology in a timely and cost-effective fashion:
- our ability to attract and retain key talent;
- · our ability to protect our intellectual property rights and to operate our business without violating the intellectual property rights of others;
- potential adverse results of threatened or pending litigation and regulatory actions and proceedings;
- our ability to realize the expected benefits of our acquisition of Ellie Mae and our majority investment in Bakkt, which could result in additional unanticipated costs and risks; and
- our ability to detect illegal activity such as fraud, money laundering, tax evasion and ransomware scams through digital currency transactions that are easily exploited.

These risks and other factors include those set forth in Part 1, Item 1(A) under the caption "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2019, or our 2019 Form 10-K, as filed with the SEC on February 6, 2020 and our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2020 and June 30, 2020, as filed with the SEC on April 30, 2020 and July 30, 2020, respectively. Due to the uncertain nature of these factors, management cannot assess the impact of each factor on the business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements.

Any forward-looking statement speaks only as of the date on which such statement is made, and we undertake no obligation to update any of these statements to reflect events or circumstances occurring after the date of this Quarterly Report. New factors may emerge and it is not possible to predict all factors that may affect our business and prospects.

Overview

We are a leading provider of marketplace infrastructure, data services and technology solutions to a broad range of customers including financial institutions, corporations and government entities. Through our markets, clearinghouses, listings, data and technology offerings, we provide comprehensive workflow solutions that enable our customers to manage risk, raise capital and operate their businesses more efficiently. We operate regulated marketplaces for listing, trading and clearing of a broad array of derivatives contracts and securities across major asset classes including: energy and agricultural commodities, metals, interest rates, equities, exchange-traded funds, or ETFs, credit derivatives, digital assets, bonds and currencies. In addition, we offer comprehensive data services to support the trading, investment, risk management and connectivity needs of customers around the world and across asset classes. We also offer technology solutions that support the U.S. residential mortgage industry from application and loan origination, through to final settlement.

We operate marketplaces and provide data services in the U.S., U.K., EU, Canada and Singapore, and offer technology and data solutions to the U.S. mortgage industry. Our business is conducted as two reportable business segments, our Trading and Clearing segment and our Data and Listings segment, and the majority of our identifiable assets are located in the U.S. and U.K.

Recent Developments

COVID-19

The coronavirus (COVID-19) pandemic has created economic and financial disruptions globally and has led governmental authorities to take unprecedented measures to mitigate the spread of the disease, including travel bans, border closings,

business closures, quarantines and shelter-in-place orders, and to take actions designed to stabilize markets and promote economic growth.

From an operational perspective, our businesses, including our exchanges, clearing houses, listing venues, data services businesses, and mortgage platforms, have remained open and we do not have any plans to close any of our business operations as a result of the COVID-19 pandemic. However, due to the COVID-19 pandemic, we have taken preventative measures and implemented contingency plans, and currently most of our employees are working remotely. In response to government mandates, we closed all of our office facilities between early March and late April 2020, with only our operationally essential employees working on-site at our facilities for business continuity purposes. As various governments began easing orders requiring office closures in late April, we began a phased re-opening of certain of our office facilities allowing a limited number of operationally non-essential workers to also work on-site. In particular, NYSE, one of our subsidiaries, has partially re-opened its trading floors since initiating fully electronic trading for its exchanges and temporarily closing all trading floors in March 2020. Those employees working on-site are utilizing an alternating framework to allow for social distancing. These measures are in compliance, as necessary, with local government mandates and social distancing directives. We continue to monitor local government mandates in determining our office re-openings, re-closures and work-related travel.

Global health concerns relating to COVID-19 and preventive measures taken to reduce its spread have created significant volatility in the financial markets, which has resulted in higher trading volumes for some of our products and increased demand for our services.

The extent of the impact of the pandemic on our business will depend largely on future developments, including the duration and spread of the outbreak, its severity and the actions taken to contain the disease or treat its impact. We continue to monitor this dynamic situation, including guidance and regulations issued by U.S. and other governmental authorities. In light of the rapidly evolving nature of the COVID-19 outbreak, we are not able at this time to estimate the ultimate effect of the pandemic on our business, results of operations or financial condition in the future.

Acquisition of Ellie Mae

On September 4, 2020, we acquired Ellie Mae for aggregate consideration of \$11.4 billion from private equity firm Thoma Bravo. Ellie Mae is a cloud-based technology solution provider for the mortgage finance industry. Through its digital lending platform, Ellie Mae provides technology solutions to participants in the mortgage supply chain, including over 3,000 customers and thousands of partners and investors who participate on its open network. Originators rely on Ellie Mae to securely manage the exchange of data across the mortgage ecosystem to enable the origination of mortgages while adhering to various local, state and federal compliance requirements. Ellie Mae is a part of ICE Mortgage Technology and is included in our Trading and Clearing segment as of September 30, 2020. From the acquisition date through September 30, 2020, Ellie Mae revenues of \$75 million, which are included in our transaction and clearing revenues, and operating expenses of \$56 million were recorded for the nine and three months ended September 30, 2020.

The purchase price consisted of \$9.5 billion in cash, as adjusted for \$335 million of cash and cash equivalents held by Ellie Mae on the date of acquisition, and \$1.9 billion, or 18.4 million shares of our common stock, based on our stock price on the acquisition date. ICE funded the cash portion of the purchase price with net proceeds from our offering of new senior notes in August 2020, together with the issuance of commercial paper and borrowings under a new senior unsecured term loan facility.

Acquisition of Bridge2 Solutions

On February 21, 2020, we acquired Bridge2 Solutions, a leading provider of loyalty solutions for merchants and consumers. Bridge2 Solutions enables some of the world's leading brands to engage customers and drive loyalty. It powers incentive and employee perk programs for companies across a wide spectrum of industries.

Regulation

Our activities and the markets in which we operate are subject to regulations that impact us as well as our customers, and, in turn, meaningfully influence our activities, the manner in which we operate and our strategy. We are primarily subject to the jurisdiction of regulatory agencies in the U.S., U.K., EU, Canada, Singapore and Abu Dhabi Global Markets. Failure to satisfy regulatory requirements can or may give rise to sanctions by the applicable regulator.

Global policy makers have undertaken reviews of their existing legal framework governing financial markets in connection with regulatory reform, and have either passed new laws and regulations, or are in the process of debating and/or enacting new laws and regulations that apply to our business and to our customers' businesses. During most of 2020,

global policy makers have been focused on the impact of and responses to the COVID-19 pandemic. As a consequence, many regulatory initiatives have been postponed. Legislative and regulatory actions may impact the way in which we or our customers conduct business and may create uncertainty, which could affect trading volumes or demand for market data. See Part 1, Item 1 "Business - Regulation" and Part 1, Item 1(A) "Risk Factors" included in our 2019 Form 10-K for a discussion of the primary regulations applicable to our business and certain risks associated with those regulations.

The key areas in the evolving regulatory landscape that are likely to impact our business are:

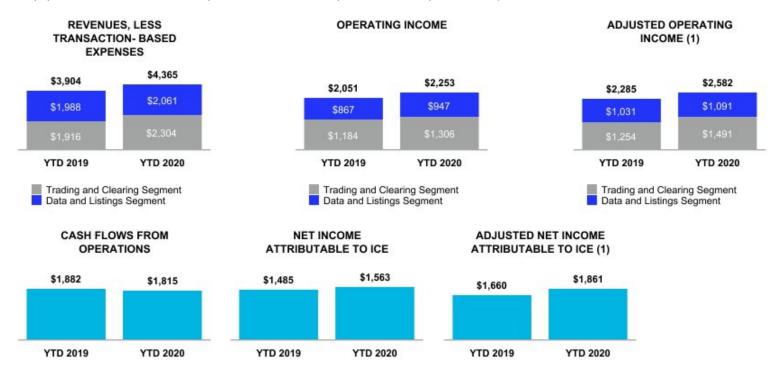
- **Brexit timing and implications.** On January 31, 2020, the U.K. officially withdrew from the EU. In connection with the U.K.'s withdrawal from the EU, the U.K. and the EU entered into a withdrawal agreement, which, amongst other things, includes a transitional period until December 31, 2020, during which EU law will continue to apply in and to the U.K.
- Continued access by EU market participants to U.K. CCPs and exchanges. Under the terms of the withdrawal agreement, EU law will continue to apply in and to the U.K. for a transitional period until December 31, 2020. During such time, EU market participants will be able to continue clearing through U.K. CCPs such as ICE Clear Europe, and accessing U.K. trading venues, such as ICE Futures Europe. The European Commission, or EC, adopted an 18-month temporary equivalence decision for U.K. CCPs, which will apply beginning on January 1, 2021. In addition, ICE Clear Europe has been recognized by the European Securities and Markets Authority, or ESMA, as a third country central counterparty in accordance with the European Markets Infrastructure Regulation, or EMIR. This recognition will take effect once the transition arrangement between the U.K. and EU ends. Separately, ICE Futures Europe and ICE Endex will continue to be able to permit access by EU and U.K. persons to transact on their platforms, even in the absence of any trade agreement being entered into by the U.K. and EU prior to the end of the transitional period and/or any trading venue equivalence decisions by the Financial Conduct Authority, or FCA, or the EC. The lack of equivalence decisions for trading venues, however, may result in increased costs for certain EU and U.K. market participants which could impact trading on ICE Futures Europe and ICE Endex. The impact to our business and corresponding regulatory changes remain uncertain at this time. We are monitoring the impact to our business as a result of these discussions and are pursuing avenues to facilitate continued access for EU and U.K. customers to our services in the event that the transition period ends without any equivalence determination for trading venues being made.
- The regulatory structure applicable to non-EU clearing houses. On January 1, 2020, EMIR 2.2 became effective, which revises the EU's current regulatory and supervisory structure for EU and non-EU clearing houses. In September 2020, the delegated regulations on the criteria for determining whether a non-EU clearing house is systemically important to the EU entered into force and, for those non-EU clearing houses that are systemically important to the EU, ESMA will assess whether compliance with the clearing house's home country regulation satisfies compliance with EU requirements. ESMA has recognized ICE Clear Europe as a third country CCP under EMIR and determined that it is a Tier 2 CCP on the basis that it is systemically important to the financial stability of the EU or one or more of its Member States. ESMA's continuing implementation of these delegated regulations could impact one or more of our other non-EU clearing houses.
- Requirement that European exchanges and CCPs offer non-discriminatory access. The non-discriminatory access provisions of the
 Markets in Financial Instruments Directive II, or MiFID II, would require our European exchanges and CCPs to offer access to third parties on
 commercially reasonable terms. In addition, MiFID II could require our European exchanges and CCPs to allow participants to trade and/or clear
 at other venues, which may encourage competing venues to offer lookalikes of our products. On July 3, 2020, the application of these nondiscriminatory access requirements for exchange-traded derivatives was postponed until July 3, 2021.
- Market data requirements. Our U.K. and EU derivatives exchanges could be impacted by changes to requirements related to the
 dissemination of market data. In its December 2019 report to the EC, ESMA recommended against, among other things, outright regulation of
 market data prices, however ESMA suggested that users could gain transparency into how market data prices are set with the help of new
 supervisory guidance and targeted changes to the MiFID II/Markets in Financial Instruments Regulation text. The EC is considering ESMA's
 report and is considering further legislative action in this area.
 - In June 2020, NYSE, Nasdaq and Cboe Global Markets filed petitions for review of the SIP Order with the U.S. Court of Appeals for the District of Columbia. In August 2020, the SEC adopted a change to Rule 608 that eliminates the provision allowing market data fee changes proposed by the National Market System Plans, or NMS Plans, to become immediately effective. Further, in August 2020, the exchanges and the Financial Industry Regulatory Authority, or FINRA, submitted to the SEC a proposed new, single NMS Plan to replace the three existing NMS Plans that govern the dissemination of real-time, consolidated equity market data for NMS stocks, in accordance with an SEC order directing the exchanges and FINRA to submit such a plan. This proposed new single NMS Plan would not replace the current NMS Plans until it is published for comment and approved by the SEC. Approval of the new SIP

Plan by the SEC may affect NYSE's revenues from the sale of consolidated market data since all the market data fees for consolidated market data would be required to be re-filed with the SEC and would not be effective until approved.

- Position limits. The adoption and implementation of position limit rules in the U.S. and the EU could have an impact on our commodities business if comparable trading venues in foreign jurisdictions are not subject to equivalent rules. Position limits became effective in the EU beginning January 2018 under MiFID II and are relevant to the markets operated by ICE Futures Europe and ICE Endex. In July 2020, the EC published a legislative proposal for amendments to MiFID II which narrowed the scope of the position limits regime by restricting the scope of the position limits to critical or significant contracts. In October 2020, the CFTC finalized its position limit rulemaking which replaced the CFTC's prior Dodd-Frank position limit efforts. There is potential for further divergence between MiFID II and U.S. position limit rules if the EU does not make changes to MiFID II or makes changes inconsistent with U.S. regulations.
- Benchmarks Regulation. In July 2020, the EC published a legislative proposal reviewing the EU Benchmarks Regulation, or BMR, and included a proposal to provide the EC with the power to designate a replacement benchmark for contracts referencing a benchmark in cessation. In June 2020, the U.K. Government announced its intention to amend the U.K.'s regulatory framework for benchmarks to ensure the FCA has the power to manage and direct any wind-down period prior to a LIBOR cessation, including powers to direct a methodology change for a critical benchmark. Increasing the powers of the FCA to change the methodology of a benchmark or the underlying market represented by a benchmark, such as LIBOR, could result in increased risks to the administrator and users of such benchmark, such as the operator of a derivatives market.

Consolidated Financial Highlights

The following summarizes our results and significant changes in our consolidated financial performance for the periods presented (dollars in millions, except per share amounts and YTD represents the nine-month periods ended September 30th):



	 Nine Mo Septe								
	2020		2019	Change		2020		2019	Change
Revenues, less transaction-based expenses	\$ 4,365	\$	3,904	12 %	\$	1,411	\$	1,336	6 %
Operating expenses	\$ 2,112	\$	1,853	14 %	\$	784	\$	630	25 %
Adjusted operating expenses ⁽¹⁾	\$ 1,783	\$	1,619	10 %	\$	611	\$	551	11 %
Operating income	\$ 2,253	\$	2,051	10 %	\$	627	\$	706	(11) %
Adjusted operating income ⁽¹⁾	\$ 2,582	\$	2,285	13%	\$	800	\$	785	2 %
Operating margin	52 %	·	53 %	(1 pt)		44 %	, D	53 %	(9 pts)
Adjusted operating margin ⁽¹⁾	59 %		59 %	_		57 %	, D	59 %	(2 pts)
Other income (expense), net	\$ (161)	\$	(157)	2 %	\$	(44)	\$	(66)	(34) %
Income tax expense	\$ 512	\$	387	32 %	\$	189	\$	103	82 %
Effective tax rate	24 %	•	20 %	4 pts		32 %	, D	16 %	16 pts
Net income attributable to ICE	\$ 1,563	\$	1,485	5 %	\$	390	\$	529	(26) %
Adjusted net income attributable to ICE ⁽¹⁾	\$ 1,861	\$	1,660	12 %	\$	569	\$	599	(5) %
Diluted earnings per share attributable to ICE common stockholders	\$ 2.83	\$	2.62	8 %	\$	0.71	\$	0.94	(24) %
Adjusted diluted earnings per share attributable to ICE common stockholders ⁽¹⁾	\$ 3.37	\$	2.93	15 %	\$	1.03	\$	1.06	(3) %
Cash flows from operating activities	\$ 1,815	\$	1,882	(4) %					

⁽¹⁾ The adjusted figures exclude items that are not reflective of our ongoing core operations and business performance. Adjusted net income attributable to ICE and adjusted diluted earnings per share attributable to ICE common stockholders are presented net of taxes. These adjusted numbers are not calculated in accordance with U.S. GAAP. See "- Non-GAAP Financial Measures" below.

[•] Revenues, less transaction-based expenses, increased \$461 million and \$75 million for the nine and three months ended September 30, 2020, respectively, from the comparable periods in 2019. See "-Trading and Clearing

Segment" and "Data and Listings Segment" below for a discussion of the significant changes in our revenues. The increase in revenues during the nine and three months ended September 30, 2020 includes \$2 million in unfavorable foreign exchange effects and \$8 million in favorable foreign exchange effects, respectively, arising from fluctuations in the U.S. dollar from the comparable periods in 2019. See Item 3 "Quantitative and Qualitative Disclosures About Market Risk-Foreign Currency Exchange Rate Risk" below for additional information on the impact of currency fluctuations.

• Operating expenses increased \$259 million and \$154 million for the nine and three months ended September 30, 2020, respectively, from the comparable periods in 2019. See "-Consolidated Operating Expenses" below for a discussion of the significant changes in our operating expenses. The increase in operating expenses includes minimal foreign exchange effect during the nine months ended September 30, 2020 and \$4 million in unfavorable foreign exchange effects for the three months ended September 30, 2020 arising from fluctuations in the U.S. dollar from the comparable periods in 2019. See Item 3 "Quantitative and Qualitative Disclosures About Market Risk-Foreign Currency Exchange Rate Risk" below for additional information on the impact of currency fluctuations.

Variability in Quarterly Comparisons

Our business environment has been characterized by:

- · globalization of marketplaces, customers and competitors;
- · commodity, interest rate and financial markets uncertainty;
- growing demand for data to inform customers' risk management and investment decisions;
- evolving, increasing and disparate regulation across multiple jurisdictions;
- · price volatility increasing customers' demand for risk management services;
- · increasing focus on capital and cost efficiencies;
- · customers' preference to manage risk in markets demonstrating the greatest depth of liquidity and product diversity;
- the evolution of existing products and new product innovation to serve emerging customer needs and changing industry agreements;
- rising demand for speed, data, data capacity and connectivity by market participants, necessitating increased investment in technology; and
- consolidation and increasing competition among global markets for trading, clearing and listings.

For additional information regarding the factors that affect our results of operations, see Item 1(A) "Risk Factors" included in our 2019 Form 10-K, and Part II, Item 1(A) "Risk Factors" below.

Segment Results

Our business is conducted through two reportable business segments:

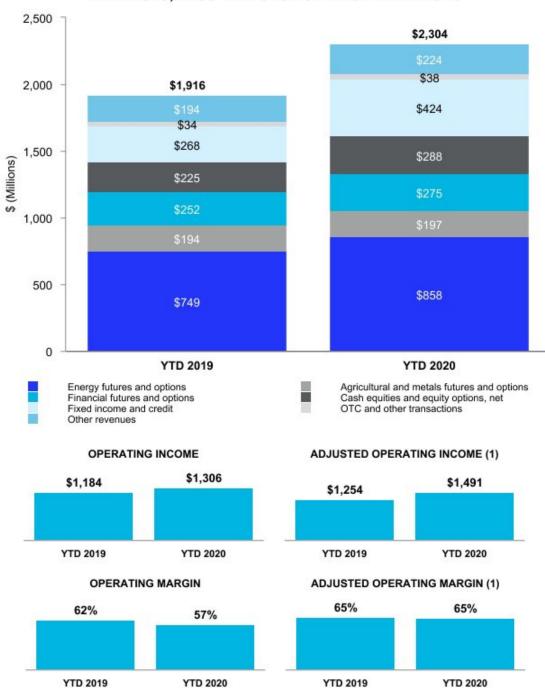
- Trading and Clearing, which comprises our transaction-based execution and clearing businesses; and
- · Data and Listings, which comprises our subscription-based data services and securities listings businesses.

While revenues are recorded specifically in the segment in which they are earned or to which they relate, a significant portion of our operating expenses are not solely related to a specific segment because the expenses serve functions that are necessary for the operation of both segments. We use a pro-rata revenue approach as the allocation method for the expenses that do not relate solely to one segment. Further, we did not allocate expenses to specific revenue streams within these segments since such an allocation is not reasonably possible. Our two segments do not engage in intersegment transactions.

Trading and Clearing Segment

The following presents selected statements of income data for our Trading and Clearing segment (dollars in millions and YTD represents the ninemonth periods ended September 30th):





⁽¹⁾ The adjusted numbers in the charts above are calculated by excluding items that are not reflective of our cash operations and core business performance. As a result, these adjusted numbers are not calculated in accordance with U.S. GAAP. See "- Non-GAAP Financial Measures" below.

	Nine Month Septemb									Ended r 30,	Change
	2020		2019		Change	Change		2020	2019		
Revenues:											
Energy futures and options contracts	\$	858	\$	749	15	%	\$	229	\$	265	(14) %
Agricultural and metals futures and options contracts		197		194	1			54		60	(11)
Financial futures and options contracts		275		252	9			76		91	(16)
Cash equities and equity options		1,934		1,201	61			593		401	48
Fixed income and credit		424		268	59			191		101	89
OTC and other transactions		38		34	13			12		11	13
Transaction and clearing, net		3,726		2,698	38			1,155		929	24
Other revenues		224		194	15			75		67	12
Revenues		3,950		2,892	37			1,230		996	24
Transaction-based expenses		1,646		976	69			519		327	59
Revenues, less transaction-based expenses		2,304		1,916	20			711		669	6
Other operating expenses		691		554	25			243		195	25
Depreciation and amortization		217		177	22			87		60	43
Acquisition-related transaction and integration costs		90		1		n/a		76		_	n/a
Operating expenses		998		732	36			406		255	59
Operating income	\$	1,306	\$	1,184	10	%	\$	305	\$	414	(26) %

Transaction and Clearing Revenues

Our transaction and clearing revenues consist of fees collected from our derivatives, fixed income, cash equities and equity options trading, derivatives clearing and mortgage technology services. Because transaction and clearing revenues are generally assessed on a per-contract basis, revenues and profitability fluctuate with changes in contract volume and due to product mix. Rates per-contract, or RPC, are driven by the number of contracts or securities traded and the fees charged per contract, net of certain rebates. Our per-contract transaction and clearing revenues will depend upon many factors, including, but not limited to, market conditions, transaction and clearing volume, product mix, pricing, applicable revenue sharing and market making agreements, and new product introductions.

For the nine months ended September 30, 2020 and 2019, 19% and 20%, respectively, of our Trading and Clearing segment revenues, less transaction-based expenses, were billed in pounds sterling or euros and for the three months ended September 30, 2020 and 2019, 17% and 19%, respectively, of our Trading and Clearing segment revenues, less transaction-based expenses, were billed in pounds sterling or euros. For the nine months ended September 30, 2020 as compared to the same period in 2019, foreign currency fluctuations due to the strengthening of the U.S. dollar compared to the euro resulted in a decrease of \$2 million to our Trading and Clearing segment revenues, less transaction-based expenses. For the three months ended September 30, 2020 as compared to the same period in 2019, foreign currency fluctuations due to the weakening of the U.S. dollar compared to the pound sterling and euro resulted in an increase of \$6 million to our Trading and Clearing segment revenues, less transaction-based expenses. See Item 3 "- Quantitative and Qualitative Disclosures About Market Risk -Foreign Currency Exchange Rate Risk" below for additional information on the impact of currency fluctuations.

Our transaction and clearing revenues are presented net of rebates. We offer rebates in certain of our markets primarily to support market liquidity and trading volume by providing qualified participants in those markets a discount to the applicable commission rate. Such rebates are calculated based on volumes traded. We recorded rebates of \$742 million and \$653 million for the nine months ended September 30, 2020 and 2019, respectively, and \$217 million and \$218 million for the three months ended September 30, 2020 and 2019, respectively. The increase in rebates for the nine months ended September 30, 2020 from the comparable period in 2019 was primarily due to the increase in volumes traded. Rebates were flat for the three months ended September 30, 2020 from the comparable period in 2019.

- Energy Futures and Options Contracts: Total energy volume increased 20% and revenues increased 15% for the nine months ended September 30, 2020 from the comparable period in 2019 and volume decreased 8% and revenues decreased 14% for the three months ended September 30, 2020 from the comparable period in 2019.
 - Total oil volume increased 16% for the nine months ended September 30, 2020 from the comparable period in 2019 due to increased risk management activity driven by shifting supply/demand dynamics related to various geopolitical events and the emergence of COVID-19. Total oil volume decreased 15% for the three months ended September 30, 2020 from the comparable period in 2019 as the third quarter of 2019

- benefited from a sharp increase in price volatility related to increased geopolitical tensions across the Middle East.
- Our global natural gas futures and options volume increased 29% and 8% for the nine and three months ended September 30, 2020, respectively. The volume increase in our North American natural gas products was primarily driven by shifting supply/demand dynamics as the price of West Texas Intermediate crude oil, the benchmark for U.S. crude oil, remained at relatively low levels leading to lower levels of shale production and thus, reduced supply of U.S. natural gas. In addition, the strength in our European TTF gas volumes was driven by the continued emergence of TTF as not only the European benchmark, but also the emerging global benchmark, for natural gas as the commodity continues to globalize.
- Agricultural and Metals Futures and Options Contracts: In our agricultural and metals futures and options markets total volume increased 1% for the nine months ended September 30, 2020 and decreased 9% for the three months ended September 30, 2020 from the comparable periods in 2019, and revenues increased 1% for the nine months ended September 30, 2020 and decreased 11% for the three months ended September 30, 2020 from the comparable periods in 2019. The overall increase in agricultural volumes for the nine months ended September 30, 2020 was primarily driven by price volatility resulting from shifting supply/demand dynamics related to COVID-19, the sharp decline in global oil prices and varying global weather patterns. The overall decrease in agricultural volumes for the three months ended September 30, 2020 was primarily driven by lower commodity price volatility than the prior year period.
 - Sugar futures and options volumes increased 9% and decreased 14% for the nine and three months ended September 30, 2020, respectively, from the comparable periods in 2019.
 - Other agricultural and metal futures and options volume decreased 5% for both the nine and three months ended September 30, 2020 from the comparable periods in 2019.
- Financial Futures and Options Contracts: In our financial futures and options markets total volume decreased 1% and 24%, respectively, for the nine and three months ended September 30, 2020 from the comparable periods in 2019 and revenues increased 9% and decreased 16%, respectively, for the nine and three months ended September 30, 2020 from the comparable periods in 2019.
 - Interest rate futures and options volume decreased 4% and 27% for the nine and three months ended September 30, 2020, respectively, from the comparable periods in 2019 and revenue decreased 1% and 26% for the nine and three months ended September 30, 2020, respectively, from the comparable periods in 2019. The interest rate futures and options volume decrease for the nine and three months ended September 30, 2020 was primarily driven by the impact of quantitative easing measures implemented by major central banks in response to COVID-19. Interest rate futures and options revenues were \$151 million and \$152 million for the nine months ended September 30, 2020 and 2019, respectively, and \$40 million and \$55 million for the three months ended September 30, 2020 and 2019, respectively.
 - Other financial futures and options volume, which includes our MSCI®, FTSE® and NYSE FANG+ equity index products, increased 15% and decreased 9% for the nine and three months ended September 30, 2020, respectively, from the comparable periods in 2019. Other financial futures and options volume increased for the nine months ended September 30, 2020, due to increased equity market volatility driven by accelerating adoption of MSCI® index futures and options as well as uncertainty related to COVID-19. Lower equity index futures and options volumes in the three months ended September 30, 2020 were partially offset by positive trends across our FX futures and options complex, particularly the U.S. Dollar Index futures and options. Other financial futures and options revenues were \$124 million and \$100 million for the nine months ended September 30, 2020 and 2019, respectively, and \$36 million and \$36 million for the three months ended September 30, 2020 and 2019, respectively.
- Cash Equities and Equity Options: Cash equities handled volume increased 45% and 29% for the nine and three months ended September 30, 2020, respectively, from the comparable periods in 2019 due to heightened volatility driven by uncertainty related to COVID-19 and various geopolitical events. Cash equities revenues, net of transaction-based expenses, were \$216 million and \$153 million for the nine months ended September 30, 2020 and 2019, respectively, and \$53 million and \$51 million for the three months ended September 30, 2020 and 2019, respectively.

Equity options volume increased 53% and 74% for the nine and three months ended September 30, 2020, respectively, from the comparable periods in 2019 primarily due to higher industry volumes and heightened volatility driven by uncertainty related to COVID-19 and various geopolitical events. Equity options revenues, net of transaction-based expenses, were \$72 million for both the nine months ended September 30, 2020 and 2019 and \$21 million and \$23 million for the three months ended September 30, 2020 and 2019, respectively.

Fixed Income and Credit: Fixed income and credit includes revenues from ICE Mortgage Technology, ICE Bonds and CDS execution and clearing.

CDS clearing revenues were \$117 million and \$102 million for the nine months ended September 30, 2020 and 2019, respectively, and \$33 million and \$35 million for the three months ended September 30, 2020 and 2019, respectively. The notional value of CDS cleared was \$14.6 trillion and \$11.9 trillion for the nine months ended September 30, 2020 and 2019, respectively, and \$3.6 trillion and \$4.3 trillion for the three months ended September 30, 2020 and 2019, respectively. The increase in CDS clearing revenues for the nine months ended September 30, 2020 from the comparable period in 2019 included record buy-side activity in terms of index notional amount cleared during the period driven by heightened market volatility related to COVID-19.

Mortgage services revenues were \$238 million and \$90 million for the nine months ended September 30, 2020 and 2019, respectively, and \$140 million and \$42 million for the three months ended September 30, 2020 and 2019, respectively. The increase in mortgage services revenues was primarily driven by the acquisitions of Ellie Mae in September 2020 and Simplifile in June 2019.

OTC and Other Transactions: OTC and other transactions include revenues from our OTC energy business and other trade confirmation services.

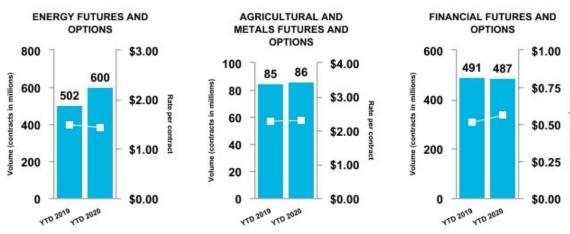
Other Revenues

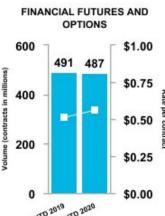
Other revenues primarily include interest income on certain clearing margin deposits, regulatory penalties and fines, fees for use of our facilities, regulatory fees charged to member organizations of our U.S. securities exchanges, designated market maker service fees, technology development fees, exchange membership fees and agricultural grading and certification fees. The increase in other revenues for the nine and three months ended September 30, 2020 from the comparable periods in 2019 was primarily due to increased interest income earned on certain clearing margin deposits reflecting higher balances, increased regulatory fees and the acquisitions of Ellie Mae and Bridge2 Solutions.

Selected Operating Data

The following charts and tables present trading activity in our futures and options markets by commodity type based on the total number of contracts traded, as well as futures and options rate per contract (in millions, except for percentages and rate per contract amounts and YTD represents the nine-month periods ended September 30th):

Volume and Rate per Contract





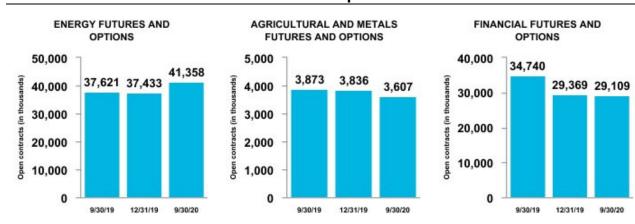
	Nine Montl Septeml					
	2020	2019	Change	2020	2019	Change
Number of contracts traded (in millions):	<u></u> -					
Energy futures and options	600	502	20 %	163	177	(8) %
Agricultural and metals futures and options	86	85	1	24	26	(9)
Financial futures and options	487	491	(1)	133	174	(24)
Total	1,173	1,078	9 %	320	377	(15) %
				-		

	Nine Month Septemb					
	2020	2019	Change	2020	2019	Change
Average Daily Volume of contracts traded (in thousands):						
Energy futures and options	3,176	2,671	19 %	2,545	2,762	(8) %
Agricultural and metals futures and options	456	453	1	376	414	(9)
Financial futures and options	2,531	2,565	(1)	2,024	2,650	(24)
Total	6,163	5,689	8 %	4,945	5,826	(15) %

	Nine Mon Septer			Three Months Ended September 30,						
	 2020		2019	Change			2020		2019	Change
Rate per contract:								_		
Energy futures and options	\$ 1.43	\$	1.49	(4)	%	\$	1.40	\$	1.50	(6) %
Agricultural and metals futures and options	\$ 2.29	\$	2.28	_	%	\$	2.23	\$	2.27	(2) %
Financial futures and options	\$ 0.56	\$	0.51	10	%	\$	0.56	\$	0.52	9 %

Open interest is the aggregate number of contracts (long or short) that clearing members hold either for their own account or on behalf of their clients. Open interest refers to the total number of contracts that are currently "open," – in other words, contracts that have been traded but not yet liquidated by either an offsetting trade, exercise, expiration or assignment. Open interest is also a measure of the future activity remaining to be closed out in terms of the number of contracts that members and their clients continue to hold in the particular contract and by the number of contracts held for each contract month listed by the exchange. The following charts and table present our quarter-end open interest for our futures and options contracts (in thousands, except for percentages):

Open Interest



	As of Septem		
	2020	2019	Change
Open interest — in thousands of contracts:			
Energy futures and options	41,358	37,621	10 %
Agricultural and metals futures and options	3,607	3,873	(7)
Financial futures and options	29,109	34,740	(16)
Total	74,074	76,234	(3) %

The following charts and table present selected cash and equity options trading data (all trading volume below is presented as average net daily trading volume, or ADV, and is single counted and YTD represents the nine-month periods ended September 30th):



	Nine Months Septembe			Three Month Septemb		
	2020	2019	Change	2020	2019	Change
NYSE cash equities:						
Total cash handled volume (shares in millions)	2,552	1,760	45 %	2,151	1,666	29 %
Total cash market share matched	22.6 %	24.2 %	(1.6) pts	21.2 %	23.5 %	(2.3) pts
NYSE equity options (contracts in thousands):						
NYSE equity options volume	4,862	3,185	53 %	5,328	3,062	74 %
Total equity options volume	26,701	17,478	53 %	28,085	17,767	58 %
NYSE share of total equity options	18.2 %	18.2 %	_	19.0 %	17.2 %	1.7 pts
Revenue capture or rate per contract:						
Cash equities rate per contract (per 100 shares)	\$0.045	\$0.046	(3) %	\$0.038	\$0.049	(21) %
Equity options rate per contract	\$0.08	\$0.12	(34) %	\$0.06	\$0.12	(46) %

Handled volume represents the total number of shares of equity securities, ETFs and crossing session activity internally matched on our exchanges or routed to and executed on an external market center. Matched volume represents the total number of shares of equity securities, ETFs and crossing session activity executed on our exchanges.

Transaction-Based Expenses

Our equities and equity options markets pay fees to the SEC pursuant to Section 31 of the Exchange Act. Section 31 fees are recorded on a gross basis as a component of transaction and clearing fee revenue. These Section 31 fees are assessed to recover the government's costs of supervising and regulating the securities markets and professionals and are subject to change. We, in turn, collect corresponding activity assessment fees from member organizations clearing or settling trades on the equities and options exchanges, and recognize these amounts in our transaction and clearing revenues when invoiced. The activity assessment fees are designed to equal the Section 31 fees. As a result, activity assessment fees and the corresponding Section 31 fees do not have an impact on our net income, although the timing of payment by us will vary from collections. Section 31 fees were \$465 million and \$274 million for the nine months ended September 30, 2020 and 2019, respectively, and \$145 million for the three months ended September 30, 2020 and 2019, respectively. The fees we collect are included in cash at the time of receipt and we remit the amounts to the SEC semi-annually as required. The total amount is included in accrued liabilities and was \$53 million as of September 30, 2020.

We make liquidity payments to cash and options trading customers, as well as routing charges made to other exchanges which are included in transaction-based expenses. We incur routing charges when we do not have the best bid or offer in the market for a security that a customer is trying to buy or sell on one of our securities exchanges. In that case, we route the customer's order to the external market center that displays the best bid or offer. The external market center charges us a fee per share (denominated in tenths of a cent per share) for routing to its system. We record routing charges on a gross basis as a component of transaction and clearing fee revenue. Cash liquidity payments, routing and clearing fees were \$1.2 billion and \$702 million for the nine months ended September 30, 2020 and 2019, respectively, and \$374 million and \$222 million for the three months ended September 30, 2020 and 2019, respectively.

Operating Expenses, Operating Income and Operating Margin

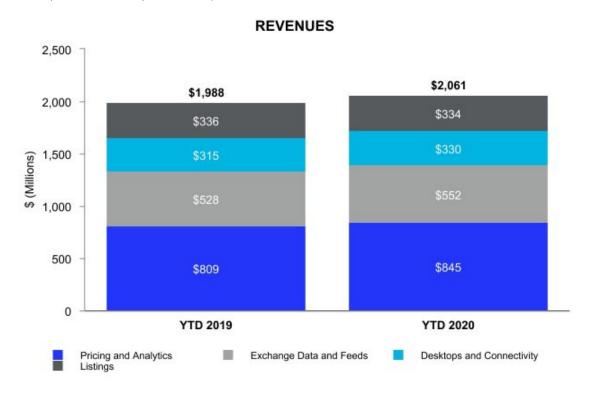
The following chart summarizes our Trading and Clearing segment's operating expenses, operating income and operating margin (dollars in millions). See "- Consolidated Operating Expenses" below for a discussion of the significant changes in our operating expenses.

Trading and Clearing Segment:	Ni	ne Months	Ended 30,	September		Ended 30,			
		2020 2019			Change	2020		2019	Change
Operating expenses	\$	998	\$	732	36 %	\$ 406	\$	255	59 %
Adjusted operating expenses ⁽¹⁾	\$	813	\$	662	23 %	\$ 282	\$	231	21 %
Operating income	\$	1,306	\$	1,184	10 %	\$ 305	\$	414	(26) %
Adjusted operating income ⁽¹⁾	\$	1,491	\$	1,254	19 %	\$ 429	\$	438	(1) %
Operating margin		57 %	6	62 %	(5 pts)	43 %	1	62 %	(19 pts)
Adjusted operating margin ⁽¹⁾		65 %	6	65 %	_	61 %	1	65 %	(4 pts)

⁽¹⁾ The adjusted figures exclude items that are not reflective of our ongoing core operations and business performance. These adjusted numbers are not calculated in accordance with U.S. GAAP. See "- Non-GAAP Financial Measures" below.

Data and Listings Segment

The following charts and table present our selected statements of income data for our Data and Listings segment (dollars in millions and YTD represents the nine-month periods ended September 30th):





⁽¹⁾ The adjusted numbers in the charts above are calculated by excluding items that are not reflective of our cash operations and core business performance. As a result, these adjusted numbers are not calculated in accordance with U.S. GAAP. See "- Non-GAAP Financial Measures" below.

	Nine Months Ended September 30,					Th	ree Mo Septer		
	2020		2019	Change		2020		2019	Change
Revenues:									
Pricing and analytics	\$ 845	\$	809	4 %	%	\$	287	\$ 273	5 %
Exchange data and feeds	552		528	4			189	172	9
Desktops and connectivity	330		315	5			113	108	4
Data services	1,727		1,652	5			589	553	6
Listings	334		336	(1)			111	114	(2)
Revenues	2,061		1,988	4			700	667	5
Other operating expenses	837		825	2			285	277	3
Depreciation and amortization	277		296	(6)			93	98	(4)
Operating expenses	1,114		1,121	(1)			378	375	1
Operating income	\$ 947	\$	867	9 %	%	\$	322	\$ 292	10 %

Our Data and Listings segment represents largely subscription-based, or recurring, revenues from data services and listings services offered across our trading and clearing businesses and ICE Data Services. Through ICE Data Services, we generate revenues from a range of global financial and commodity markets, including pricing and reference data, exchange data, analytics, feeds, index services, desktops and connectivity solutions. Through NYSE, NYSE American and NYSE Arca, we generate listings revenue related to the provision of listings services for public companies and ETFs, and related corporate actions for listed companies.

For both the nine and three months ended September 30, 2020 and the nine and three months ended September 30, 2019, 7% of our Data and Listings segment revenues were billed in pounds sterling or euros (all relating to our data services revenues). As the pound sterling or euro exchange rate changes, the U.S. equivalent of revenues denominated in foreign currencies changes accordingly. Foreign currency fluctuations resulted in minimal foreign exchange impact during the nine months ended September 30, 2020 on our Data and Listings segment revenues. Due to the weakening of the U.S. dollar compared to the pound sterling and euro, for the three months ended September 30, 2020 as compared to the same period in 2019, foreign currency fluctuations resulted in an increase of \$2 million to our Data and Listings segment revenues.

Our data services revenues are primarily subscription-based and increased 5% and 6% for the nine and three months ended September 30, 2020 from the comparable periods in 2019, respectively. The increase in revenues was primarily due to the strong retention rate of existing customers, the addition of new customers, increased purchases by existing customers and increases in pricing of our products.

- **Pricing and Analytics:** Our pricing and analytics revenues increased 4% and 5% for the nine and three months ended September 30, 2020, respectively, from the comparable periods in 2019. The increase in revenue was due to strength in our index businesses and continued growth in our pricing and reference data business driven by the strong retention rate of existing customers, the addition of new customers, increased purchases by existing customers and increases in pricing of our products.
- Exchange Data and Feeds: Our exchange data and feeds revenues increased 4% and 9% for the nine and three months ended September 30, 2020 from the comparable periods in 2019, respectively. The increase in revenue was largely due to growth in NYSE exchange data during the three months ended September 30, 2020, as well as continued growth in our futures exchange data and our consolidated feed offering, which was driven by the strong retention rate of existing customers, the addition of new customers and increases in pricing of our products.
- **Desktops and Connectivity:** Our desktop and connectivity revenues increased 5% and 4% for the nine and three months ended September 30, 2020, respectively, from the comparable periods in 2019. The increase in revenue was driven primarily by growth in our connectivity services including the ICE Global Network, coupled with stronger desktop revenues.

Annual Subscription Value, or ASV, represents, at a point in time, the data services revenues subscribed for the succeeding 12 months. ASV does not include new sales, contract terminations or price changes that may occur during that 12-month period. ASV also does not include certain data services revenue streams that are not subscription-based. Revenue from ASV businesses has historically represented approximately 90% of our data revenues. Thus, while it is an indicative forward-looking metric, it does not provide a growth forecast of the next 12 months of data services revenues.

As of September 30, 2020, ASV was \$2.098 billion, which increased 5.8% compared to the ASV as of September 30, 2019. This does not adjust for year-over-year foreign exchange fluctuations or impacts of acquisitions.

Listings Revenues

Listings revenues in our securities markets arise from fees applicable to companies listed on our cash equities exchanges—original listing fees and annual listing fees. Original listing fees consist of two components: initial listing fees and fees related to corporate actions. Initial listing fees, subject to a minimum and maximum amount, are based on the number of shares that a company initially lists. All listings fees are billed upfront and the identified performance obligations are satisfied over time. Revenue related to the investor relations performance obligation is recognized ratably over the period these services are provided, with the remaining revenue recognized ratably over time as customers continue to list on our exchanges.

In addition, we earn corporate actions-related listing fees in connection with actions involving the issuance of new shares, such as stock splits, rights issues and sales of additional securities, as well as mergers and acquisitions. Listings fees related to other corporate actions are considered contract modifications of our listing contracts and are recognized ratably over time as customers continue to list on our exchanges.

Our listings revenues decreased 1% and 2% for the nine and three months ended September 30, 2020, respectively, compared to the comparable periods in 2019.

Operating Expenses, Operating Income and Operating Margin

The following chart summarizes our Data and Listings segment's operating expenses, operating income and operating margin (dollars in millions). See "- Consolidated Operating Expenses" below for a discussion of the significant changes in our operating expenses.

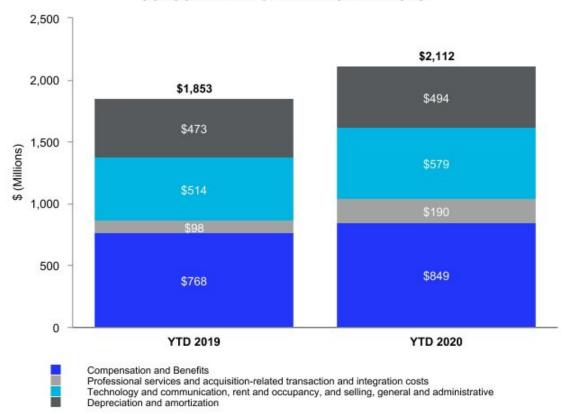
Data and Listings Segment:	 Nine Mo Septe	nths E						
	2020		2019	Change	2020		2019	Change
Operating expenses	\$ 1,114	\$	1,121	(1) %	\$ 3	78	\$ 375	1 %
Adjusted operating expenses ⁽¹⁾	\$ 970	\$	957	1 %	\$ 3	29 9	\$ 320	3 %
Operating income	\$ 947	\$	867	9 %	\$ 3	22	\$ 292	10 %
Adjusted operating income ⁽¹⁾	\$ 1,091	\$	1,031	6 %	\$ 3	71 5	\$ 347	7 %
Operating margin	46 %	0	44 %	2 pts		46 %	44 %	2 pts
Adjusted operating margin ⁽¹⁾	53 %	6	52 %	1 pt		53 %	52 %	1 pt

⁽¹⁾ The adjusted figures exclude items that are not reflective of our ongoing core operations and business performance. These adjusted numbers are not calculated in accordance with U.S. GAAP. See "- Non-GAAP Financial Measures" below.

Consolidated Operating Expenses

The following presents our consolidated operating expenses (dollars in millions and YTD represents the nine-month periods ended September 30th):

CONSOLIDATED OPERATING EXPENSES



	Nine Months End September 30,						Three Mor Septer		
	2020			2019	Change	_	2020	2019	Change
Compensation and benefits	\$	849	\$	768	11 9	% 5	\$ 298	\$ 261	14 %
Professional services		100		97	3		37	35	9
Acquisition-related transaction and integration costs		90		1	n/a	а	76	_	n/a
Technology and communication		388		346	12		131	126	4
Rent and occupancy		59		52	15		19	17	13
Selling, general and administrative		132		116	14		43	33	29
Depreciation and amortization		494		473	4		180	158	14
Total operating expenses	\$	2,112	\$	1,853	14 %	% 5	\$ 784	\$ 630	25 %

The majority of our operating expenses do not vary directly with changes in our volume and revenues, except for certain technology and communication expenses, including data acquisition costs, licensing and other fee-related arrangements and a portion of our compensation expense that is tied directly to our data sales or overall financial performance.

We expect our operating expenses to increase in absolute terms in future periods in connection with the growth of our business, and to vary from year-to-year based on the type and level of our acquisitions, our integrations and other investments.

For the nine months ended September 30, 2020 and 2019, 11% and 12%, respectively, of our operating expenses were billed in pounds sterling or euros and for the three months ended September 30, 2020 and 2019, 10% and 12%,

respectively, of our operating expenses were billed in pounds sterling or euros. Due to fluctuations in the U.S. dollar compared to the pound sterling and euro, our consolidated operating expenses increased \$4 million during the three months ended September 30, 2020 from the comparable period in 2019, and there was a minimal effect on the nine months ended September 30, 2020 from the comparable period in 2019. See Item 3 "— Quantitative and Qualitative Disclosures About Market Risk - Foreign Currency Exchange Rate Risk" below for additional information.

Compensation and Benefits Expenses

Compensation and benefits expense is our most significant operating expense and includes non-capitalized employee wages, bonuses, non-cash or stock compensation, certain severance costs, benefits and employer taxes. The bonus component of our compensation and benefits expense is based on both our financial performance and individual employee performance. The performance-based restricted stock compensation expense is also based on our financial performance. Therefore, our compensation and benefits expense will vary year-to-year based on our financial performance and fluctuations in our number of employees. The below chart summarizes the significant drivers of our compensation and benefits expense results for the periods presented (dollars in millions, except employee headcount).

		Nine Mon Septen	 	_			
		2020	2019	Change	2020	2019	Change
Employee headcount	_	8,445	5,435	55 %		 	
Stock-based compensation expenses	\$	95	\$ 100	(6) % \$	34	\$ 36	(7) %

Employee headcount increased for the nine months ended September 30, 2020 from the comparable period in 2019 primarily due to new employees at Ellie Mae, Bridge2 Solutions and in our ICE India office, who had previously been our contractors. Total compensation and benefits expenses increased for the nine and three months ended September 30, 2020 from the comparable periods in 2019 primarily due to \$50 million and \$24 million, respectively, in additional costs related to the acquisitions of Ellie Mae, Simplifile and Bridge2 Solutions and the establishment of ICE India, as well as increases of \$20 million and \$9 million, respectively, of expenses related to other increases in employee headcount and 2020 merit pay. The stock-based compensation expenses in the table above relate to employee stock option and restricted stock awards.

Professional Services Expenses

Professional services expense includes fees for consulting services received on strategic and technology initiatives, temporary labor, as well as regulatory, legal and accounting fees, and may fluctuate as a result of changes in the use of these services in our business.

Professional services expenses increased for the nine and three months ended September 30, 2020 from the comparable periods in 2019 due to increased costs associated with regulatory and litigation matters and our acquisition of Ellie Mae.

Acquisition-Related Transaction and Integration Costs

We incurred \$90 million and \$76 million in acquisition-related transaction costs for the nine and three months ended September 30, 2020, respectively, primarily related to our September 2020 acquisition of Ellie Mae and our February 2020 Bakkt acquisition of Bridge2 Solutions. The Bridge2 Solutions acquisition costs include expenses of \$10 million resulting from a Bakkt incentive award market condition estimation adjustment that was directly related to the March 2020 capital call to fund the acquisition of Bridge2 Solutions. For the nine months ended September 30, 2019, we incurred \$1 million in acquisition-related transaction and integration costs and for the three months ended September 30, 2019, such costs were nominal.

We expect to continue to explore and pursue various potential acquisitions and other strategic opportunities to strengthen our competitive position and support our growth. As a result, we may incur acquisition-related transaction costs in future periods.

Technology and Communication Expenses

Technology support services consist of costs for running our wholly-owned data centers, hosting costs paid to third-party data centers and maintenance of our computer hardware and software required to support our technology and cybersecurity. These costs are driven by system capacity, functionality and redundancy requirements. Communication expenses consist of costs for network connections for our electronic platforms and telecommunications costs.

Technology and communications expense also includes fees paid for access to external market data, licensing and other fee agreement expenses. Technology and communications expenses may be impacted by growth in electronic contract volume, our capacity requirements, changes in the number of telecommunications hubs and connections with customers

to access our electronic platforms directly. Beginning in the second quarter of 2019, we have reflected amounts owed under certain third-party revenue share arrangements as technology and communication operating expenses rather than as had been previously recorded net within transaction and clearing revenues, which resulted in an increase in technology and communications expense of \$14 million for the nine months ended September 30, 2020 as compared to the comparable period in 2019. Technology and communications expenses also increased by \$15 million for the nine months ended September 30, 2020 related to increased 2020 third-party revenue share fees. In addition, for the nine and three months ended September 30, 2020 total technology and communications expenses increased \$15 million and \$9 million, respectively, due to our acquisitions of Ellie Mae and Bridge2 Solutions in 2020 and Simplifile in 2019, partially offset by lower data services costs.

Rent and Occupancy Expenses

Rent and occupancy expense relates to leased and owned property and includes rent, maintenance, real estate taxes, utilities and other related costs. We have significant operations located in and around Atlanta, New York, Pleasanton, London and Hyderabad with smaller offices located throughout the world.

Rent and occupancy expenses increased for the nine and three months ended September 30, 2020 from the comparable periods in 2019 primarily due to the early termination of our NYSE Chicago office lease and the acquisition of Ellie Mae.

Selling, General and Administrative Expenses

Selling, general and administrative expenses include marketing, advertising, public relations, insurance, bank service charges, dues and subscriptions, travel and entertainment, non-income taxes and other general and administrative costs.

Selling, general and administrative expenses increased for the nine months ended September 30, 2020 from the comparable period in 2019 primarily due to a \$10 million charitable contribution in support of COVID-19 relief efforts, \$8 million in accruals for investigations and inquiries and due to our acquisition of Ellie Mae, partially offset by lower travel expenses. Selling, general and administrative expenses increased for the three months ended September 30, 2020 from the comparable period in 2019 primarily due to an increase in accruals for investigations and inquiries, marketing costs and other taxes and fees, as well as due to our acquisition of Ellie Mae.

Depreciation and Amortization Expenses

Depreciation and amortization expense results from depreciation of long-lived assets such as buildings, leasehold improvements, aircraft, hardware and networking equipment, software, furniture, fixtures and equipment over their estimated useful lives. This expense includes amortization of intangible assets obtained in our acquisitions of businesses, as well as on various licensing agreements, over their estimated useful lives. Intangible assets subject to amortization consist primarily of customer relationships, trading products with finite lives and technology. This expense also includes amortization of internally-developed and purchased software over its estimated useful life.

We recorded amortization expenses on intangible assets acquired as part of our acquisitions, as well as on other intangible assets, of \$236 million and \$235 million for the nine months ended September 30, 2020 and 2019, respectively, and \$95 million and \$79 million for the three months ended September 30, 2020 and 2019, respectively. Amortization expense increased for the nine and three months ended September 30, 2020 from the comparable periods in 2019 primarily due to \$23 million in amortization expenses recorded on the Ellie Mae intangible assets following our acquisition, partially offset by certain Interactive Data intangible assets that became fully amortized in the fourth quarter of 2019.

We recorded depreciation expenses on our fixed assets of \$258 million and \$238 million for the nine months ended September 30, 2020 and 2019, respectively, and \$85 million and \$79 million for the three months ended September 30, 2020 and 2019, respectively. Depreciation expense increased for the nine and three months ended September 30, 2020 from the comparable periods in 2019 primarily due to depreciation resulting from increased software development and networking equipment and due to our September 2020 acquisition of Ellie Mae.

Consolidated Non-Operating Income (Expense)

Income and expenses incurred through activities outside of our core operations are considered non-operating. The following tables present our non-operating income (expenses) (dollars in millions):

	Nine Mon Septen			Three Mor Septer		
	 2020	2019	Change	2020	2019	Change
Other income (expense):					 ,	
Interest income	\$ 9	\$ 27	(66) %	\$ 1	\$ 8	(88) %
Interest expense	(245)	(214)	15	(89)	(72)	24
Other income (expense), net	75	30	155	44	(2)	n/a
Total other income (expense), net	\$ (161)	\$ (157)	2%	\$ (44)	\$ (66)	(34)%
Net income attributable to non-controlling interest	\$ (17)	\$ (22)	(19)%	\$ (4)	\$ (8)	(39)%

Interest Income

Interest income decreased for the nine and three months ended September 30, 2020 from the comparable periods in 2019 primarily due to a decrease in short-term interest rates on various investments.

Interest Expense

Interest expense increased for the nine and three months ended September 30, 2020 from the comparable periods in 2019 primarily due to the issuance of new senior notes in May 2020 and August 2020 related to the Ellie Mae acquisition, including \$5 million in pre-acquisition interest expense. In addition, interest expense increased for the nine months ended September 30, 2020 from the comparable period in 2019 due to a \$14 million extinguishment payment we incurred related to the June 2020 early redemption of senior notes with an original maturity of December 1, 2020. See "- Debt" below.

Other income, net

We own a 40% interest in the OCC, which is regulated by the SEC and the CFTC. We recognized \$84 million and \$51 million during the nine months ended September 30, 2020 and 2019, respectively, and \$49 million and \$15 million during the three months ended September 30, 2020 and 2019, respectively, of equity earnings as our share of the OCC's estimated profits, which is included in other income. Included within the amounts recognized during the nine and three months ended September 30, 2020, is a \$36 million cumulative adjustment to increase our equity earnings for our share of the OCC's estimated profits due to an increase in the OCC's 2020 transaction revenues. During the nine months ended September 30, 2019, equity earnings in the OCC included a \$19 million earnings adjustment in other income to reflect the disapproved OCC capital plan that had originally been established in 2015. Refer to Note 4 to our consolidated financial statements included in our 2019 Form 10-K for additional details on our OCC investment.

We incurred foreign currency transaction losses of \$2 million and \$1 million for the nine months ended September 30, 2020 and 2019, respectively, and \$3 million and \$1 million for the three months ended September 30, 2020 and 2019, respectively. This was primarily attributable to the fluctuations of the pound sterling and euro relative to the U.S. dollar. Foreign currency transaction gains and losses are recorded in other income, net, when the settlement of foreign currency assets, liabilities and payables occur in non-functional currencies and there is an increase or decrease in the period-end foreign currency exchange rates between periods. See Item 3 "- Quantitative and Qualitative Disclosures About Market Risk - Foreign Currency Exchange Rate Risk" included elsewhere in this Quarterly Report for more information on these items.

In 2016, the SEC approved a plan to establish a market-wide consolidated audit trail, or CAT, to improve regulators' ability to monitor trading activity with a phased implementation through 2019. Funding of the implementation and operation of the CAT was ultimately expected to be provided by both the execution venues, including us, and industry members. To date, however, funding has been provided solely by the execution venues in exchange for promissory notes expected to be repaid if industry member fees are: (i) approved by the SEC and (ii) collected to fund the CAT. Due to delays and failures in implementation and functionality by the original plan processor, as well as recently published proposals by the SEC for an amended timeline and implementation structure and the most recent CAT financial statements, we believe the risk that execution venues are not reimbursed has increased, resulting in a \$2 million CAT promissory note impairment during the nine months ended September 30, 2020 in addition to a \$16 million impairment recorded during the nine and three months ended September 30, 2019. These impairment charges are both related to the work performed by the original plan processor.

Non-controlling Interest

For consolidated subsidiaries in which our ownership is less than 100%, and for which we have control over the assets, liabilities and management of the entity, the outside stockholders' interests are shown as non-controlling interests. As of September 30, 2020, our non-controlling interests included those related to the non-ICE limited partners' interest in our CDS clearing subsidiaries, non-controlling interests in ICE Futures Abu Dhabi and redeemable non-controlling interests of the non-ICE partners in Bakkt. During the nine months ended September 30, 2020, we received a contribution from a group of minority investors for a non-controlling interest in ICE Futures Abu Dhabi.

In December 2018, Bakkt was capitalized with \$183 million in initial funding with ICE as the majority owner, along with a group of other minority investors, and in March 2020, an additional \$300 million in funding occurred with ICE maintaining its majority ownership. We hold a call option over these interests subject to certain terms. Similarly, the non-ICE partners in Bakkt hold a put option to require us to repurchase their interests subject to certain terms. These minority interests are reflected as redeemable non-controlling interests in temporary equity within our consolidated balance sheet and are subject to remeasurement when repurchase is probable.

Consolidated Income Tax Provision

Consolidated income tax expense was \$512 million and \$387 million for the nine months ended September 30, 2020 and 2019, respectively, and \$189 million and \$103 million for the three months ended September 30, 2020 and 2019, respectively. The change in consolidated income tax expense between periods is primarily due to the tax impact of changes in our pre-tax income and the changes in our effective tax rate each period. Our effective tax rate was 24% and 20% for the nine months ended September 30, 2020 and 2019, respectively, and 32% and 16% for the three months ended September 30, 2020 and 2019, respectively. The effective tax rates for the nine and three months ended September 30, 2020 are higher than the effective tax rates for the comparable periods in 2019 primarily due to U.K. tax law changes enacted in July 2020, partially offset by favorable state apportionment changes as a result of our acquisition of Ellie Mae, as well as favorable changes in certain international tax provisions as part of the TCJA during the three months ended September 30, 2019.

In 2015 and 2016, the U.K. enacted corporate income tax rate reductions from 19% to 17% to be effective prospectively on April 1, 2020 and we recorded associated deferred tax benefits in those years. In July 2020, the U.K. enacted a reinstatement of the U.K. corporate income tax rate back to 19%, effective April 1, 2020. As a result, we revalued our U.K. deferred tax assets and liabilities back to the rate of 19%, and recorded an additional \$65 million deferred tax expense during the three months ended September 30, 2020. We also reflected the rate change in our estimated annual effective tax rate during the three months ended September 30, 2020.

On March 27, 2020, the CARES Act was enacted and certain income tax related relief was provided under the CARES Act. There is no material impact of the CARES Act on our income tax provision for the nine and three months ended September 30, 2020.

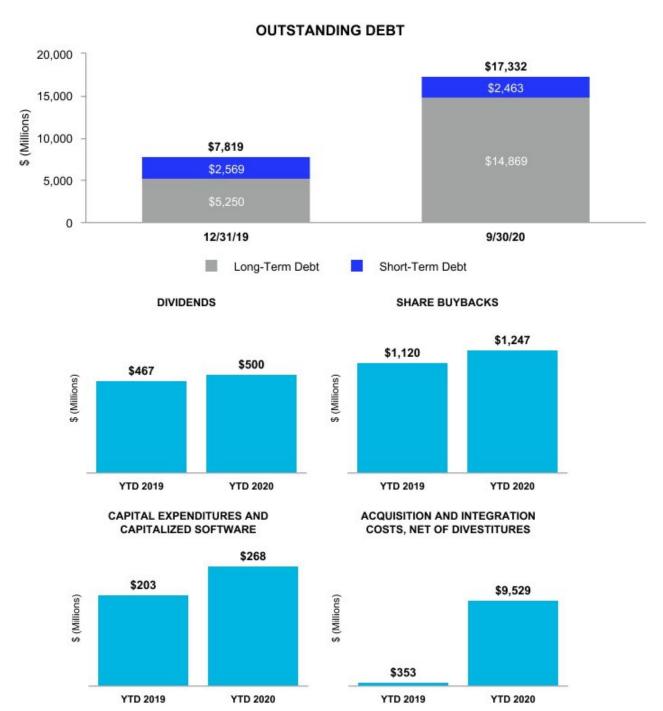
Quarterly Results of Operations

The following quarterly unaudited condensed consolidated statements of income data has been prepared on substantially the same basis as our audited consolidated financial statements and includes all adjustments, consisting only of normal recurring adjustments, necessary for the fair presentation of our consolidated results of operations for the quarters presented. The historical results for any quarter do not necessarily indicate the results expected for any future period. The following table sets forth quarterly consolidated statements of income data (in millions):

	Three Months Ended,								
	Septen	nber 30, 2020		June 30, 2020	March 31, 2020	December 31, 2019	Septe	mber 30, 2019	
Revenues:									
Energy futures and options contracts	\$	229	\$	276	\$ 353	\$ 243	\$	265	
Agricultural and metals futures and options contracts		54		59	84	57		60	
Financial futures and options contracts		76		76	123	80		91	
Cash equities and equity options		593		672	669	442		401	
Fixed income and credit		191		111	122	96		101	
OTC and other transactions		12		13	13	11		11	
Total transaction and clearing, net		1,155		1,207	1,364	929		929	
Pricing and analytics		287		282	276	274		273	
Exchange data and feeds		189		183	180	176		172	
Desktops and connectivity		113		109	108	109		108	
Total data services	<u> </u>	589		574	564	559		553	
Listings		111		111	112	113	· ·	114	
Other revenues		75		74	75	66		67	
Total revenues		1,930		1,966	2,115	1,667		1,663	
Transaction-based expenses		519		571	556	369		327	
Total revenues, less transaction-based expenses	<u> </u>	1,411		1,395	1,559	1,298		1,336	
Compensation and benefits		298		273	278	274		261	
Professional services		37		34	29	28		35	
Acquisition-related transaction and integration costs		76		2	12	1		_	
Technology and communication		131		126	131	123		126	
Rent and occupancy		19		19	21	16		17	
Selling, general and administrative		43		40	49	45		33	
Depreciation and amortization		180		157	157	189		158	
Total operating expenses		784		651	677	676		630	
Operating income		627		744	882	622		706	
Other income (expense), net		(44)		(71)	(46)	(35)		(66)	
Income tax expense		189		145	178	134		103	
Net income	\$	394	\$	528	\$ 658	\$ 453	\$	537	
Net income attributable to non-controlling interest		(4)		(5)	(8)	(5)		(8)	
Net income attributable to Intercontinental Exchange, Inc.	\$	390	\$	523	\$ 650	\$ 448	\$	529	
	·		-		•	-			

Liquidity and Capital Resources

Below are charts that reflect our capital allocation. The acquisition and integration costs in the chart below include cash paid for acquisitions, net of cash received for divestitures, cash paid for equity investments, cash paid for non-controlling interest and redeemable non-controlling interest, and acquisition-related transaction and integration costs, in each period (YTD represents the nine-month periods ended September 30th).



We have financed our operations, growth and cash needs primarily through income from operations and borrowings under our various debt facilities. Our principal capital requirements have been to fund capital expenditures, working capital,

strategic acquisitions and investments, stock repurchases, dividends and the development of our technology platforms. We believe that our cash on hand and cash flows from operations will be sufficient to repay our outstanding debt, but we may also need to incur additional debt or issue additional equity securities in the future. See "- Future Capital Requirements" below.

For a discussion of the COVID-19 pandemic and how the pandemic may impact our business, results of operations or financial condition in the future, including our liquidity and capital resources, see "— Recent Developments", above and "— Risk Factors" in Part 2, Item 1(A) below.

See "- Recent Developments" above for a discussion of the acquisitions that we made during the nine months ended September 30, 2020. These acquisitions were funded from borrowings under our Commercial Paper Program and new term loan, the net proceeds from the issuance of the August 2020 Notes and cash flows from operations.

Our Commercial Paper Program enables us to borrow efficiently at reasonable short-term interest rates and provides us with the flexibility to delever using our strong annual cash flows from operating activities whenever our leverage becomes elevated as a result of investment or acquisition activities. We had net issuances of \$1.1 billion under our Commercial Paper Program during the nine months ended September 30, 2020.

Upon maturity of our commercial paper and to the extent old issuances are not repaid by cash on hand, we are exposed to the rollover risk of not being able to issue new commercial paper. To mitigate this risk, we maintain an undrawn back-stop bank revolving credit facility, or the Credit Facility, for an aggregate amount which meets or exceeds the amount issued under our Commercial Paper Program at any time. If we were not able to issue new commercial paper, we have the option of drawing on the back-stop revolving facility. However, electing to do so would result in higher interest expense. For a discussion of our Commercial Paper Program and other indebtedness, see "- Debt" below.

Consolidated cash and cash equivalents were \$610 million and \$841 million as of September 30, 2020 and December 31, 2019, respectively. We had \$1.4 billion and \$1.3 billion in short-term and long-term restricted cash and cash equivalents as of September 30, 2020 and December 31, 2019, respectively.

As of September 30, 2020, the amount of unrestricted cash held by our non-U.S. subsidiaries was \$270 million. Due to U.S. tax reform, the majority of our foreign earnings since January 1, 2018 have been subject to immediate U.S. income taxation, and the existing non-U.S. unrestricted cash balance can be distributed to the U.S. in the future with no material additional income tax consequences.

Our cash and cash equivalents and financial investments are managed as a global treasury portfolio of non-speculative financial instruments that are readily convertible into cash, such as overnight deposits, term deposits, money market funds, mutual funds for treasury investments, short duration fixed income investments and other money market instruments, thus ensuring high liquidity of financial assets. We may invest a portion of our cash in excess of short-term operating needs in investment-grade marketable debt securities, including government or government-sponsored agencies and corporate debt securities. As of September 30, 2020, we held \$29 million of unrestricted cash that was set aside for legal, regulatory, and surveillance operations at NYSE.

In December 2019, our Board approved an aggregate of \$2.4 billion for future repurchases of our common stock with no fixed expiration date that became effective January 1, 2020. The \$2.4 billion replaced the previous amount approved by the Board.

For the nine months ended September 30, 2020, we repurchased 13.6 million shares of our outstanding common stock at a cost of \$1.2 billion, including 10.4 million shares at a cost of \$948 million under our Rule 10b5-1 trading plan and 3.2 million shares at a cost of \$299 million on the open market during an open trading period. For the nine months ended September 30, 2019, we repurchased 13.8 million shares of our outstanding common stock at a cost of \$1.1 billion, including 12.5 million shares at a cost of \$1.0 billion under our Rule 10b5-1 trading plan and 1.3 million shares at a cost of \$100 million on the open market. The shares repurchased are held in treasury stock.

As of September 30, 2020, up to \$1.2 billion capacity remains from the Board authorization for repurchases of our common stock. We fund repurchases from our operating cash flow or borrowings under our Commercial Paper Program or our debt facilities. Repurchases of our common stock may be made from time to time on the open market, through established trading plans, in privately-negotiated transactions or otherwise, in accordance with all applicable securities laws, rules and regulations.

We may discontinue stock repurchases at any time and may amend or terminate a Rule 10b5-1 trading plan at any time. Prior to early August 2020, we had a Rule 10b5-1 trading plan that governed some of the repurchases of our shares of common stock, but in connection with the Ellie Mae acquisition, we discontinued stock repurchases and terminated our Rule 10b5-1 trading plan. The approval of our Board for the share repurchases does not obligate us to acquire any

particular amount of our common stock. In addition, our Board may increase or decrease the amount of capacity we have for repurchases from time to time.

From time to time, we enter into Rule 10b5-1 trading plans, as authorized by our Board, to govern some or all of the repurchases of our shares of common stock. The timing and extent of future repurchases that are not made pursuant to a Rule 10b5-1 trading plan will be at our discretion and will depend upon many conditions. In making a determination regarding any stock repurchases, management considers multiple factors, including overall stock market conditions, our common stock price performance, the remaining amount authorized for repurchases by our Board, the potential impact of a stock repurchase program on our corporate debt ratings, our expected free cash flow and working capital needs, our current and future planned strategic growth initiatives, and other potential uses of our cash and capital resources.

Cash Flow

The following table presents the major components of net changes in cash, cash equivalents, and restricted cash and cash equivalents (in millions):

	ı	Nine Months Ended September 30,					
		2020		2019			
Net cash provided by (used in):							
Operating activities	\$	1,815	\$	1,882			
Investing activities		(9,702)		(512)			
Financing activities		7,709		(1,251)			
Effect of exchange rate changes		1		(2)			
Net (decrease)/ increase in cash, cash equivalents and restricted cash and cash equivalents	\$	(177)	\$	117			

Operating Activities

Net cash provided by operating activities primarily consists of net income adjusted for certain non-cash items, including depreciation and amortization, deferred taxes, stock based compensation and the effects of changes in working capital.

The \$67 million decrease in net cash provided by operating activities during the nine months ended September 30, 2020 as compared to the prior period in 2019 was driven by slower accounts receivable collections of \$131 million, primarily due to our decision to allow NYSE listed companies to delay payment of their annual invoices until later in the year and higher income taxes paid due to the U.K. government accelerating its required income tax installment payments in 2020 of \$123 million, partially offset by a \$73 million increase in net income and the non-cash impact of deferred taxes of \$119 million, which includes the impact of the U.K. tax rate increase on our deferred tax assets and liabilities. The remaining change is due to fluctuations in our working capital and the timing of various payments such as transaction-related expenses.

Investing Activities

Consolidated net cash used in investing activities for the nine months ended September 30, 2020 relates to \$9.4 billion in cash paid for acquisitions (primarily Ellie Mae), net of cash acquired, \$114 million of capital expenditures and \$154 million of capitalized software development expenditures.

Consolidated net cash used in investing activities for the nine months ended September 30, 2019 primarily relates to \$352 million cash paid for acquisitions (primarily Simplifile), \$87 million of capital expenditures, \$116 million of capitalized software development expenditures and a \$44 million return of capital related to our equity method investment in the OCC and proceeds from investments related to MERS. Refer to Note 4 to our consolidated financial statements included in this Quarterly Report for additional details on our OCC investment.

The capital expenditures primarily relate to hardware and software purchases to continue the development and expansion of our electronic platforms, data services and clearing houses, and leasehold improvements. The software development expenditures primarily relate to the continued development and expansion of our electronic trading platforms, data services and clearing houses.

Financing Activities

Consolidated net cash provided by financing activities for the nine months ended September 30, 2020 primarily relates to \$9.6 billion in net proceeds from the issuances of the May 2020 Notes and the August 2020 Notes and borrowings under the new term loan facility maturing on February 21, 2022 and \$1.1 billion in net issuances under our Commercial Paper

Program, partially offset by \$1.3 billion in repayments of our December 2020 Senior Notes, \$1.2 billion in repurchases of common stock, \$500 million in dividend payments to stockholders and \$72 million in cash payments related to treasury shares received for restricted stock tax payments and stock option exercises.

Consolidated net cash used in financing activities for the nine months ended September 30, 2019 primarily relates to \$1.1 billion in repurchases of common stock, \$367 million in net issuances under our Commercial Paper Program, \$467 million in dividend payments to our stockholders and \$64 million in cash payments related to treasury shares received for restricted stock tax payments and stock options exercises.

Debt

As of September 30, 2020, we had \$17.3 billion in outstanding debt, consisting of \$747 million under our term loan, \$14.1 billion of senior notes, \$2.5 billion under the Commercial Paper Program and \$3 million under a line of credit at our ICE India subsidiary. The commercial paper notes had original maturities ranging from one to 358 days as of September 30, 2020, with a weighted average interest rate of 0.39% per annum, and a weighted average remaining maturity of 53 days. As of December 31, 2019, we had \$7.8 billion in outstanding debt, consisting of \$6.5 billion of senior notes, \$1.3 billion under the Commercial Paper Program and \$10 million under a line of credit at our ICE India subsidiary. The commercial paper notes had original maturities ranging from two to 87 days as of December 31, 2019, with a weighted average interest rate of 1.84% per annum, and a weighted average remaining maturity of 22 days. Our current fixed rate debt of \$12.9 billion has a weighted average maturity of 16 years and a weighted average cost of 3.0% per annum.

We currently have a \$3.7 billion senior unsecured revolving credit facility pursuant to a credit agreement with Wells Fargo Bank, N.A., as primary administrative agent, issuing lender and swing-line lender, Bank of America, N.A., as syndication agent, backup administrative agent and swing-line lender, and the lenders party thereto. As of September 30, 2020, of the \$3.7 billion that is currently available for borrowing under the Credit Facility, \$2.5 billion is required to back-stop the amount outstanding under our Commercial Paper Program and \$171 million is required to support certain broker-dealer and other subsidiary commitments. The amount required to back-stop the amounts outstanding under the Commercial Paper Program will fluctuate as we increase or decrease our commercial paper borrowings. The remaining \$1.0 billion is available for working capital and general corporate purposes including, but not limited to, acting as a back-stop to future increases in the amounts outstanding under the Commercial Paper Program.

On August 21, 2020, we entered into a \$750 million 18-month senior unsecured delayed draw term loan facility with a maturity date of February 21, 2022. We borrowed in full under the facility on September 3, 2020. Interest on borrowings under the term loan facility initially bear interest on the principal amount outstanding at LIBOR plus an applicable margin, currently equal to 1.125%. The proceeds from borrowings under this term loan facility were used to fund a portion of the purchase price for the Ellie Mae acquisition.

On August 20, 2020, we issued \$6.5 billion in aggregate principal amount of new senior notes, comprised of \$1.25 billion in aggregate principal amount of floating rate senior notes due in 2023, \$1.0 billion in aggregate principal amount of 0.70% senior notes due in 2023, \$1.5 billion in aggregate principal amount of 1.85% senior notes due in 2032, \$1.25 billion in aggregate principal amount of 2.65% senior notes due in 2040, and \$1.5 billion in aggregate principal amount of 3.00% senior notes due in 2060. We used the net proceeds from the offering to fund a portion of the purchase price for the Ellie Mae acquisition.

On May 26, 2020, we issued \$2.5 billion in aggregate principal amount of new senior notes, comprised of \$1.25 billion in aggregate principal amount of 2.10% senior notes due in 2030 and \$1.25 billion in aggregate principal amount of 3.00% senior notes due in 2050. We used the net proceeds from the offering for general corporate purposes, including to fund the redemption of our \$1.25 billion aggregate principal amount of 2.75% senior notes due in December 2020 and to pay down a portion of our commercial paper outstanding.

For additional details of our debt instruments, refer to Note 8 to our consolidated unaudited financial statements, included in this Quarterly Report, and Note 10 to our consolidated financial statements included in our 2019 Form 10-K.

Future Capital Requirements

Our future capital requirements will depend on many factors, including the rate of growth across our Trading and Clearing and Data and Listings segments, strategic plans and acquisitions, available sources for financing activities, required and discretionary technology and clearing initiatives, regulatory requirements, the timing and introduction of new products and enhancements to existing products, the geographic mix of our business and potential stock repurchases.

We currently expect to incur capital expenditures (including operational and real estate capital expenditures) and to incur software development costs that are eligible for capitalization ranging in the aggregate between \$410 million and

\$420 million in 2020, which we believe will support the enhancement of our technology, business integration and the continued growth of our businesses.

In December 2019, our Board approved an aggregate of \$2.4 billion for future repurchases of our common stock with no fixed expiration date that became effective on January 1, 2020. We expect this authorization to provide us with capacity for buybacks over six quarters and flexibility to act opportunistically. As of September 30, 2020, we had \$1.2 billion authorized for future repurchases of our common stock. Refer to Note 10 to our consolidated financial statements included in this Quarterly Report for additional details on our stock repurchase plan.

Our Board has adopted a quarterly dividend policy providing that dividends will be approved quarterly by the Board or the Audit Committee taking into account factors such as our evolving business model, prevailing business conditions, our current and future planned strategic growth initiatives and our financial results and capital requirements, without a predetermined net income payout ratio. During the third quarter of 2020, we paid a quarterly dividend of \$0.30 per share of our common stock for an aggregate payout of \$170 million, which includes the payment of dividend equivalents on unvested employee restricted stock units. On October 29, 2020, we announced a \$0.30 per share dividend for the fourth quarter of 2020 with the dividend payable on December 31, 2020 to stockholders of record as of December 16, 2020.

Other than the facilities for the ICE Clearing Houses, our Credit Facility and our Commercial Paper Program are currently the only significant agreements or arrangements that we have for liquidity and capital resources with third parties. See Notes 8 and 12 to our consolidated financial statements where discussed further. In the event of any strategic acquisitions, mergers or investments, or if we are required to raise capital for any reason or desire to return capital to our stockholders, we may incur additional debt, issue additional equity to raise necessary funds, repurchase additional shares of our common stock or pay a dividend. However, we cannot provide assurance that such financing or transactions will be available or successful, or that the terms of such financing or transactions will be favorable to us. See "—Debt" above.

Non-GAAP Measures

We use certain financial measures internally to evaluate our performance and make financial and operational decisions that are presented in a manner that adjusts from their equivalent GAAP measures or that supplement the information provided by our GAAP measures. We use these adjusted results because we believe they more clearly highlight trends in our business that may not otherwise be apparent when relying solely on GAAP financial measures, since these measures eliminate from our results specific financial items that have less bearing on our core operating performance.

We use these measures in communicating certain aspects of our results and performance, including in this Quarterly Report, and believe that these measures, when viewed in conjunction with our GAAP results and the accompanying reconciliation, can provide investors with greater transparency and a greater understanding of factors affecting our financial condition and results of operations than GAAP measures alone. In addition, we believe the presentation of these measures is useful to investors for making period-to-period comparisons of results because the adjustments to GAAP are not reflective of our core business performance.

These financial measures are not presented in accordance with, or as an alternative to, GAAP financial measures and may be different from non-GAAP measures used by other companies. We encourage investors to review the GAAP financial measures included in this Quarterly Report, including our consolidated financial statements, to aid in their analysis and understanding of our performance and in making comparisons.

The table below outlines our adjusted operating expenses, adjusted operating income, adjusted operating margin, adjusted net income attributable to ICE common stockholders and adjusted earnings per share, which are non-GAAP measures that are calculated by making adjustments for items we view as not reflective of our cash operations and core business performance. These measures, including the adjustments and their related income tax effect and other tax adjustments (in millions, except for percentages and per share amounts), are as follows:

		Trading and			_					_		
	Segment Nine Months Ended September 30,			Di	ata and List Nine Mon Septen	ths	Ended		Conso Nine Mon Septen	ths E	nded	
		2020		2019		2020		2019		2020		2019
Total revenues, less transaction-based expenses	\$	2,304	\$	1,916	\$	2,061	\$	1,988	\$	4,365	\$	3,904
Operating expenses		998		732		1,114		1,121		2,112		1,853
Less: Amortization of acquisition-related intangibles		99		70		136		164		235		234
Less: Transaction and integration costs and acquisition-related success fee	3	86		_		_		_		86		_
Less: Accruals related to investigations and inquiries						8				8		_
Adjusted operating expenses	\$	813	\$	662	\$	970	\$	957	\$	1,783	\$	1,619
Operating income	\$	1,306	\$	1,184	\$	947	\$	867	\$	2,253	\$	2,051
Adjusted operating income	\$	1,491	\$	1,254	\$	1,091	\$	1,031	\$	2,582	\$	2,285
Operating margin		57 %		62 %		46 %		44 %		52 %		53 %
Adjusted operating margin		65 %	_	65 %		53 %	_	52 %		59 %		59 %
Net income attributable to ICE common stockholders									\$	1,563	\$	1,485
Add: Amortization of acquisition-related intangibles										235		234
Add: Extinguishment of 2020 Senior Notes										14		_
Add: Pre-acquisition interest expense on debt issued for Ellie Mae acquisition										5		_
Add: Transaction and integration costs and acquisition-related success fee										86		_
Add: Accruals related to investigations and inquiries										8		_
Add: Impairment of CAT promissory notes										2		16
Less: Income tax effect for the above items										(85)		(65)
Add/(Less): Deferred tax adjustments on acquisition-related intangibles										33		(13)
Add: Other tax adjustments									_		_	3
Adjusted net income attributable to ICE common stockholders									\$	1,861	\$	1,660
Basic earnings per share attributable to ICE common stockholders									\$	2.85	\$	2.64
Diluted earnings per share attributable to ICE common stockholders									\$	2.83	\$	2.62
Adjusted basic earnings per share attributable to ICE common stockholders									\$	3.39	\$	2.95
Adjusted diluted earnings per share attributable to ICE common stockholders									\$	3.37	\$	2.93

	 Trading and Segn	aring	Da	ta and List	ings	Segment		Consc	olidat	ed
	Three Mon Septem			Three Mor Septen				Three Mor Septer		
	2020	2019		2020		2019		2020		2019
Total revenues, less transaction-based expenses	\$ 711	\$ 669	\$	700	\$	667	\$	1,411	\$	1,336
Operating expenses	406	255		378		375		784		630
Less: Transaction and integration costs	76	_		_		_		76		_
Less: Amortization of acquisition-related intangibles	48	24		46		55		94		79
Less: Accruals related to investigations and inquiries				3				3		_
Adjusted operating expenses	\$ 282	\$ 231	\$	329	\$	320	\$	611	\$	551
Operating income	\$ 305	\$ 414	\$	322	\$	292	\$	627	\$	706
Adjusted operating income	\$ 429	\$ 438	\$	371	\$	347	\$	800	\$	785
Operating margin	43 %	62 %		46 %		44 %		44 %		53 %
Adjusted operating margin	61 %	65 %		53 %		52 %		57 %		59 %
Net income attributable to ICE common stockholders		 					\$	390	\$	529
Add: Transaction and integration costs								76		
Add: Amortization of acquisition-related intangibles								94		79
Add: Accruals related to investigations and inquiries								3		_
Add: Pre-acquisition interest expense on debt issued for Ellie Mae acquisition								5		_
Add: Impairment of CAT promissory notes								_		16
Less: Income tax effect for the above items								(42)		(25)
Add: Deferred tax adjustments on acquisition-related intangibles								43		
Adjusted net income attributable to ICE common stockholders							\$	569	\$	599
Basic earnings per share attributable to ICE common stockholders							\$	0.71	\$	0.95
Diluted earnings per share attributable to ICE common stockholders							\$	0.71	\$	0.94
Adjusted basic earnings per share attributable to ICE common stockholders							\$	1.04	\$	1.07
Adjusted diluted earnings per share attributable to ICE common stockholders							\$	1.03	\$	1.06
							_			

Amortization of acquisition-related intangibles are included in non-GAAP adjustments as excluding these non-cash expenses provides greater clarity regarding our financial strength and stability of cash operating results.

Acquisition-related transaction and integration costs are included as part of our core business expenses, except for those that are directly related to the announcement, closing, financing, or termination of a transaction. For the three months ended September 30, 2020, we adjust for the \$76 million of acquisition-related costs related to the Ellie Mae acquisition given the size of the \$11.4 billion purchase price of this acquisition. During the nine months ended September 30, 2020, we also included a \$10 million adjustment for Bridge2 Solutions acquisition costs resulting from a Bakkt incentive award market condition estimation adjustment as an acquisition-related success fee. This adjustment was directly related to the March 2020 capital call to fund the acquisition of Bridge2 Solutions and we believe is therefore appropriate since we exclude costs directly related to financing a transaction.

The extinguishment payment on the 2020 Senior Notes is included as a non-GAAP adjustment as it relates to the June 2020 early redemption of senior notes with an original maturity of December 1, 2020 as a result of our new senior notes offering in May 2020. These costs include both a make-whole redemption payment and duplicative interest and are not considered part of our normal operations. We also adjust for pre-acquisition interest expense on the August 2020 debt issued to fund a portion of the purchase price of our Ellie Mae acquisition, as well as accruals for investigations and inquiries as non-GAAP adjustments, as we do not consider either of these to be reflective of our normal operations.

In 2016, the SEC approved a plan to establish a market-wide CAT to improve regulators' ability to monitor trading activity with a phased implementation through 2019. Funding of the implementation and operation of the CAT was ultimately expected to be provided by both the execution venues, including us, and industry members. To date, however, funding has been provided solely by the execution venues in exchange for promissory notes expected to be repaid if industry member fees are: (i) approved by the SEC and (ii) collected to fund the CAT. Due to delays and failures in implementation and functionality by the original plan processor, as well as recently published proposals by the SEC for an amended timeline and implementation structure and the most recent CAT financial statements, we believe the risk that execution venues are not reimbursed has increased, resulting in a \$2 million CAT promissory note impairment during the nine

months ended September 30, 2020 in addition to a \$16 million impairment recorded during the nine and three months ended September 30, 2019. The impairment charges are related to the work performed by the original plan processor and are included as non-GAAP adjustments as they are not considered a part of our core business operations.

The income tax effects relating to all non-GAAP adjustments above are included as non-GAAP adjustments. We also include non-GAAP adjustments for deferred tax adjustments on acquisition-related intangibles. The deferred tax adjustments of \$33 million and \$43 million for the nine and three months ending September 30, 2020, respectively, include \$65 million deferred tax expense related to U.K. tax law changes, partially offset by (\$32 million) and (\$22 million) for the nine and three months ending September 30, 2020, respectively, of deferred tax benefits due to U.S. state apportionment changes. The adjustment of (\$13 million) for the nine months ending September 30, 2019 was due to U.S. state tax law and state apportionment changes. The \$3 million other tax adjustment for the nine months ended September 30, 2019 is for additional audit settlement payments primarily related to pre-acquisition tax matters in conjunction with our acquisition of NYSE in 2013.

For additional information on these items, refer to our consolidated financial statements included in this Quarterly Report and "—Consolidated Operating Expenses", above.

Contractual Obligations and Commercial Commitments

During the nine months ended September 30, 2020, there were no significant changes to our contractual obligations and commercial commitments from those disclosed in the section "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our 2019 Form 10-K.

Off-Balance Sheet Arrangements

As described in Note 12 to our consolidated financial statements, which are included elsewhere in this Quarterly Report, certain clearing house collateral is reported off-balance sheet. As described in Note 3 of our 2019 Form 10-K, Bakkt custodial assets are reported off-balance sheet. We do not have any relationships with unconsolidated entities or financial partnerships, often referred to as structured finance or special purpose entities.

New and Recently Adopted Accounting Pronouncements

Refer to Note 2 to our consolidated financial statements, which are included elsewhere in this Quarterly Report, for information on the new and recently adopted accounting pronouncements that are applicable to us.

Critical Accounting Policies

During the nine months ended September 30, 2020, there were no significant changes to our critical accounting policies and estimates from those disclosed in the section "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our 2019 Form 10-K.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

As a result of our operating and financing activities, we are exposed to market risks such as interest rate risk, foreign currency exchange rate risk and credit risk. We have implemented policies and procedures designed to measure, manage, monitor and report risk exposures, which are regularly reviewed by the appropriate management and supervisory bodies.

Interest Rate Risk

We have exposure to market risk for changes in interest rates relating to our cash and cash equivalents, short-term and long-term restricted cash and cash equivalents, short-term and long-term investments and indebtedness. As of September 30, 2020 and December 31, 2019, our cash and cash equivalents, short-term and long-term restricted cash and cash equivalents and short-term and long-term investments were \$2.0 billion and \$2.2 billion, respectively, of which \$229 million and \$282 million, respectively, were denominated in pounds sterling, euros or Canadian dollars, and the remaining amounts are denominated in U.S. dollars. We do not use our investment portfolio for trading or other speculative purposes. A hypothetical 50% decrease in short-term interest rates would decrease annual pre-tax earnings by \$6 million as of September 30, 2020, assuming no change in the amount or composition of our cash and cash equivalents and short-term and long-term restricted cash and cash equivalents.

As of September 30, 2020, we had \$17.3 billion in outstanding debt, of which \$12.9 billion relates to our fixed rate senior notes. The remaining amount outstanding of \$4.5 billion relates to \$2.5 billion outstanding under our Commercial Paper Program, \$1.2 billion of floating rate senior notes and our \$747 million term loan, each of which bear interest at fluctuating rates, and a \$3 million line of credit at our ICE India subsidiary. A hypothetical 100 basis point increase in short-term interest rates relating to the amounts of floating rate debt outstanding as of September 30, 2020 would decrease annual pre-tax earnings by \$45 million, assuming no change in the volume or composition of our outstanding indebtedness and no hedging activity. See Part I, Item 2 "Management's Discussion and Analysis of Financial Condition and Results of Operations - Debt" included in this Quarterly Report.

The interest rates on our Commercial Paper Program are currently evaluated based upon current maturities and market conditions. The weighted average interest rate on our Commercial Paper Program decreased from 1.84% as of December 31, 2019 to 0.39% as of September 30, 2020. The decrease in the Commercial Paper Program weighted average interest rate was primarily due to the decision by the U.S. Federal Reserve to decrease the federal funds short-term interest rate by 150 basis points in March 2020 due to the impact of COVID-19 on financial markets, which impacted the liquidity and pricing volatility for all commercial paper issuances. The effective interest rate of commercial paper issuances will continue to fluctuate based on the movement in short-term interest rates along with shifts in supply and demand within the commercial paper market.

Foreign Currency Exchange Rate Risk

As an international business, we are subject to foreign currency exchange rate risk. We may experience gains or losses from foreign currency transactions in the future given that a significant part of our assets and liabilities are recorded in pounds sterling, Canadian dollars or euros, and a significant portion of our revenues and expenses are recorded in pounds sterling or euros. Certain assets, liabilities, revenues and expenses of foreign subsidiaries are denominated in the local functional currency of such subsidiaries. Our exposure to foreign denominated earnings for the nine and three months ended September 30, 2020 and September 30, 2019 is presented by primary foreign currency in the following table (dollars in millions, except exchange rates):

	Nine Mo Septemb			Three Months Ended September 30, 2020		Nine Months Ended September 30, 2019			Three Months Ended September 30, 2019				
	Pound Sterling		Euro		Pound Sterling	Euro		Pound Sterling		Euro	 Pound Sterling		Euro
Average exchange rate to the U.S. dollar in the current year period	1.2708		1.1242		1.2916	1.1691		1.2734		1.1237	1.2330		1.1118
Average exchange rate to the U.S. dollar in the same period in the prior year	1.2734		1.1237		1.2330	1.1118		1.3520		1.1947	1.3037		1.1631
Average exchange rate increase (decrease)	— %	, b	— %		5 %	5 %		(6)%		(6)%	(5)%		(4)%
Foreign denominated percentage of:													
Revenues, less transaction-based expenses	7 %	, D	6 %		7 %	6 %		8 %		5 %	8 %		5 %
Operating expenses	9 %	, D	2 %		8 %	2 %		10 %		2 %	10 %		2 %
Operating income	6 %	,)	9 %		5 %	10 %		7 %		8 %	7 %		8 %
Impact of the currency fluctuations (1) on:													
Revenues, less transaction-based expenses	\$ (1)	\$	(1)	\$	4	\$ 4	\$	(20)	\$	(13)	\$ (7)	\$	(3)
Operating expenses	\$ —	\$	_	\$	3	\$ 1	\$	(11)	\$	(3)	\$ (3)	\$	(1)
Operating income	\$ (1)	\$	(1)	\$	1	\$ 3	\$	(9)	\$	(10)	\$ (4)	\$	(2)

⁽¹⁾ Represents the impact of currency fluctuation for the nine and three months ended September 30, 2020 and September 30, 2019 compared to the same periods in the prior year.

We have a significant part of our assets, liabilities, revenues and expenses recorded in pounds sterling or euros. For both the nine and three months ended September 30, 2020, 13% of our consolidated revenues, less transaction-based expenses were denominated in pounds sterling or euros, and for the nine and three months ended September 30, 2020, 11% and 10%, respectively, of our consolidated operating expenses were denominated in pounds sterling or euros. As the pound sterling or euro exchange rate changes, the U.S. equivalent of revenues and expenses denominated in foreign currencies changes accordingly.

Foreign currency transaction risk related to the settlement of foreign currency denominated assets, liabilities and payables occurs through our operations, which are received in or paid in pounds sterling, Canadian dollars, or euros, due to the increase or decrease in the foreign currency exchange rates between periods. We incurred foreign currency transaction

losses of \$2 million and \$1 million for the nine months ended September 30, 2020 and 2019, respectively, and \$3 million and \$1 million for the three months ended September 30, 2020 and 2019, respectively. The foreign currency transaction losses were primarily attributable to the fluctuations of the pound sterling and euro relative to the U.S. dollar. A 10% adverse change in the underlying foreign currency exchange rates as of September 30, 2020, assuming no change in the composition of the foreign currency denominated assets, liabilities and payables and assuming no hedging activity, would result in a foreign currency transaction loss of \$8 million.

We entered into foreign currency hedging transactions during the nine and three months ended September 30, 2020 as economic hedges to help mitigate a portion of our foreign exchange risk exposure and may enter into additional hedging transactions in the future to help mitigate our foreign exchange risk exposure. Although we may enter into additional hedging transactions in the future, these hedging arrangements may not be effective, particularly in the event of imprecise forecasts of the levels of our non-U.S. denominated assets and liabilities.

We have foreign currency translation risk equal to our net investment in our foreign subsidiaries. The financial statements of these subsidiaries are translated into U.S. dollars using a current rate of exchange, with gains or losses included in the cumulative translation adjustment account, a component of equity. Our exposure to the net investment in foreign currencies is presented by primary foreign currencies in the table below (in millions):

	As of September 30, 2020						
		sition in ds sterling		ition in ian dollars	Positio	n in euros	
Assets	£	772	C\$	1,226	€	145	
of which goodwill represents		595		404	,	92	
Liabilities		81		829		52	
Net currency position	£	691	C\$	397	€	93	
Net currency position, in \$USD	\$	893	\$	298	\$	109	
Negative impact on consolidated equity of a 10% decrease in foreign currency exchange rates	\$	89	\$	30	\$	11	

Foreign currency translation adjustments are included as a component of accumulated other comprehensive income/(loss) within our balance sheet. See the table below for the portion of equity attributable to foreign currency translation adjustments as well as the activity for the nine and three months ended September 30, 2020 included within our statement of other comprehensive income. The impact of the foreign currency exchange rate differences in the table below were primarily driven by fluctuations of the pound sterling as compared to the U.S. dollar which were 1.2923, 1.2400 and 1.3260 as of September 30, 2020, June 30, 2020 and December 31, 2019, respectively, and by fluctuations of the euro as compared to the U.S. dollar which were 1.1721, 1.1234 and 1.1212 as of September 30, 2020, June 30, 2020 and December 31, 2019, respectively.

	Compreȟensive Foreign Curr Adju:	ccumulated Other Income/(Loss) from ency Translation stments nillions)
Balance, as of December 31, 2019	\$	(177)
Net current period other comprehensive income (loss)		(30)
Balance, as of September 30, 2020	\$	(207)

	Comprehensive Incom Foreign Currency T Adjustmen (in millions	ranslation ts
Balance, as of June 30, 2020	\$	(255)
Net current period other comprehensive income (loss)		48
Balance, as of September 30, 2020	\$	(207)

Changes in Accumulated Other

The future impact on our business relating to the U.K. leaving the EU and the corresponding regulatory changes are uncertain at this time, including future impacts on currency exchange rates.

Credit Risk

We are exposed to credit risk in our operations in the event of a counterparty default. We limit our exposure to credit risk by rigorously selecting the counterparties with which we make our investments, monitoring them on an ongoing basis and executing agreements to protect our interests.

Clearing House Cash Deposit Risks

The ICE Clearing Houses hold material amounts of clearing member cash and cash equivalent deposits which are held or invested primarily to provide security of capital while minimizing credit, market and liquidity risks. Refer to Note 12 to our consolidated financial statements for more information on the ICE Clearing Houses' cash and cash equivalent deposits, which were \$85.9 billion as of September 30, 2020. While we seek to achieve a reasonable rate of return which may generate interest income for our clearing members, we are primarily concerned with preservation of capital and managing the risks associated with these deposits. As the ICE Clearing Houses may pass on interest revenues (minus costs) to the clearing members, this could include negative or reduced yield due to market conditions. For a summary of the risks associated with these deposits and how these risks are mitigated, see Part II, Item 7(A) "Quantitative and Qualitative Disclosures About Market Risk" in our 2019 Form 10-K.

ITEM 4. CONTROLS AND PROCEDURES

- (a) Evaluation of Disclosure Controls and Procedures. As of the end of the period covered by this report, an evaluation was carried out by our management, with the participation of our Chief Executive Officer and Chief Financial Officer, of the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act). Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that these disclosure controls and procedures were effective as of the end of the period covered by this report.
- (b) Changes in Internal Controls over Financial Reporting. There were no changes in our internal controls over financial reporting that occurred during our most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal controls over financial reporting. As a result, no corrective actions were taken.

PART II. Other Information

ITEM 1. LEGAL PROCEEDINGS

See Note 13 to the consolidated financial statements and related notes, which are incorporated by reference herein.

ITEM 1(A). RISK FACTORS

The following represents a material change in our risk factors from those disclosed in Part 1, Item 1(A), "Risk Factors" in our 2019 Form 10-K.

The COVID-19 pandemic could have an adverse effect on our business, results of operations and financial condition.

The coronavirus (COVID-19) pandemic has created economic and financial disruptions globally and has led governmental authorities to take unprecedented measures to mitigate the spread of the disease, including travel bans, border closings, business closures, quarantines and shelter-in-place orders, and to take actions designed to stabilize markets and promote economic growth.

From an operational perspective, the spread of COVID-19 has resulted in, and could continue to result in, temporary closures of our office facilities and the office facilities of our customers and our third-party vendors. We have taken preventive measures and implemented contingency plans, and currently most of our employees are working remotely, with a limited number of employees working on-site at our facilities. However, we cannot assure you that such measures will adequately protect our business, and an extended period of remote work arrangements could introduce operational risks, including, but not limited to, cybersecurity risk, and could strain our technological resources and business continuity plans. If one or more of the third-party vendors to whom we outsource certain material activities claim that they cannot perform due to a force majeure or experience operational failures as a result of the COVID-19 pandemic, it could have a material adverse effect on our business, results of operations and financial condition. Further, although we maintain

contingency plans for events such as pandemic outbreaks, the further spread of COVID-19 could impact the availability of our executive officers who are necessary to conduct our business.

The extent of the impact of the COVID-19 pandemic on our business, financial condition and results of operations will depend largely on future developments, including the duration and spread of the outbreak, its severity and the actions taken to contain the disease or treat its impact, all of which are highly uncertain and cannot be predicted at this time. A prolonged economic downturn could have an adverse effect on our revenues related to certain activities such as a decline in demand for certain data products and a decline in IPOs. The COVID-19 pandemic could also have an adverse impact on our customers' businesses, risk management needs and ability to trade, and the resulting impact on our business will depend on future developments, which are highly uncertain and cannot be predicted. Due to the speed with which the situation is developing, we are not able at this time to estimate the impact of the COVID-19 outbreak on our business, but the adverse impact on our business, results of operations and financial condition could be material.

While governmental organizations are engaging in efforts to combat the spread and severity of COVID-19, these measures may not be effective. Moreover, actions taken by U.S. or other governmental authorities that are intended to ameliorate the macroeconomic or other effects of COVID-19, or delays in the announcement or implementation of regulatory measures that had been pending prior to the COVID-19 pandemic, have resulted in and may in the future result in regulatory uncertainty and could in turn impact our business. At this time, we cannot predict how legal and regulatory responses to concerns about COVID-19 will impact our business.

The COVID-19 pandemic has resulted in, and may continue to result in, significant disruption of, and volatility in the global financial markets. Our parent company relies on payment of dividends from its subsidiaries, and certain regulators are considering instituting restrictions on certain entities' ability to pay dividends. Although we believe that our existing sources of liquidity are sufficient to meet our cash requirements for the foreseeable future, we cannot assure you that we will not experience liquidity constraints. If, as a result of the COVID-19 pandemic, conditions in the lending, capital and other financial markets are unfavorable, our regulated subsidiaries are unable to pay dividends to the parent company for an extended period of time or our access to capital and other sources of funding is cut off or negatively impacted, we could face liquidity issues and the availability and terms of future borrowings, renewals or refinancings could be adversely affected.

In addition to the other information set forth in this Quarterly Report, including the information in the "- Regulation" section of Item 2 - Management's Discussion and Analysis of Financial Condition and Results of Operations, you should carefully consider the factors discussed under "Risk Factors" and the regulation discussion under "Business - Regulation" in our 2019 Form 10-K. These risks could materially and adversely affect our business, financial condition and results of operations. The risks and uncertainties in our 2019 Form 10-K are not the only ones facing us. Additional risks and uncertainties not presently known to us, or that we currently believe to be immaterial, may also adversely affect our business. In addition, to the extent that COVID-19 adversely affects our business, financial condition or results of operations, it may also heighten other risks described in Part 1, Item 1(A) under the caption "Risk Factors" in our 2019 Form 10-K.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

Stock Repurchases

The table below sets forth the information with respect to purchases made by or on behalf of ICE or any "affiliated purchaser" (as defined in Rule 10b-18(a)(3) under the Exchange Act) of our common stock during the three months ended September 30, 2020.

Period (2020)	Total number of shares purchased (in thousands)	Average price paid per share	Total number of shares purchased as part of publicly announced plans or programs (in thousands) (1)	Approximate dollar value of shares that may yet be purchased under the plans or programs (in millions) (1)
July 1 - July 31	1,503	\$93.75	13,530	\$1,160
August 1 - August 31	73	\$96.66	13,603	\$1,153
September 1 - September 30	_	N/A	13,603	\$1,153
Total	1,576	\$93.88	13,603	\$1,153

We have provided in the table below additional supplemental information with respect to purchases made by or on behalf of ICE or any "affiliated purchaser" (as defined in Rule 10b-18(a)(3) under the Exchange Act) of our common stock during each of the three months ended March 31, 2020, June 30, 2020 and September 30, 2020.

Three months ended	Total number of shares purchased (in thousands)	Average price paid per share	Total number of shares purchased as part of publicly announced plans or programs (in thousands) (1)	Approximate dollar value of shares that may yet be purchased under the plans or programs (in millions) (1)
March 31, 2020	7,643	\$91.50	7,643	\$1,701
June 30, 2020	4,384	\$91.24	12,027	\$1,301
September 30, 2020	1,576	\$93.88	13,603	\$1,153
Total	13,603	\$91.69	13,603	\$1,153

⁽¹⁾ Refer to the Notes to our consolidated financial statements and related notes, which are included in our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2020 and June 30, 2020 and elsewhere in this Quarterly Report, for details on our stock repurchase plans.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

Not applicable.

ITEM 6. EXHIBITS

Exhibit Number		Description of Document
2.1		Stock Purchase Agreement, dated as of August 6, 2020, by and among Intercontinental Exchange, Inc., Ellie Mae Intermediate Holdings I, Inc. and Ellie Mae Parent, LP (incorporated by reference to Exhibit 2.1 to Intercontinental Exchange, Inc.'s Current Report on Form 8-K filed with the SEC on August 7, 2020, File No. 001-36198).*
4.1	_	Third Supplemental Indenture dated as of August 20, 2020 between Intercontinental Exchange, Inc., as issuer, and Wells Fargo Bank, National Association, as trustee (incorporated by reference to Exhibit 4.1 to Intercontinental Exchange, Inc.'s Current Report on Form 8-K filed with the SEC on August 20, 2020, File No. 001-36198).
4.2		Form of Floating Rate Senior Notes due 2023 (included in Exhibit 4.1 and incorporated by reference to Exhibit 4.2 to Intercontinental Exchange, Inc.'s Current Report on Form 8-K filed with the SEC on August 20, 2020, File No. 001-36198).
4.3		Form of 0.700% Senior Notes due 2023 (included in Exhibit 4.1 and incorporated by reference to Exhibit 4.3 to Intercontinental Exchange, Inc.'s Current Report on Form 8-K filed with the SEC on August 20, 2020, File No. 001-36198).
4.4	_	Form of 1.850% Senior Notes due 2032 (included in Exhibit 4.1 and incorporated by reference to Exhibit 4.4 to Intercontinental Exchange, Inc.'s Current Report on Form 8-K filed with the SEC on August 20, 2020, File No. 001-36198).

4.5		Form of 2.650% Senior Notes due 2040 (included in Exhibit 4.1 and incorporated by reference to Exhibit 4.5 to Intercontinental Exchange, Inc.'s Current Report on Form 8-K filed with the SEC on August 20, 2020, File No. 001-36198).
4.6		Form of 3.000% Senior Notes due 2060 (included in Exhibit 4.1 and incorporated by reference to Exhibit 4.6 to Intercontinental Exchange, Inc.'s Current Report on Form 8-K filed with the SEC on August 20, 2020, File No. 001-36198).
4.7		Registration Rights Agreement, dated September 4, 2020, by and between Intercontinental Exchange, Inc. and Ellie Mae Parent, LP (incorporated by reference to Exhibit 4.1 to Intercontinental Exchange, Inc.'s Current Report on Form 8-K filed with the SEC on September 4, 2020, File No. 001-36198).*
10.1		The Seventh Amendment, dated as of August 14, 2020, by and among Intercontinental Exchange, Inc., as borrower, the lenders party thereto and Wells Fargo Bank, National Association, as administrative agent, amending that certain Credit Agreement, dated as of April 3, 2014, by and among Intercontinental Exchange, Inc., as borrower, the lenders party thereto and Wells Fargo Bank, National Association, as administrative agent (as amended by the First Amendment to Credit Agreement, dated as of May 15, 2015, the Second Amendment to Credit Agreement, dated as of November 9, 2015, the Third Amendment to Credit Agreement, dated as of November 13, 2015, the Fourth Amendment to Credit Agreement, dated as of August 18, 2017, and the Sixth Amendment to Credit Agreement, dated as of August 18, 2017, and the Sixth Amendment to Credit Agreement, dated as of August 9, 2018) (incorporated by reference to Exhibit 10.1 to Intercontinental Exchange, Inc.'s Current Report on Form 8-K filed with the SEC on August 18, 2020, File No. 001-36198).
10.2	_	The Eighth Amendment, dated as of August 21, 2020, by and among Intercontinental Exchange, Inc., as borrower, the lenders party thereto and Wells Fargo Bank, National Association, as administrative agent, amending that certain Credit Agreement, dated as of April 3, 2014, by and among Intercontinental Exchange, Inc., as borrower, the lenders party thereto and Wells Fargo Bank, National Association, as administrative agent (as amended by the First Amendment to Credit Agreement, dated as of May 15, 2015, the Second Amendment to Credit Agreement, dated as of November 9, 2015, the Third Amendment to Credit Agreement, dated as of November 13, 2015, the Fourth Amendment to Credit Agreement, dated as of August 18, 2017, the Fifth Amendment to Credit Agreement, dated as of August 18, 2017, the Sixth Amendment to Credit Agreement, dated as of August 19, 2018, and the Seventh Amendment to Credit Agreement, dated as of August 14, 2020) (incorporated by reference to Exhibit 10.1 to Intercontinental Exchange, Inc.'s Current Report on Form 8-K filed with the SEC on August 25, 2020, File No. 001-36198).
10.3		Term Loan Credit Agreement, dated as of August 21, 2020, by and among Intercontinental Exchange, Inc., as borrower, the lenders party thereto and Wells Fargo Bank, National Association, as administrative agent (incorporated by reference to Exhibit 10.2 to Intercontinental Exchange, Inc.'s Current Report on Form 8-K filed with the SEC on August 25, 2020, File No. 001-36198).
31.1		Rule 13a-14(a)/15d-14(a) Certification of Chief Executive Officer.
31.2		Rule 13a-14(a)/15d-14(a) Certification of Chief Financial Officer.
32.1		Section 1350 Certification of Chief Executive Officer.
32.2	_	Section 1350 Certification of Chief Financial Officer.
101	_	The following materials from Intercontinental Exchange, Inc.'s Quarterly Report on Form 10-Q for the quarter ended September 30, 2020, formatted in Inline XBRL (Extensible Business Reporting Language): (i) the Consolidated Balance Sheets, (ii) the Consolidated Statements of Income, (iii) the Consolidated Statements of Comprehensive Income, (iv) the Consolidated Statements of Changes in Equity and Redeemable Non-Controlling Interest (v) Consolidated Statements of Cash Flows and (vi) Notes to Consolidated Financial Statements, tagged as blocks of text.
104		The cover page from Intercontinental Exchange, Inc.'s Quarterly Report on Form 10-Q for the quarter ended September 30, 2020 formatted in Inline XBRL.

^{*} Certain exhibits and similar attachments to this agreement have been omitted in accordance with Item 601(b)(2) of Regulation S-K. A copy of any omitted exhibit or other attachment will be furnished supplementally to the SEC upon request.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) 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.

Intercontinental Exchange, Inc. (Registrant)

Date: October 29, 2020

By: /s/ Scott A. Hill

Scott A. Hill Chief Financial Officer

(Principal Financial Officer)

CERTIFICATIONS

I, Jeffrey C. Sprecher, certify that:

- 1. I have reviewed this Quarterly Report on Form 10-Q of Intercontinental Exchange, Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: October 29, 2020

/s/ Jeffrey C. Sprecher

Jeffrey C. Sprecher Chairman of the Board and Chief Executive Officer

CERTIFICATIONS

I, Scott A. Hill, certify that:

- 1. I have reviewed this Quarterly Report on Form 10-Q of Intercontinental Exchange, Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles:
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: October 29, 2020

/s/ Scott A. Hill

Scott A. Hill

Chief Financial Officer

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Intercontinental Exchange, Inc. (the "Company") on Form 10-Q for the period ended September 30, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Jeffrey C. Sprecher, Chairman and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: October 29, 2020

/s/ Jeffrey C. Sprecher

Jeffrey C. Sprecher Chairman of the Board and Chief Executive Officer

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Intercontinental Exchange, Inc. (the "Company") on Form 10-Q for the period ended September 30, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Scott A. Hill, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: October 29, 2020

/s/ Scott A. Hill

Scott A. Hill

Chief Financial Officer