MILLIGAN GEORGE D

Form 4 June 18, 2009

FORM 4

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if no longer

subject to

Section 16.

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

OMB APPROVAL

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STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Form 4 or
Form 5
obligations
may continue.

See Instruction

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934,
Section 17(a) of the Public Utility Holding Company Act of 1935 or Section
30(h) of the Investment Company Act of 1940

1(b).

(Print or Type Responses)

06/15/2009

Stock

1. Name and Address of Reporting Person * 5. Relationship of Reporting Person(s) to 2. Issuer Name and Ticker or Trading MILLIGAN GEORGE D Issuer Symbol UNITED FIRE & CASUALTY CO (Check all applicable) [UFCS] (Last) (First) (Middle) 3. Date of Earliest Transaction X_ Director 10% Owner Officer (give title Other (specify (Month/Day/Year) below) 118 SECOND AVENUE SE, P.O. 06/15/2009 BOX 73909 (Street) 4. If Amendment, Date Original 6. Individual or Joint/Group Filing(Check Filed(Month/Day/Year) Applicable Line) _X_ Form filed by One Reporting Person Form filed by More than One Reporting **CEDAR RAPIDS, IA 52407-3909** Person (City) (State) (Zip) Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned 5. Amount of 1. Title of 2. Transaction Date 2A. Deemed 3. 4. Securities Acquired (A) 7. Nature of Security (Month/Day/Year) Execution Date, if Transactionor Disposed of (D) Securities Ownership Indirect (Instr. 3) Code (Instr. 3, 4 and 5) Beneficially Form: Beneficial (Month/Day/Year) Direct (D) (Instr. 8) Owned Ownership or Indirect **Following** (Instr. 4) Reported (I) (A) Transaction(s) (Instr. 4) (Instr. 3 and 4) (D) Code V Amount Price Common

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

06/18/2009

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SEC 1474

(9-02)

 $3,869^{(2)}$

17.3872

D

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

 $2^{(1)}$

1. Title of	2.	3. Transaction Date	3A. Deemed	4.	5.	6. Date Exerc	cisable and	7. Title	e and	8. Price of	9. Nu
Derivative	Conversion	(Month/Day/Year)	Execution Date, if	Transacti	onNumber	Expiration D	ate	Amou	nt of	Derivative	Deriv
Security	or Exercise		any	Code	of	(Month/Day/	Year)	Underl	ying	Security	Secui
(Instr. 3)	Price of		(Month/Day/Year)	(Instr. 8)	Derivative	e		Securit	ties	(Instr. 5)	Bene
	Derivative				Securities			(Instr.	3 and 4)		Own
	Security				Acquired						Follo
	Ĭ				(A) or						Repo
					Disposed						Trans
					of (D)						(Instr
					(Instr. 3,						Ì
					4, and 5)						
									Amount		
						Date	Expiration		or		
						Exercisable	Date		Number		
						2.1010154010	2410		of		
				Code V	(A) (D)				Shares		

Reporting Owners

Reporting Owner Name / Address

Director 10% Owner Officer Other

MILLIGAN GEORGE D

118 SECOND AVENUE SE
P.O. BOX 73909

CEDAR RAPIDS, IA 52407-3909

Signatures

/s/ George D. Milligan by Dianne M. Lyons, Attorney-in-Fact

06/18/2009

**Signature of Reporting Person

Date

Explanation of Responses:

- * If the form is filed by more than one reporting person, see Instruction 4(b)(v).
- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations. See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).
- (1) Shares acquired through participation in Dividend Reinvestment Plan.
- (2) Total number of securities after all reported transactions includes: a total of 3,642 shares held by Mr. Milligan in two separate brokerage accounts and 227 shares held of record by Mr. Milligan in a direct registration account.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number. ont-size:10pt;">

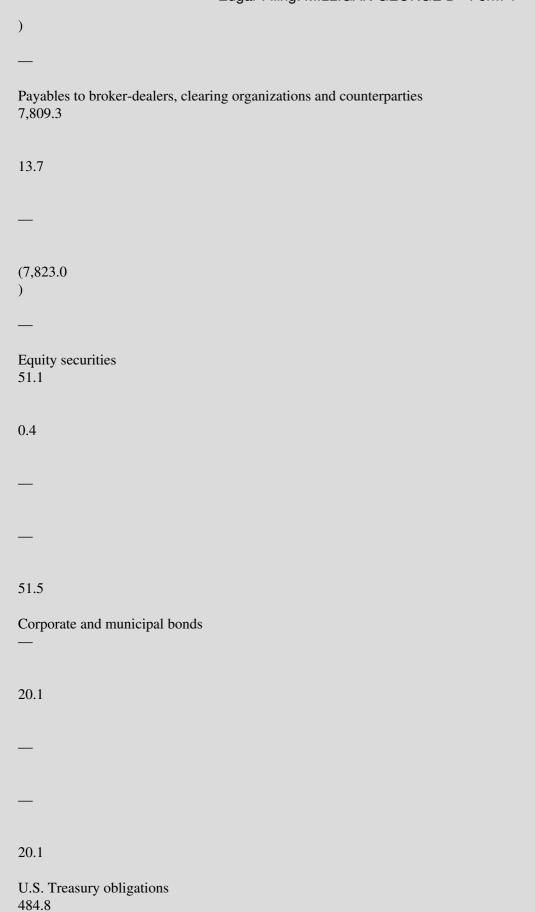
Derivatives

7,809.3

11.6

(7,820.9)

Reporting Owners 2



<u> </u>
_
484.8
U.S government agency obligations —
57.2
_
57.2
Agency mortgage-backed obligations —
0.2
_
_
0.2
Derivatives —
688.0

```
(494.6
193.4
Commodities leases
75.5
(16.2
59.3
Financial instruments sold, not yet purchased
535.9
841.4
(510.8
866.5
Total liabilities at fair value
8,345.2
$
855.1
$
```

\$

(8,333.8) \$ 866.5

(1) Represents cash collateral and the impact of netting across the levels of the fair value hierarchy. Netting among positions classified within the same level are included in that level.

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	September 30, 2017				
(in millions)				Netting ⁽¹⁾	Total
Assets:					
Certificate of deposits	\$3.8	\$—	\$ —	\$—	\$3.8
Unrestricted cash equivalents - certificates of deposits	3.8	_	_	_	3.8
Commodities warehouse receipts	21.0	_	_	_	21.0
U.S. Treasury obligations	33.5	_	_	_	33.5
Securities and other assets segregated under federal and other					
regulations	54.5		_	_	54.5
Foreign government obligations	_	6.4	_	_	6.4
U.S. Treasury obligations	244.7			_	244.7
TBA and forward settling securities	_	8.8	_	_	8.8
Derivatives	2,608.6	289.1	_	(2,952.9)	(55.2)
Deposits and receivables from broker-dealers, clearing	2 052 2	304.3		(2.052.0)	204.7
organizations and counterparties	2,853.3	304.3	_	(2,952.9)	204.7
Equity securities	40.4	4.6	0.1	_	45.1
Corporate and municipal bonds	28.2	0.9	_	_	29.1
U.S. Treasury obligations	60.0	_	_	_	60.0
U.S. government agency obligations	_	368.9	_	_	368.9
Foreign government obligations	_	10.2	_	_	10.2
Agency mortgage-backed obligations	_	920.9	_	_	920.9
Asset-backed obligations	_	47.3	_	_	47.3
Derivatives	1.3	1,413.4	_	(1,252.6)	162.1
Commodities leases	_	174.1		(138.7)	35.4
Commodities warehouse receipts	38.5		—	_	38.5
Exchange firm common stock	8.3		—	_	8.3
Mutual funds and other	6.0	_	_	_	6.0
Financial instruments owned	182.7	2,940.3	0.1	(1,391.3)	1,731.8
Physical commodities inventory	73.2	_	_	_	73.2
Total assets at fair value	\$3,167.5	\$3,244.6	\$ 0.1	\$(4,344.2)	\$2,068.0
Liabilities:					
Accounts payable and other accrued liabilities - contingent	\$ —	\$—	\$ 1.0	\$—	\$1.0
liabilities	*	·	7 -75		
TBA and forward settling securities	_	4.9	_		4.8
Derivatives	2,476.2	292.8	_	(2,769.0)	·
Payable to broker-dealers, clearing organizations and counterpartie - derivatives	^s 2,476.2	297.7	_	(2,769.1)	4.8
Equity securities	44.0	0.9			44.9
Corporate and municipal bonds	0.3	0.9	_	_	0.3
U.S. Treasury obligations	285.9	_	_	_	285.9
U.S government agency obligations	203.9		_	_	27.9
Agency mortgage-backed obligations	_	0.1	_	_	0.1
Derivatives	_	1,427.2	_	$\overline{}$ (1,110.2)	
Commodities leases		1,427.2			41.5
Financial instruments sold, not yet purchased	330.2	1,647.2		(149.0) $(1,259.8)$	
Total liabilities at fair value		\$1,944.9		\$(4,028.9)	
Total nautitues at fall value	\$2,000.4	\$1,944.9	φ 1.U	Φ(4,026.9)	ψ123.4

⁽¹⁾ Represents cash collateral and the impact of netting across the levels of the fair value hierarchy. Netting among positions classified within the same level are included in that level.

Realized and unrealized gains and losses are included in 'trading gains, net', 'interest income', and 'cost of sales of physical commodities' in the consolidated income statements.

Information on Level 3 Financial Assets and Liabilities

The following tables set forth a summary of changes in the fair value of the Company's Level 3 financial assets and liabilities during the fiscal years ended September 30, 2018 and 2017, including a summary of unrealized gains (losses) during the fiscal year ended on the Company's Level 3 financial assets and liabilities held during the periods.

	Level 3 Financial Assets and Financial Liabilities								
	For the Year Ended September 30, 2018								
	BalanRe	salitzed gains	Unrealized	D 1	,		Transfers in	D.1	
(in millions)		negsenser) during		Purch		Settlements		Balances at	
,	perioфe		during period	issuai	nces		Level 3	end of period	
Assets:	r T -		8 F						
Equity securities	\$0.1 \$		-\$ (0.1) \$	_	-\$ —	\$ -	-\$ —	
Equity securities	φυ.ι φ		Ψ (0.1) Ψ		Ψ	Ψ	Ψ	
	BalanRe	salitzed (gains)	Remeasureme	ent			Transfers in	D.I.	
(in millions)		aseofduring	(gains) losses		isitions	Settlements	or (out) of	Balances at	
,	perioфeriod		during period	_			Level 3	end of period	
Liabilities:			0.1						
Contingent liabilities	\$1.0 \$		-\$ —	\$	_	-\$ (1.0)	\$ -	-\$ —	
E		Level 3 Fina	ncial Assets and	d Financi				•	
			Ended Septem						
			ed gains Unrea				Transf	ers in_	
(in millions)			beging with during gains (losses)						
(perioderiod	~ ~	period	issuan	ices	Level	end of period	
Assets:		perioquiiou	0011118	, period			20,01		
Equity securities		\$0.2 \$	— \$ (0.	1)	\$	_\$ _	\$	- \$ 0.1	
Corporate and munic	cipal			,				·	
bonds	I	3.0 —	_		_	(3.0) —	_	
		\$3.2 \$	— \$ (0.	1)	\$	— \$ (3.0)	 \$ 0.1	
		7 - 1 - 1	+ (3.	- ,	,	+ (
		Balan Resalitze	ed (gains)Reme	asuremer	nt		Transf	ers in Balances at	
(in millions)		begin hinseo f	during (gains) losses	Acqui	sitions Settle	ments or (out	e) of Balances at	
		perioderiod		period	•		Level	end of neriod	
Liabilities:				_					
Contingent liabilities	3	\$0.8 \$	— \$ 0.2	2	\$	<u> \$ </u>	\$	 \$ 1.0	
The Company had debentures issued by a single asset owning company of Suriwongse Hotel located in Chiang Mai,									

The Company had debentures issued by a single asset owning company of Suriwongse Hotel located in Chiang Mai, Thailand. As of September 30, 2016, the Company's investment in the hotel was \$3.0 million, and was included within the corporate and municipal bonds classification in the Level 3 financial assets and financial liabilities table. The Company classified its investment in the hotel within Level 3 of the fair value hierarchy because the fair value was determined using significant unobservable inputs, which included projected cash flows. These cash flows were discounted employing present value techniques. In December 2016, the Company sold the debentures and collected an amount approximating their carrying value.

The Company was required to make additional future cash payments based on certain financial performance measures of an acquired business. The Company was required to remeasure the fair value of the contingent consideration on a recurring basis. As of September 30, 2017, the Company had classified its liability for the contingent consideration within Level 3 of the fair value hierarchy because the fair value was determined using significant unobservable inputs, which included projected cash flows. These cash flows were discounted employing present value techniques in arriving at fair value. The fair value of the contingent consideration increased by \$0.1 million during the year ended September 30, 2017, with the corresponding amount classified as 'other' in the consolidated income statement. The contingency period for the contingent consideration ended as of December 31, 2017, and the accrued balance of \$1.0

million was paid during the year ended September 30, 2018.

The value of an exchange-traded derivative contract is equal to the unrealized gain or loss on the contract determined by marking the contract to the current settlement price for a like contract on the valuation date of the contract. A settlement price may not be used if the market makes a limit move with respect to a particular derivative contract or if the securities underlying the contract experience significant price fluctuations after the determination of the settlement price. When a settlement price cannot be used, derivative contracts will be valued at their fair value as determined in good faith pursuant to procedures adopted by management of the Company.

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The Company has classified equity investments in exchange firms' common stock not pledged for clearing purposes as trading securities. The investments are recorded at fair value, with unrealized gains and losses recorded, net of taxes, included in earnings. As of September 30, 2018, the cost and fair value of the equity investments in exchange firms is \$3.7 million and \$10.2 million, respectively. As of September 30, 2017, the cost and fair value of the equity investments in exchange firms was \$3.9 million and \$8.3 million, respectively.

Additional disclosures about the fair value of financial instruments that are not carried on the Consolidated Balance Sheets at fair value

Many, but not all, of the financial instruments that the Company holds are recorded at fair value in the Consolidated Balance Sheets. The following represents financial instruments in which the ending balance at September 30, 2018 and 2017 was not carried at fair value in accordance with U.S. GAAP on our Consolidated Balance Sheets: Short-term financial instruments: The carrying value of short-term financial instruments, including cash and cash equivalents, cash segregated under federal and other regulations, securities purchased under agreements to re-sell and securities sold under agreements to re-purchase, and securities borrowed and loaned are recorded at amounts that approximate the fair value of these instruments due to their short-term nature and level of collateralization. These financial instruments generally expose us to limited credit risk and have no stated maturities or have short-term maturities and carry interest rates that approximate market rates. Under the fair value hierarchy, cash and cash equivalents and cash segregated under federal and other regulations are classified as Level 1. Securities purchased under agreements to re-sell and securities sold under agreements to re-purchase, and securities borrowed and loaned are classified as Level 2 under the fair value hierarchy as they are generally overnight and are collateralized by common stock, U.S. Treasury obligations, U.S. government agency obligations, agency mortgage-backed obligations, and asset-backed obligations.

Receivables and other assets: Receivables from broker-dealers, clearing organizations, and counterparties, receivables from clients, net, notes receivables, net and certain other assets are recorded at amounts that approximate fair value due to their short-term nature and are classified as Level 2 under the fair value hierarchy.

Payables: Payables to clients and payables to brokers-dealers, clearing organizations, and counterparties are recorded at amounts that approximate fair value due to their short-term nature and are classified as Level 2 under the fair value hierarchy.

Lender under loans: Payables to lenders under loans carry variable rates of interest and thus approximate fair value and are classified as Level 2 under the fair value hierarchy.

Note 4 – Financial Instruments with Off-Balance Sheet Risk and Concentrations of Credit Risk

The Company is party to certain financial instruments with off-balance sheet risk in the normal course of its business. The Company has sold financial instruments that it does not currently own and will therefore be obliged to purchase such financial instruments at a future date. The Company has recorded these obligations in the consolidated financial statements as of September 30, 2018 at the fair values of the related financial instruments. The Company will incur losses if the fair value of the underlying financial instruments increases subsequent to September 30, 2018. The total of \$866.5 million as of September 30, 2018 includes \$193.4 million for derivative contracts, which represent a liability to the Company based on their fair values as of September 30, 2018.

Derivatives

The Company utilizes derivative products in its trading capacity as a dealer in order to satisfy client needs and mitigate risk. The Company manages risks from both derivatives and non-derivative cash instruments on a consolidated basis. The risks of derivatives should not be viewed in isolation, but in aggregate with the Company's other trading activities. The Company's derivative positions are included in the consolidating balance sheets in 'deposits with and receivables from broker-dealers, clearing organizations, and counterparties', 'financial instruments owned and sold, not yet purchased, at fair value' and 'payables to broker-dealers, clearing organizations and counterparties'.

The Company employs an interest rate risk management strategy using derivative financial instruments in the form of interest rate swaps as well as outright purchases of medium-term U.S. Treasury notes to manage a portion of the aggregate interest rate position. The Company's objective when using interest rate swaps under the strategy, is to invest

certain amounts of customer deposits in high quality, short-term investments and swap the resulting variable interest earnings into medium-term interest earnings. When used, the risk mitigation of these interest rate swaps are not within the documented hedging designation requirements of the Derivatives and Hedging Topic of the ASC, and as a result are recorded at fair value, with changes in the fair value of the interest rate swaps recorded within 'trading gains, net' in the consolidated income statements. Currently, the Company holds no U.S. Treasury notes or interest rate swap derivative contracts as part of this strategy.

Listed below are the fair values of the Company's derivative assets and liabilities as of September 30, 2018 and 2017. Assets represent net unrealized gains and liabilities represent net unrealized losses.

	September	ptember 30, 2018		r 30, 2017
(in millions)	Assets (1)	Liabilities (1)	Assets (1)	Liabilities (1)
Derivative contracts not accounted for as hedges:				
Exchange-traded commodity derivatives	\$2,455.7	\$ 2,499.3	\$2,094.2	\$ 1,975.0
OTC commodity derivatives	207.0	369.9	1,084.0	1,110.3
Exchange-traded foreign exchange derivatives	49.8	37.2	66.0	52.0
OTC foreign exchange derivatives	302.5	303.9	618.5	609.8
Exchange-traded interest rate derivatives	449.3	478.7	228.4	203.6
OTC interest rate derivatives	24.8	25.9	_	_
Exchange-traded equity index derivatives	4,541.8	4,794.0	221.3	245.4
TBA and forward settling securities	5.0	2.1	8.8	4.9
Gross fair value of derivative contracts	8,035.9	8,511.0	4,321.2	4,201.0
Impact of netting and collateral	(8,118.5)	(8,317.6)	(4,205.5)	(3,879.2)
Total fair value included in 'Deposits with and receivables from broker-dealers, clearing organizations and counterparties'	\$(268.7)		\$(46.4)	
Total fair value included in 'Financial instruments owned, at fair value'	\$186.1		\$162.1	
Total fair value included in 'Payables to broker-dealers, clearing organizations and counterparties		\$ <i>—</i>		\$ 4.8
Fair value included in 'Financial instruments sold, not yet purchased at fair value'	,	\$ 193.4		\$ 317.0

⁽¹⁾ As of September 30, 2018 and 2017, the Company's derivative contract volume for open positions was approximately 10.6 million and 6.1 million contracts, respectively.

The Company's derivative contracts are principally held in its Commodities and Risk Management Services ("Commercial Hedging") segment. The Company assists its Commercial Hedging segment clients in protecting the value of their future production by entering into option or forward agreements with them on an OTC basis. The Company also provides its Commercial Hedging segment clients with option products, including combinations of buying and selling puts and calls. The Company mitigates its risk by generally offsetting the client's transaction simultaneously with one of the Company's trading counterparties or will offset that transaction with a similar but not identical position on the exchange. The risk mitigation of these offsetting trades is not within the documented hedging designation requirements of the Derivatives and Hedging Topic of the ASC. These derivative contracts are traded along with cash transactions because of the integrated nature of the markets for these products. The Company manages the risks associated with derivatives on an aggregate basis along with the risks associated with its proprietary trading and market-making activities in cash instruments as part of its firm-wide risk management policies. In particular, the risks related to derivative positions may be partially offset by inventory, unrealized gains in inventory or cash collateral paid or received.

The Company transacts in derivative instruments, which consist of futures, mortgage-backed TBA securities and forward settling transactions, that are used to manage risk exposures in the Company's fixed income portfolio. The fair value of these transactions is recorded in deposits with and receivables from broker-dealers, clearing organizations, and counterparties. Realized and unrealized gains and losses on securities and derivative transactions are reflected in 'trading gains, net'.

The Company enters into TBA securities transactions for the sole purpose of managing risk associated with the purchase of mortgage pass-through securities. TBA securities are included within payables to broker-dealers, clearing organizations and counterparties. Forward settling securities represent non-regular way securities and are included in financial instruments owned and sold. As of September 30, 2018, TBA and forward settling securities recorded within deposits with and receivables from broker-dealers, clearing organizations, and counterparties are summarized as follows (in millions):

	Gain / Notional
	(Loss) Amounts
Unrealized gain on TBA securities purchased	\$1.2 \$721.5
Unrealized loss on TBA securities purchased	\$(0.6)\$293.2
Unrealized gain on TBA securities sold	\$3.2 \$(1,099.5)
Unrealized loss on TBA securities sold	\$(1.5)\$(812.7)
Unrealized loss on forward settling securities purchased	\$0.5 \$614.3
Unrealized gain on forward settling securities sold	\$0.1 \$(427.2)

The notional amounts of these instruments reflect the extent of the Company's involvement in TBA and forward settling securities and do not

represent counterparty exposure.

The following table sets forth the Company's net gains (losses) related to derivative financial instruments for the fiscal years ended September 30, 2018, 2017, and 2016, in accordance with the Derivatives and Hedging Topic of the ASC. The net gains (losses) set forth below are included in 'trading gains, net' and 'cost of sales of physical commodities' in the consolidated income statements.

	Year Er	nded Sep	otember
	30,		
(in millions)	2018	2017	2016
Commodities	\$94.0	\$47.3	\$41.8
Foreign exchange	9.2	8.7	9.7
Interest rate and equity	1.0	(0.1)	0.8
TBA and forward settling securities	14.5	(2.5)	(14.4)
Net gains from derivative contracts	\$118.7	\$53.4	\$37.9
Credit Risk			

In the normal course of business, the Company purchases and sells financial instruments, commodities and foreign currencies as either principal or agent on behalf of its clients. If either the client or counterparty fails to perform, the Company may be required to discharge the obligations of the nonperforming party. In such circumstances, the Company may sustain a loss if the fair value of the financial instrument or foreign currency is different from the contract value of the transaction.

The majority of the Company's transactions and, consequently, the concentration of its credit exposure are with commodity exchanges, clients, broker-dealers and other financial institutions. These activities primarily involve collateralized and uncollateralized arrangements and may result in credit exposure in the event that a counterparty fails to meet its contractual obligations. The Company's exposure to credit risk can be directly impacted by volatile financial markets, which may impair the ability of counterparties to satisfy their contractual obligations. The Company seeks to control its credit risk through a

variety of reporting and control procedures, including establishing credit limits based upon a review of the counterparties' financial condition and credit ratings. The Company monitors collateral levels on a daily basis for compliance with regulatory and internal guidelines and requests changes in collateral levels as appropriate. The Company is a party to financial instruments in the normal course of its business through client and proprietary trading accounts in exchange-traded and OTC derivative instruments. These instruments are primarily the execution of orders for commodity futures, options on futures and forward foreign currency contracts on behalf of its clients, substantially all of which are transacted on a margin basis. Such transactions may expose the Company to significant credit risk in the event margin requirements are not sufficient to fully cover losses which clients may incur. The Company controls the risks associated with these transactions by requiring clients to maintain margin deposits in compliance with individual exchange regulations and internal guidelines. The Company monitors required margin levels daily and, therefore, may require clients to deposit additional collateral or reduce positions when necessary. The Company also establishes credit limits for clients, which are monitored daily. The Company evaluates each client's creditworthiness on a case by case basis. Clearing, financing, and settlement activities may require the Company to maintain funds with or pledge securities as collateral with other financial institutions. Generally, these exposures to both clients and counterparties are subject to master netting, or client agreements, which reduce the exposure to the Company by permitting receivables and payables with such clients to be offset in the event of a client default. Management believes that the margin deposits held as of September 30, 2018 and September 30, 2017 were adequate to minimize the risk of material loss that could be created by positions held at that time. Additionally, the Company monitors collateral fair value on a daily basis and adjusts collateral levels in the event of excess market exposure. Derivative financial instruments involve varying degrees of off-balance sheet market risk whereby changes in the fair values of underlying financial instruments may result in changes in the fair value of the financial instruments in excess of the amounts reflected in the consolidated balance sheets. Exposure to market risk is influenced by a number of factors, including the relationships between the financial instruments and the Company's positions, as well as the volatility and liquidity in the markets in which the financial instruments are traded. The principal risk components of financial instruments include, among other things, interest rate volatility, the duration of the underlying instruments and changes in commodity pricing and foreign exchange rates. The Company attempts to manage its exposure to market risk through various techniques. Aggregate market limits have been established and market risk measures are routinely monitored against these limits.

Note 5 – Allowance for Doubtful Accounts

Deposits with and receivables from broker-dealers, clearing organizations, and counterparties, net, receivables from clients, net, and notes receivable, net include an allowance for doubtful accounts, which reflects the Company's best estimate of probable losses inherent in the accounts. The Company provides for an allowance for doubtful accounts based on a specific-identification basis. The Company continually reviews its allowance for doubtful accounts. The allowance for doubtful accounts related to deposits with and receivables from broker-dealers, clearing organizations, and counterparties was \$48.0 million and \$47.0 million as of September 30, 2018 and 2017, respectively. The allowance for doubtful accounts related to receivables from clients was \$10.2 million and \$7.6 million as of September 30, 2018 and 2017, respectively. The Company had no allowance for doubtful accounts related to notes receivable as of September 30, 2018 and 2017.

During the year ended September 30, 2018, the Company recorded bad debt expense related to clients, net of recoveries, of \$3.1 million, including provision net increases of \$2.9 million, direct write-offs of \$0.3 million, and recoveries of \$0.1 million. The increase in bad debts during fiscal 2018 primarily related to \$2.8 million of agricultural OTC client account deficits in the Commercial Hedging segment and \$0.4 million of exchange-traded client account deficits in the Clearing & Execution Services segment, partially offset by a provision decrease in the Physical Commodities segment.

During the year ended September 30, 2017, the Company recorded bad debt expense related to clients, net of recoveries, of \$4.3 million, including provision increases of \$4.2 million and direct write-offs of \$0.1 million. The increase in bad debts during fiscal 2017 primarily related to \$3.8 million of client deficits in the Commercial Hedging segment, primarily related to account deficits from South Korean and Dubai commercial LME clients, \$0.2 million of

uncollectible client receivables in the Physical Commodities segment, and \$0.3 million of uncollectible client receivables in the Clearing & Execution Services segment, primarily related to our derivatives voice brokerage business.

During first quarter of fiscal 2018 and the fourth quarter of fiscal 2017, the Company recorded charges to earnings of \$1.0 million and \$47.0 million, respectively, to record an allowance for doubtful accounts related to a bad debt incurred in the physical coal business conducted solely in INTL Asia Pte. Ltd., with a coal supplier (counterparty), as further discussed in Note 17.

During the year ended September 30, 2016, the Company recorded bad debt expense related to clients, net of recoveries, of \$4.4 million, including provision increases of \$4.2 million and direct write-offs of \$0.4 million, offset by recoveries of \$0.2 million. The increase in bad debts during fiscal 2016 primarily related to \$3.6 million of client deficits in the Commercial

Hedging segment, \$0.4 million of uncollectible client receivables in the Physical Commodities segment, and \$0.4 million of uncollectible service fees and notes in the Securities segment.

Activity in the allowance for doubtful accounts for the years ended September 30, 2018, 2017, and 2016 was as follows:

(in millions)	2018	2017	2016
Balance, beginning of year	\$54.6	\$9.7	\$11.2
Provision for bad debts	3.9	51.0	4.2
Charge-offs	(0.3)	(6.1)	(5.7)
Balance, end of year	\$58.2	\$54.6	\$9.7

Note 6 – Physical Commodities Inventory

The Company's inventories consist of finished physical commodities. Inventories by component of the Company's Physical Commodities segment are shown below.

(in millions)	September 30,	September 30,
(in millions)	2018	2017
Physical Ag & Energy ⁽¹⁾	\$ 114.7	\$ 65.1
Precious metals - held by broker-dealer subsidiary ⁽²⁾	42.1	13.3
Precious metals - held by non-broker-dealer subsidiaries ⁽³⁾	65.7	46.4
Physical commodities inventory	\$ 222.5	\$ 124.8

- (1) Physical Ag & Energy maintains agricultural commodity inventories, including corn, soybeans, wheat, canola, coffee, cocoa, cotton, and others. The agricultural commodity inventories are carried at net realizable value, which approximates fair value less disposal costs, with changes in net realizable value included as a component of 'cost of sales of physical commodities' on the consolidated income statement. The agricultural inventories have reliable, readily determinable and realizable market prices, have relatively insignificant costs of disposal and are available for immediate delivery. Physical Ag & Energy also maintains energy inventory, primarily propane, gasoline, and kerosene, which are valued at the lower of cost or net realizable value.
- (2) Precious metals held by the Company's subsidiary, INTL FCStone Ltd, a United Kingdom based broker-dealer subsidiary, is measured at net realizable value, with changes in net realizable value included as a component of 'trading gains, net' on the consolidated income statement, in accordance with U.S. GAAP accounting requirements for broker-dealers.
- (3) Precious metals inventory held by subsidiaries that are not broker-dealers are valued at the lower of cost or net realizable value.

The Company has recorded lower of cost or net realizable value adjustments for certain precious metals inventory of \$0.4 million and \$0.7 million as of September 30, 2018 and 2017, respectively. The adjustments are included in 'cost of sales of physical commodities' in the consolidated income statements.

Note 7 – Property and Equipment, net

Property and equipment are stated at cost, and reported net of accumulated depreciation on the consolidated balance sheets. Depreciation on property and equipment is calculated using the straight-line method over the estimated useful lives of the assets. The estimated useful lives of property and equipment range from 3 to 10 years. During the fiscal years ended September 30, 2018, 2017, and 2016, depreciation expense was \$9.4 million, \$7.0 million and \$6.6 million, respectively.

A summary of property and equipment, at cost less accumulated depreciation as of September 30, 2018 and 2017 is as follows:

(in millions)	September 30,	September 30,
(in millions)	2018	2017
Property and equipment:		
Furniture and fixtures	\$ 8.7	\$ 7.2
Software	30.5	25.3
Equipment	24.7	22.6
Leasehold improvements	17.0	15.4
Total property and equipment	80.9	70.5
Less accumulated depreciation	(38.5)	(31.8)
Property and equipment, net	\$ 42.4	\$ 38.7

Note 8 – Goodwill

Goodwill allocated to the Company's operating segments as of September 30, 2018 and 2017 is as follows:

(in millions)	September 30,	September 30		
(III IIIIIIIIIIIII)	2018	2017		
Commercial Hedging	\$ 30.3	\$ 30.7		
Global Payments	8.9	6.3		
Physical Commodities	2.4	2.4		
Securities	6.8	7.7		
Goodwill	\$ 48.4	\$ 47.1		

The Company recorded \$1.3 million and zero in foreign exchange translation losses on goodwill within the Commercial Hedging and Securities operating segments for the years ended September 30, 2018 and 2017, respectively. The Company also recorded additional goodwill of \$2.6 million within the Global Payments operating segment related to the acquisition of PayCommerce Financial Solutions, LLC as discussed further in Note 19. Note 9 – Intangible Assets

During the year ended September 30, 2018, the Company recorded additional client base intangible assets of \$1.4 million as part of the PayCommerce Financial Solutions, LLC acquisition. See Note 19- Acquisitions for additional discussion.

The gross and net carrying values of intangible assets as of the balance sheet dates, by major intangible asset class are as follows (in millions):

	September 30, 2018			September 30, 2017			
	Gross	Accumulate Amount Amortizatio	d n	Net Amount	Gross	Accumulated Amount Amortization	Net Amount
Intangible assets subject to amortization:							
Trade name	\$ —	\$ —		\$ —	\$ —	\$ —	\$ —
Software programs/platforms	2.7	(2.6)	0.1	2.7	(2.5)	0.2
Client base	21.4	(10.1)	11.3	20.0	(7.9)	12.1
Total intangible assets	\$24.1	\$ (12.7)	\$ 11.4	\$22.7	\$ (10.4)	\$ 12.3

Amortization expense related to intangible assets was \$2.3 million, \$2.8 million, and \$1.6 million for the fiscal years ended September 30, 2018, 2017, and 2016, respectively. The estimated future amortization expense as of September 30, 2018 is as follows (in millions):

Year ending September 30,

2019				\$2.5
2020			,	2.2
2021			,	2.2
2022				1.0
2023 and	there	eafter	,	3.5

\$11.4

Note 10 – Credit Facilities

Variable-Rate Credit Facilities

The Company has four committed credit facilities under which the Company and its subsidiaries may borrow up to \$594.5 million, subject to the terms and conditions for these facilities. The amounts outstanding under these credit facilities are short term borrowings and carry variable rates of interest, thus approximating fair value. The Company's credit facilities are as follows:

A three-year first-lien senior secured committed syndicated loan facility under which \$262.0 million is available to the Company for general working capital requirements and capital expenditures. The credit facility is secured by a first priority lien on substantially all of the assets of the Company and those of our subsidiaries that guarantee the credit facility. Unused portions of the loan facility require a commitment fee of 0.625% on the unused commitment. Borrowings under the facility bear interest at the Eurodollar Rate, as defined, plus 3.00% or the Base Rate, as defined, plus 2.00%, and averaged 5.17% as of September 30, 2018. The agreement contains financial covenants related to consolidated tangible net worth, consolidated funded debt to net worth ratio, consolidated fixed charge coverage ratio and consolidated net unencumbered liquid assets, as defined. The agreement also contains a non-financial covenant related to the allowable annual consolidated capital expenditures permitted under the agreement. The Company was in compliance with all covenants under the loan facility as of September 30, 2018.

An unsecured syndicated committed line of credit under which \$75.0 million is available to the Company's wholly owned subsidiary, INTL FCStone Financial to provide short term funding of margin to commodity exchanges as necessary. This line of credit is subject to annual review, and the continued availability of this line of credit is subject to INTL FCStone Financial's financial condition and operating results continuing to be satisfactory as set forth in the agreement. Unused portions of the margin line require a commitment fee of 0.50% on the unused commitment.

Borrowings under the margin line are on a demand basis and bear interest at the Base Rate, as defined, plus 2.00%, which was 7.25% as of September 30, 2018. The agreement contains financial covenants related to INTL FCStone Financial's tangible net worth, excess net capital and maximum net loss over a trailing twelve month period, as defined. INTL FCStone Financial was in compliance with these covenants as of September 30, 2018. The facility is guaranteed by the Company.

A syndicated committed borrowing facility under which \$232.5 million is available to the Company's wholly owned subsidiary, FCStone Merchant Services, LLC ("FCStone Merchants") for financing traditional commodity financing arrangements and commodity repurchase agreements. The facility is secured by the assets of FCStone Merchants, and guaranteed by the Company. Unused portions of the borrowing facility require a commitment fee of 0.38% on the unused commitment. The borrowings outstanding under the facility bear interest at a rate per annum equal to the Eurodollar Rate plus Applicable Margin, as defined, or the Base Rate plus Applicable Margin, as defined, which averaged 4.77% as of September 30, 2018. The agreement contains financial covenants related to tangible net worth, as defined. FCStone Merchants was in compliance with this covenant as of September 30, 2018.

An unsecured syndicated committed borrowing facility under which \$25.0 million is available to the Company's wholly owned subsidiary, INTL FCStone Ltd for short term funding of margin to commodity exchanges. The borrowings outstanding under the facility bear interest at a rate per annum equal to 2.50% plus the Federal Funds Rate, as defined. The agreement contains financial covenants related to consolidated tangible net worth, as defined. INTL FCStone Ltd was in compliance with this covenant as of September 30, 2018. The facility is guaranteed by the Company.

The Company also has a secured, uncommitted loan facility, under which INTL FCStone Ltd may borrow up to £20.0 million, collateralized by commodities warehouse receipts, to facilitate financing of commodities under repurchase agreement services to its clients, subject to certain terms and conditions of the credit agreement.

The Company also has a secured, uncommitted loan facility, under which INTL FCStone Financial may borrow up to \$75.0 million, collateralized by commodities warehouse receipts, to facilitate U.S. commodity exchange deliveries of its clients, subject to certain terms and conditions of the credit agreement. There were \$0 and \$23.0 million in borrowings outstanding under this credit facility at September 30, 2018 and 2017, respectively. Borrowings under this facility bear interest at the Fed Funds Rate, as defined, plus 2.5%.

The Company also has a secured uncommitted loan facility under which INTL FCStone Financial may borrow for short term funding of firm and client securities margin requirements, subject to certain terms and conditions of the agreement. The uncommitted amount available to be borrowed is not specified, and all requests for borrowing are subject to the sole discretion of the lender. The facility bears interest at a rate per annum equal to such rate in respect of such day as determined by the bank in its sole discretion. In the event that the Company fails to pay the principal and interest on the scheduled due date, the facilities bear penalty interest at a rate equal to the Federal Funds rate plus 2%. The amounts borrowed under the facilities are

payable on demand. At September 30, 2018 and 2017, the Company had \$14.0 million and \$0, respectively, of borrowings outstanding under this credit facility. The interest rate associated with the borrowings outstanding as of September 30, 2018, was 2.88%.

The Company also has secured uncommitted loan facilities under which INTL FCStone Financial may borrow up to \$150.0 million for short term funding of firm and client securities margin requirements, subject to certain terms and conditions of the agreements. The loans are payable on demand and bear interest at a rate mutually agreed to with the lender. The borrowings are secured by first liens on firm owned marketable securities or client owned securities which have been pledged to the Company. There were \$0 and \$11.0 million in borrowings outstanding under these credit facilities at September 30, 2018 and 2017, respectively.

In August 2018, the Company executed a secured uncommitted loan facility under which FCStone Merchants could borrow up to \$15.0 million to facilitate the financing of inventory of commodities and other products or goods approved by the lender in its sole discretion, subject to certain terms and conditions of the loan facility agreement. The loan facility is collateralized by a first priority security interest in goods and inventory of FCStone Merchants that is (a) either located outside of the U.S. and Canada or in transit to a destination outside the U.S. or Canada and (b) acquired with any extension of credit (whether in the form of a loan or by the issuance of a letter of credit) under the loan facility. Loans under the facility accrue interest at a per annum rate equal to the applicable Cost of Funds Rate, as defined, plus 3.00% or at the Base Rate, as defined, plus 2.00%. Letters of credit under the facility accrue a fee at the per annum rate of 2.75%. There were \$3.8 million in borrowings outstanding under this credit facility at September 30, 2018. The interest rate associated with these borrowings was approximately 5.4%. In December 2018, the Company executed an amendment to increase the availability under this uncommitted loan facility to \$20.0 million. Note Payable to Bank

In April 2015, the Company obtained a \$4.0 million loan from a commercial bank, secured by equipment purchased with the proceeds. The note is payable in monthly installments, ending in March 2020. The note bears interest at a rate per annum equal to LIBOR plus 2.00%.

Senior Unsecured Notes

In July 2013, the Company completed an offering of \$45.5 million aggregate principal amount of the Company's 8.5% Senior Notes due 2020 (the "Notes"). The net proceeds of the sale of the Notes were being used for general corporate purposes. The Notes bore interest at a rate of 8.5% per year (payable quarterly on January 30, April 30, July 30 and October 30 of each year). The Notes were scheduled to mature on July 30, 2020. The Company could redeem the Notes, in whole or in part, at any time on and after July 30, 2016, at a redemption price equal to 100% of the principal amount redeemed plus accrued and unpaid interest to, but not including, the redemption date. The Company incurred debt issuance costs of \$1.7 million in connection with the issuance of the Notes, which were being amortized over the term of the Notes.

On September 15, 2016, the Company provided notice, through the trustee of the Notes, to the record holders of the Notes that the Company would redeem the outstanding \$45.5 million aggregate principal amount of the Notes in full. On October 15, 2016, the Company redeemed the Notes at a prices equal to 100% of the principal amount redeemed plus accrued and unpaid interest to, but not including, October 15, 2016. The remaining unamortized deferred financing costs of \$1.0 million were written off in connection with the redemption of the Notes and are included in 'interest expense' in the consolidated income statement for the year ended September 30, 2017.

The following table sets forth a listing of credit facilities, the current committed amounts, as of the report date, on the facilities, and outstanding borrowings on the facilities as well as indebtedness on a promissory note as of September 30, 2018 and 2017:

(in millions)

Credit Facilities				Amoun		
Раммахуам	Consuite	Danawal / Evidentian Data	Total		borpitomber 30,	
Borrower	Security	Renewal / Expiration Date	Commitmen	12018	2017	
Committed Credit Fac	cilities					
INTL FCStone Inc.	Pledged shares of certain subsidiaries	March 18, 2019	\$ 262.0	\$208.2	\$ 150.0	
INTL FCStone Financial Inc.	None	April 4, 2019	75.0	_	_	
FCStone Merchants Services, LLC	Certain commodities assets	November 1, 2019	232.5	128.0	44.2	
INTL FCStone Ltd.	None	January 31, 2019	25.0	_	_	
			\$ 594.5	336.2	194.2	
Uncommitted Credit l	Facilities					
INTL FCStone	Commodities warehouse receipts	n/a		14.0	34.0	
Financial Inc.	and certain pledged securities	11/4		17.0	54.0	
	Commodities warehouse receipts	n/a	_	—	_	
FCStone Merchants	Certain commodities assets	n/a		3.8	_	
Services, LLC		11/4		5.0		
Note Payable to Bank						
Monthly installments, due March 2020 and secured by certain equipment 1.2 2.0						
Total Payables to \$355.2 \$ 230.2						
lenders under loans				ψυυυ.Δ	Ψ 230.2	

As reflected above, \$362 million of the Company's committed credit facilities are scheduled to expire during the fiscal year ended September 30, 2019. The Company intends to renew or replace these facilities as they expire, and based on the Company's liquidity position and capital structure, the Company believes it will be able to do so.

Note 11 – Commitments and Contingencies

Legal and Regulatory Proceedings

Certain conditions may exist as of the date the financial statements are issued, which may result in a loss to the Company but which will only be resolved when one or more future events occur or fail to occur. The Company assesses such contingent liabilities, and such assessment inherently involves an exercise of judgment. In assessing loss contingencies related to legal and regulatory proceedings that are pending against the Company or unasserted claims that may result in such proceedings, the Company's legal counsel evaluates the perceived merits of any legal or regulatory proceedings or unasserted claims as well as the perceived merits of the amount of relief sought or expected to be sought therein.

If the assessment of a contingency indicates that it is probable that a material loss had been incurred at the date of the financial statements and the amount of the liability can be estimated, then the estimated liability would be accrued in the Company's financial statements. If the assessment indicates that a potentially material loss contingency is not probable, but is reasonably possible, or is probable but cannot be estimated, then the nature of the contingent liability, together with an estimate of the range of possible loss if determinable and material, would be disclosed. Neither accrual nor disclosure is required for loss contingencies that are deemed remote. The Company accrues legal fees related to contingent liabilities as they are incurred.

From time to time and in the ordinary course of business, the Company is involved in various legal actions and proceedings, including tort claims, contractual disputes, employment matters, workers' compensation claims and

collections. The Company carries insurance that provides protection against certain types of claims, up to the limits of the respective policy. Additionally, the Company is subject to extensive regulation and supervision by U.S. federal and international governmental agencies and various self-regulatory organizations. The Company and its advisors periodically engage with such regulatory agencies and organizations, in the context of examinations or otherwise, to respond to inquiries, informational requests, and investigations. From time to time, such engagements result in regulatory complaints or other matters, the resolution of which can include fines and other remediation.

As of September 30, 2018 and 2017, the consolidated balance sheets include loss contingency accruals, recorded during and prior to these fiscal years then ended, which are not material, individually or in the aggregate, to the Company's financial position or liquidity. In the opinion of management, possible exposure from loss contingencies in excess of the amounts

accrued, and in addition to the possible losses discussed below, is not material to the Company's earnings, financial position or liquidity.

The following is a summary of a significant legal matter involving the Company:

Sentinel Litigation

Prior to the July 1, 2015 merger into INTL FCStone Financial, our subsidiary, FCStone, LLC, had a portion of its excess segregated funds invested with Sentinel Management Group Inc. ("Sentinel"), a registered futures commission merchant ("FCM") and an Illinois-based money manager that provided cash management services to other FCMs. In August 2007, Sentinel halted redemptions to clients and sold certain of the assets it managed to an unaffiliated third party at a significant discount. On August 17, 2007, subsequent to Sentinel's sale of certain assets, Sentinel filed for bankruptcy protection. In aggregate, \$15.5 million of FCStone, LLC's \$21.9 million in invested funds were returned to it before and after Sentinel's bankruptcy petition. A further \$2.0 million was held by the bankruptcy trustee in reserve in the name of FCStone, LLC.

In August 2008, the bankruptcy trustee of Sentinel filed adversary proceedings against FCStone, LLC, and a number of other FCMs, seeking recovery of pre- and post-petition transfers totaling \$15.5 million.

On April 23, 2018, following ten years of legal proceedings and a final ruling by the United States Court of Appeals for the Seventh Circuit against the trustee in favor of INTL FCStone Financial, the United States Supreme Court denied the trustee's petition for writ of certiorari. Following this, on May 1, 2018, INTL FCStone Financial received funds from the reserve account in the amount of \$2.0 million. This amount is presented in 'Other gains' in the consolidated income statement for the year ended September 30, 2018.

Our assessments are based on estimates and assumptions that have been deemed reasonable by management, but that may later prove to be incomplete or inaccurate, and unanticipated events and circumstances may occur that might cause us to change those estimates and assumptions.

Contractual Commitments

Operating Leases

The Company is obligated under various noncancelable operating leases for the rental of office facilities, automobiles, service obligations and certain office equipment, and accounts for these lease obligations on a straight line basis. The expense associated with operating leases was \$12.0 million, \$11.3 million and \$9.9 million, for fiscal years ended September 30, 2018, 2017, and 2016, respectively. The expenses associated with the operating leases and service obligations are reported in the consolidated income statements in 'occupancy and equipment rental', 'transaction-based clearing expenses' and 'other' expenses.

Future aggregate minimum lease payments under noncancelable operating leases as of September 30, 2018 are as follows:

(in millions)

Year ending September 30,

2019	\$10.1
2020	9.3
2021	8.1
2022	5.8
2023	4.5
Thereafter	5.6
	\$43.4

Purchase Commitments

The Company determines an estimate of contractual purchase commitments in the ordinary course of business primarily for the purchase of precious metals and agricultural and energy commodities. Unpriced contract commitments have been estimated using September 30, 2018 fair values. The purchase commitments and other obligations as of September 30, 2018 for less than one year, one to three years and three to five years were \$1,204.7 million, \$1.7 million and \$1.8 million, respectively. There were \$2.0 million in purchase commitments and other obligations after five years as of September 30, 2018. The purchase commitments for less than one year will be offset

by corresponding sales commitments of \$1,406 million.

Exchange Member Guarantees

The Company is a member of various exchanges that trade and clear futures and option contracts. In connection with the Sterne acquisition, the Company is also a member of and provides guarantees to securities clearinghouses and exchanges in connection with client trading activities. Associated with its memberships, the Company may be required to pay a proportionate share of the financial obligations of another member who may default on its obligations to the exchanges. While the rules governing different exchange memberships vary, in general the Company's guarantee obligations would arise only if the exchange had previously exhausted its resources. In addition, any such guarantee obligation would be apportioned among the other non-defaulting members of the exchange. Any potential contingent liability under these arrangements is not quantifiable and could exceed the cash and securities it has posted to the clearinghouse as collateral.

The Company has not recorded any contingent liability in the consolidated financial statements for these agreements and believes that any potential requirement to make payments under these agreements is remote. Self-Insurance

The Company self-insures its costs related to medical and dental claims. The Company is self-insured, up to a stop loss amount, for eligible participating employees and retirees, and for qualified dependent medical and dental claims, subject to deductibles and limitations. Liabilities are recognized based on claims filed and an estimate of claims incurred but not reported. The Company has purchased stop-loss coverage to limit its exposure on a per claim basis and in aggregate in the event that aggregated actual claims would exceed 120% of actuarially estimated claims. The Company is insured for covered costs in excess of these limits. Although the ultimate outcome of these matters may exceed the amounts recorded and additional losses may be incurred, the Company does not believe that any additional potential exposure for such liabilities will have a material adverse effect on the Company's consolidated financial position or results of operations. As of September 30, 2018 and 2017, the Company had \$0.8 million accrued for self-insured medical and dental claims included in 'accounts payable and other liabilities' in the consolidated balance sheets.

Note 12 – Regulatory Requirements and Subsidiary Dividend Restrictions

The Company's subsidiary INTL FCStone Financial is registered as a broker dealer and member of the Financial Industry Regulatory Authority ("FINRA") subject to the SEC Uniform Net Capital Rule 15c3-1, which requires the maintenance of minimum net capital. INTL FCStone Financial is also a commodity futures commission merchant registered with the CFTC and subject to the net capital requirements of the CFTC Regulation 1.17. Under the more restrictive of these rules, INTL FCStone Financial is required to maintain "adjusted net capital", equivalent to the greater of \$1,000,000 or 8 percent of client and nonclient risk maintenance margin requirements on all positions, as defined in such rules, regulations, and requirements. Net capital and the related net capital requirement may fluctuate on a daily basis. INTL FCStone Financial also has restriction on dividends, which restricts the withdrawal of equity capital if the planned withdrawal would reduce net capital, subsequent to haircuts and charges, to an amount less than 120% of the greatest minimum requirement.

INTL FCStone Financial as a registered securities carrying broker dealer is also subject to Rule 15c3-3 of the Securities Exchange Act of 1934 ("Rule 15c3-3"), which requires the Company to maintain separate accounts for the benefit of securities clients and proprietary accounts of broker dealers ("PABs"). These client protection rules require the Company to maintain special reserve bank accounts ("SRBAs") for the exclusive benefit of securities clients and PABs.

Pursuant to the requirements of the Commodity Exchange Act, funds deposited by clients of INTL FCStone Financial relating to their trading of futures and options on futures on a U.S. commodities exchange must be carried in separate accounts which are designated as segregated clients' accounts. Pursuant to the requirements of the CFTC, funds deposited by clients of INTL FCStone Financial relating to their trading of futures and options on futures traded on, or subject to the rules of, a foreign board of trade must be carried in separate accounts in an amount sufficient to satisfy all of INTL FCStone Financial's current obligations to clients trading foreign futures and foreign options on foreign commodity exchanges or boards of trade, which are designated as secured clients' accounts. See below for additional information regarding INTL FCStone Financial's calculation of segregated and secured client funds.

The Company's subsidiary SA Stone Wealth Management Inc. (formerly Sterne Agee Financial Services, Inc.) is subject to the SEC Uniform Net Capital Rule 15c3-1 under the Securities Exchange Act of 1934. The Company's subsidiary INTL FCStone Ltd is regulated by the Financial Conduct Authority ("FCA"), the regulator of the financial services industry in the United Kingdom, as a Financial Services Firm under part IV of the Financial Services and Markets Act 2000. The regulations impose regulatory capital, as well as conduct of business, governance, and other requirements. The conduct of business rules include those that govern the treatment of client money and other assets which under certain circumstances for certain classes of client must be segregated from the firm's own assets.

The Company's subsidiary INTL FCStone Pty Ltd is regulated by the Australian Securities and Investment Commission and is subject to a net tangible asset capital requirement.

INTL FCStone DTVM Ltda. ("INTL FCStone DTVM") is a registered broker-dealer and regulated by the Brazilian Central Bank and Securities and Exchange Commission of Brazil, and is subject to a capital adequacy requirement. INTL Gainvest S.A. and INTL CIBSA S.A. are regulated by the Comision Nacional de Valores, and are subject to net capital and capital adequacy requirements.

All subsidiaries of the Company are in compliance with all of their regulatory requirements as of September 30, 2018, as follows:

		As of Sep 2018	otember 30,
Regulatory Authority	Requirement Type	Actual	Minimum Requirement
	Net capital	\$167.7	\$ 101.4
	Segregated funds	\$2,637.0	\$ 2,579.7
	Secured funds	\$148.9	\$ 132.8
	Customer reserve	*	\$ 6.4
1 SEC	PAB reserve	\$0.3	\$ —
SEC	Net capital	\$4.6	\$ 0.4
FCA (United Kingdom)	Net capital	\$193.1	\$ 95.9
FCA (United Kingdom)	Segregated funds	\$187.3	\$ 182.1
FCA (United Kingdom)	Net capital	\$193.0	\$ 95.9
Brazilian Central Bank and Securities and Exchange Commission of Brazil	Capital adequacy	\$11.2	\$ 2.1
<u> </u>	Capital adequacy	\$4.2	\$ 0.1
CNV		\$1.2	\$ 0.1
CNV	Capital adequacy	\$4.4	\$ 0.5
CNV	Net capital	\$3.1	\$ 0.3
	SEC and CFTC CFTC SEC SEC SEC FCA (United Kingdom) FCA (United Kingdom) FCA (United Kingdom) Brazilian Central Bank and Securities and Exchange Commission of Brazil National Securities Commission ("CNV") CNV CNV	SEC and CFTC Segregated funds CFTC Secured funds CFTC Secured funds CUstomer reserve SEC PAB reserve SEC Net capital FCA (United Kingdom) FCA (United Kingdom) FCA (United Kingdom) FCA (United Kingdom) Brazilian Central Bank and Securities and Exchange Commission of Brazil National Securities Commission ("CNV") Capital adequacy CNV Net capital Capital adequacy Net capital Capital adequacy CNV CNV Net capital	Regulatory Authority Requirement Type Actual SEC and CFTC Net capital SEC Segregated funds SEC Secured funds SEC Customer reserve SEC PAB reserve SEC PAB reserve SEC Net capital SEC Net capital SEC SEC Net capital SEC SEC Net capital SEC SEC SEC Net capital SEC SEC SEC Net capital SEC

^{*} As of September 30, 2018, the Company had no balance in the customer reserve SRBA. As a result of the reserve requirement determined through the weekly computation, the Company made a deposit to the customer reserve SRBA of \$11.4 million on October 2, 2018, to meet the customer segregation requirements under Rule 15c3-3.

Certain other non-U.S. subsidiaries of the Company are also subject to capital adequacy requirements promulgated by authorities of the countries in which they operate. As of September 30, 2018, these subsidiaries were in compliance with their local capital adequacy requirements.

Note 13 – Securities and Commodity Financing Transactions

The Company's outstanding notes receivable in connection with repurchase agreements for agricultural and energy commodities, whereby the clients sell to the Company certain commodity inventory and agree to repurchase the commodity inventory at a future date at a fixed price were \$1.9 million and \$0.8 million as of September 30, 2018 and 2017, respectively.

The Company enters into securities purchased under agreements to resell, securities sold under agreements to repurchase, securities borrowed and securities loaned transactions to, among other things, finance financial instruments, acquire securities to cover short positions, acquire securities for settlement, and to accommodate counterparties' needs. These agreements are recorded as collateralized financings at their contractual amounts plus

accrued interest. The related interest is recorded in the consolidated income statements as interest income or interest expense, as applicable. In connection with these agreements and transactions, it is the policy of the Company to receive or pledge cash or securities to adequately collateralize such agreements and transactions in accordance with general industry guidelines and practices. The value of the collateral is valued daily and the Company may require counterparties to deposit additional collateral or return collateral pledged, when appropriate. The carrying amounts of these agreements and transactions approximate fair value due to their short-term nature and the level of collateralization.

The Company pledges financial instruments owned to collateralize repurchase agreements. At September 30, 2018 and 2017, financial instruments owned, at fair value of \$123.0 million and \$19.4 million, respectively, were pledged as collateral under repurchase agreements. The counterparty has the right to repledge the collateral in connection with these transactions. These

financial instruments owned have been pledged as collateral and have been parenthetically disclosed on the consolidated balance sheet.

In addition, as of September 30, 2018 and 2017, the Company pledged financial instruments owned, at fair value of \$1,481.1 million and \$1,306.4 million, respectively, and securities received under reverse repurchase agreements of \$369.8 million and \$100.2 million, respectively, to cover collateral requirements for tri-party repurchase agreements. For these securities, the counterparties do not have the right to sell or repledge the collateral and, therefore, they have not been parenthetically disclosed on the consolidated balance sheet.

The Company also has repledged securities borrowed and client securities held under custodial clearing arrangements to collateralize securities loaned agreements with a fair value of \$267.9 million and \$108.4 million as of September 30, 2018 and 2017, respectively. Additionally, the Company has also pledged financial instruments owned of \$27.1 million and \$12.7 million as of September 30, 2018 and 2017, respectively, to collateralize uncommitted loan facilities with certain banks as discussed further in Note 10.

At September 30, 2018 and 2017, the Company had accepted collateral that it is permitted by contract to sell or repledge. This collateral consists primarily of securities received in reverse repurchase agreements, securities borrowed agreements, and margin securities held on behalf of correspondent brokers. The fair value of such collateral at September 30, 2018 and 2017 was \$1,294.8 million and \$631.7 million, respectively, of which \$473.9 million and \$306.9 million, respectively, was used to cover securities sold short which are recorded in financial instruments sold, not yet purchased on the consolidated balance sheet. In the normal course of business, this collateral is used by the Company to cover financial instruments sold, not yet purchased, to obtain financing in the form of repurchase agreements, and to meet counterparties' needs under lending arrangements.

The following tables provide the contractual maturities of gross obligations under repurchase and securities lending agreements as of September 30, 2018 and 2017 (in millions):

agreements as of September 30, 2018 and 2017 (in millions): September 30, 2018 Overnight Less 30-90 Total and Open Days Securities sold under agreements to repurchase \$934.9 \$661.3\$340.5\$1,936.7 Securities loaned 277.9 Gross amount of secured financing \$1,212.8\$661.3\$340.5\$2,214.6 September 30, 2017 30-90 and Days Open Davs Securities sold under agreements to repurchase \$640.2\$432.9\$320.0\$1,393.1

Securities sold under agreements to repurchase \$640.2\$432.9\$320.0\$1,393.1 Securities loaned 111.1 — 111.1 Gross amount of secured financing \$751.3\$432.9\$320.0\$1,504.2

The following table provides the underlying collateral types of the gross obligations under repurchase and securities lending agreements as of September 30, 2018 and 2017 (in millions):

Constitue cold under agreements to renurchase	SeptemberSeptember		
Securities sold under agreements to repurchase:	30, 2018	30, 2017	
U.S. Treasury obligations	\$39.6	\$7.0	
U.S. government agency obligations	461.7	332.6	
Asset-backed obligations	50.0	36.4	
Agency mortgage-backed obligations	1,385.4	1,017.1	
Total securities sold under agreements to repurchase	\$1,936.7	\$1,393.1	

Securities loaned:

Equity securities277.9111.1Total securities loaned277.9111.1Gross amount of secured financing\$ 2,214.6\$ 1,504.2

Note 14 – Share-Based Compensation

Share-based compensation expense is included in 'compensation and benefits' in the consolidated income statements and totaled \$6.6 million, \$6.3 million and \$5.1 million for the fiscal years ended September 30, 2018, 2017, and 2016, respectively.

Stock Option Plans

The Company sponsors a stock option plan for its directors, officers, employees and consultants. The 2013 Stock Option Plan, which was approved by the Company's Board of Directors and shareholders, authorizes the Company to issue stock options covering up to 1.0 million shares of the Company's common stock. As of September 30, 2018, there were 0.6 million shares authorized for future grant under this plan. Awards that expire or are canceled generally become available for issuance again under the plan. The Company settles stock option exercises with newly issued shares of common stock.

Fair value is estimated at the grant date based on a Black-Scholes-Merton option-pricing model using the following weighted-average assumptions:

Expected stock price volatility rates are primarily based on the historical volatility. The Company has not paid dividends in the past and does not currently expect to do so in the future. Risk free interest rates are based on the U.S. Treasury yield curve in effect at the time of grant for periods corresponding with the expected life of the option or award. The average expected life represents the estimated period of time that options or awards granted are expected to be outstanding, based on the Company's historical share option exercise experience for similar option grants. The weighted average fair value of options issued during fiscal years ended September 30, 2018, 2017, and 2016 was \$9.79, \$8.67 and \$6.40, respectively.

The following is a summary of stock option activity for the year ended September 30, 2018:

	Shares Available for Grant	Number of Options Outstanding	Average Exercise	Weighted Average Grant Date Fair Value	Weighted Average Remaining Term (in years)	Aggregate Intrinsic Value (\$ millions)
Balances at September 30, 2017	652,494	881,403	\$ 27.31	\$ 11.55	3.57	\$ 9.8
Granted	(79,800)	79,800	\$ 44.17	\$ 9.79		
Exercised		(110,423)	\$ 23.79	\$ 7.98		
Forfeited	13,324	(13,324)	\$ 33.19	\$ 7.14		
Expired	2,002	(2,002)	\$ 32.60	\$ 6.78		
Balances at September 30, 2018	588,020	835,454	\$ 29.27	\$ 11.93	3.01	\$ 15.9
Exercisable at September 30, 2018		314,366	\$ 27.16	\$ 11.68	2.81	\$ 6.7

The total compensation cost not yet recognized for non-vested awards of \$3.0 million as of September 30, 2018 has a weighted-average period of 3.13 years over which the compensation expense is expected to be recognized. The total intrinsic value of options exercised during fiscal years 2018, 2017 and 2016 was \$2.1 million, \$2.6 million and \$1.9 million, respectively.

The options outstanding as of September 30, 2018 broken down by exercise price are as follows:

Exercise Price	Number of Options Outstanding	Weighted Average Exercise Price	Weighted Average Remaining Term (in Years)
\$	_	n/a	n/a
\$5.00 -\$10.00		n/a	n/a
\$10.00-\$15.00	_	n/a	n/a
\$15.00-\$20.00	_	n/a	n/a
\$20.00-\$25.00	28,668	\$ 20.54	0.27
\$25.00-\$30.00	580,000	\$ 25.91	3.37
\$30.00-\$35.00	49,656	\$ 31.37	1.28
\$35.00-\$40.00	100,330	\$ 38.77	2.27
\$40.00-\$45.00	74,800	\$ 43.88	3.30
\$45.00-\$50.00	_	n/a	n/a
\$50.00-\$55.00	2,000	\$ 55.28	3.89
	835,454	\$ 29.27	3.01

Restricted Stock Plan

The Company sponsors a restricted stock plan for its directors, officers and employees. The Company's 2017 restricted stock plan, which was approved by the Company's Board of Directors and shareholders, authorizes up to 1.5 million shares to be issued. As of September 30, 2018, 1.4 million shares were authorized for future grant under the restricted stock plan. Awards that expire or are canceled generally become available for issuance again under the plan. The Company utilizes newly issued shares of common stock to make restricted stock grants.

The following is a summary of restricted stock activity through September 30, 2018:

	Shares Available for Grant	Number of Shares Outstanding		Weighted Average Remaining Term (in years)	Aggregate Intrinsic Value (\$ millions)
Balances at September 30, 2017	1,459,976	354,474	\$ 33.34	1.26	\$ 13.6
Granted	(85,404)	85,404	\$ 44.86		
Vested		(162,544)	\$ 31.14		
Forfeited	2,706	(2,706)	\$ 36.24		
Balances at September 30, 2018	1 377 278	274 628	\$ 38 20	1 15	\$ 133

The total compensation cost not yet recognized of \$6.8 million as of September 30, 2018 has a weighted-average period of 1.15 years over which the compensation expense is expected to be recognized. Compensation expense is amortized on a straight-line basis over the vesting period. Restricted stock grants are included in the Company's total issued and outstanding common shares.

Note 15 – Retirement Plans

Defined Benefit Retirement Plans

The Company has a frozen qualified defined benefit pension plan (the "Qualified Plan") and a nonqualified defined benefit pension plan (the "Nonqualified Plan"), and recognizes their funded status, measured as the difference between the fair value of the plan assets and the projected benefit obligation, in "other assets" or "accounts payable and other accrued liabilities" in the consolidated balance sheets, depending on the funded status of each plan.

The Qualified Plan assets, which are managed in a third-party trust, primarily consist of a diversified blend of approximately 80% debt securities and 20% equity investments and had a total fair value of \$35.6 million and \$36.3 million as of September 30, 2018 and 2017, respectively. All Qualified Plan assets fall within Level 2 of the fair value hierarchy. The benefit obligation associated with the Qualified Plan will vary over time only as a result of changes in

market interest rates, the life expectancy of the plan participants, and benefit payments, since the accrual of benefits was suspended when the Qualified Plan was frozen in 2006. The benefit obligation was \$32.5 million and \$34.7 million and the discount rate assumption used in the

measurement of this obligation was 4.20% and 3.75% as of September 30, 2018 and 2017, respectively. Related to the Qualified Plan, the Company's net liability for retirement costs had a funded status of \$3.1 million and \$1.6 million as of September 30, 2018 and 2017, respectively.

The Nonqualified Plan assets had a total fair value of less than \$0.1 million as of September 30, 2018 and 2017. The benefit obligation associated with the Nonqualified Plan will vary over time only as a result of changes in market interest rates, the life expectancy of the plan participants, and benefit payments. There are no active participants in the Nonqualified plan. The benefit obligation was \$1.6 million and \$1.8 million as of September 30, 2018 and 2017, respectively. Related to the Nonqualified Plan, the Company's unfunded pension obligation was \$1.6 million and \$1.7 million as of September 30, 2018 and 2017, respectively.

The Company recognized a net periodic benefit \$0.2 million and \$0.3 million for the year ended September 30, 2018 and 2017, respectively. The net periodic benefit cost associated with the plans was \$0.2 million for the year ended September 30, 2016. The expected long-term return on plan assets assumption is 4.50% for 2018. The Company made contributions of \$1.0 million and \$2.0 million to the plans in the years ended September 30, 2018 and 2017, respectively. The Company complies with minimum funding requirements. The estimated undiscounted future benefit payments are expected to be \$2.1 million in 2019, \$2.0 million in 2020, \$2.0 million in 2021, \$2.0 million in 2022, \$2.0 million in 2023 and \$9.7 million in 2024 through 2028.

Defined Contribution Retirement Plans

The Company offers participation in the INTL FCStone Inc. 401(k) Plan ("401(k) Plan"), a defined contribution plan providing retirement benefits to all domestic full-time non-temporary employees who have reached 21 years of age. Employees may contribute from 1% to 80% of their annual compensation to the 401(k) Plan, limited to a maximum annual amount as set periodically by the Internal Revenue Service. The Company makes matching contributions to the 401(k) Plan in an amount equal to 62.5% of each participant's eligible elective deferral contribution to the 401(k) Plan, up to 8% of employee compensation. Matching contributions vest, by participant, based on the following years of service schedule: less than two years – none, after two years – 33%, after three years – 66%, and after four years – 100%. U.K. based employees of INTL FCStone are eligible to participate in a defined contribution pension plan. The Company contributes double the employee's contribution up to 10% of total base salary for this plan. For this plan, employees are 100% vested in both the employee and employer contributions at all times.

For fiscal years ended September 30, 2018, 2017, and 2016, the Company's contribution to these defined contribution plans were \$6.8 million, \$6.1 million and \$5.3 million, respectively.

Note 16 – Other Expenses

Other expenses for the years ended September 30, 2018, 2017, and 2016 are comprised of the following:

Year Ended			
September 30,			
2018	2017	2016	
\$—	\$0.1	\$0.4	
2.6	2.7	2.1	
6.2	4.0	5.1	
1.7	2.1	1.2	
2.5	2.6	1.3	
4.9	4.6	4.3	
8.4	9.8	7.9	
\$26.3	\$25.9	\$22.3	
	Septer 2018 \$— 2.6 6.2 1.7 2.5 4.9 8.4	September 30 2018 2017 \$— \$0.1 2.6 2.7 6.2 4.0 1.7 2.1 2.5 2.6 4.9 4.6	

⁽¹⁾ Contingent consideration includes remeasurement of contingent liabilities related to business combinations accounted for in accordance with the provisions of the Business Combinations Topic of the ASC (see Note 3). Note 17 – Bad Debt on Physical Coal

During the first quarter of fiscal 2018 and the fourth quarter of fiscal 2017, the Company recorded charges to earnings of \$1.0 million and \$47.0 million, respectively, to record an allowance for doubtful accounts related to a bad debt incurred in the physical coal business, conducted solely in the Company's Singapore subsidiary, INTL Asia Pte. Ltd.,

with a coal supplier. Components of the bad debt on physical coal include allowances on amounts due to the Company from the supplier related to: coal paid for but not delivered to clients; reimbursement of demurrage claims, dead freight and other charges paid by INTL

Asia Pte. Ltd. to its clients; reimbursement due for deficiencies in the quality of coal delivered to clients; and losses incurred related to the cancellation of open sales contracts.

During fiscal 2017, the Company purchased coal delivered onto barges and paid 80% of the value against bills of lading and purchase invoices, with the remaining 20% payable following inspection upon delivery to clients' vessels. The Company took title of the coal when it was loaded onto barges and maintained title until it was offloaded onto clients' vessels. The logistics related to the delivery of coal to the clients' vessels was out-sourced to the Company's coal supplier, and the Company determined that certain purchased coal was not delivered to the clients' vessels during the fourth quarter ended September 30, 2017. Furthermore, the Company determined that the supplier was unable to deliver such purchased coal to its clients. Demurrage claims, dead freight, and other penalty charges paid and payable by INTL Asia Pte. Ltd. to its clients were due to be reimbursed by the supplier based on transaction agreements with the supplier. The Company determined the supplier was unable to make this reimbursement.

The Company received an acknowledgment of debt and a note from the supplier, however, there is substantial uncertainty as to whether the supplier will be able to meet its financial obligations to the Company and as to the timing of any recovery. The Company continues to pursue all legal avenues available to it regarding this matter. The bad debt on physical coal is presented separately as a component of income before tax in the consolidated income statements. The Company has completed its exit of the physical coal business, which was part of our Physical Commodities segment and was conducted solely in INTL Asia Pte. Ltd.

On November 22, 2018, the Company reached a settlement with a client, paying \$5.1 million related to demurrage, dead freight, and other penalty charges regarding coal supplied during fiscal 2017. The settlement amount paid was less than the accrued liability for the transactions recorded during fiscal 2017, and accordingly the Company will record a recovery on the bad debt on physical coal of \$1.7 million in the three months ending December 31, 2018. Note 18 – Income Taxes

Effects of the Tax Cuts and Jobs Act

On December 22, 2017, the President of the United States ("U.S.") signed and enacted into law H.R. 1, the Tax Cuts and Jobs Act (the "Tax Reform"). Among the significant changes to the U.S. Internal Revenue Code, the Tax Reform lowers the U.S. federal corporate income tax rate from 35% to 21%, effective January 1, 2018. The Company computed income tax expense for the year ended September 30, 2018 using a U.S. statutory tax rate of 24.5%. The 21% U.S. statutory tax rate will apply to fiscal years ending September 30, 2019 and thereafter. The Tax Reform also imposes a one-time mandatory repatriation transition tax on previously untaxed accumulated and current earnings and profits ("E&P") of certain foreign subsidiaries.

The SEC staff issued Staff Accounting Bulletin No. 118 ("SAB 118"), which provides guidance on accounting for the tax effects of the Tax Reform. SAB 118 provides a measurement period that should not extend beyond one year from the Tax Reform enactment date for companies to complete the accounting under Accounting Standards Codification ("ASC") 740 - Income Taxes ("ASC 740"). In accordance with SAB 118, a company must reflect the income tax effects of those aspects of the Tax Reform for which the accounting under ASC 740 is complete. To the extent that a company's accounting for certain income tax effects of the Tax Reform is incomplete but it can determine a reasonable estimate, it must record a provisional estimate in the financial statements. If a company cannot determine a provisional estimate to be included in the financial statements, it should continue to apply ASC 740 based on the tax laws that were in effect immediately before the enactment of the Tax Reform.

The accounting for certain elements of the Tax Reform is incomplete. However, as of September 30, 2018, the accounting for the remeasurement of the deferred tax assets and liabilities is complete. The remeasurement of the deferred tax assets and liabilities resulted in \$8.6 million of income tax expense, which increased the effective tax rate by 8.5% during the year ended September 30, 2018.

To determine the amount of the mandatory repatriation transition tax, the Company must determine, in addition to other factors, the amount of post 1986 E&P of the relevant subsidiaries, as well as the amount of non-U.S. income taxes paid on such earnings. The Company made a reasonable estimate of the mandatory repatriation transition tax and recorded a provisional transition tax obligation of \$11.2 million, which increased the effective tax rate by 11% during the year ended September 30, 2018. While the Company can make reasonable estimates for the deemed

repatriation transition tax, the final tax impact may differ from these estimates, due to, among other things, changes in our interpretations and assumptions, additional guidance that may be issued by taxing authorities, and actions the Company may take.

The Tax Reform also establishes new tax laws that will affect the fiscal year ending September 30, 2019, including, but not limited to, (1) elimination of the corporate alternative minimum tax, (2) a new provision designed to tax global intangible low-taxed income (GILTI), (3) limitations on the utilization of net operating losses incurred in tax years beginning after September 30, 2018 to 80% of taxable income per tax year, (4) the creation of the base erosion anti-abuse tax (BEAT), (5) a general

elimination of U.S. federal income taxes on dividends from foreign subsidiaries, and (6) limitations on the deductibility of interest expense and certain executive compensation. The Company has not yet determined the potential tax impact of provisions that are not yet effective, such as GILTI, BEAT, and the elimination of U.S. tax on dividends of future foreign earnings. The Company expects to make the policy election to treat GILTI as a period expense in the first quarter of fiscal year 2019.

Income tax expense (benefit) for the years ended September 30, 2018, 2017, and 2016 was allocated as follows:

	r ear r	inaea	
	Septer	nber 3	0,
(in millions)	2018	2017	2016
Income tax expense attributable to income from operations	\$46.0	\$8.8	\$18.0
Taxes allocated to stockholders' equity, related to pension liabilities	0.1	1.0	0.2
Taxes allocated to additional paid-in capital, related to share-based compensation	_	0.1	(0.8)
Total income tax expense	\$46.1	\$9.9	\$17.4

The components of income tax expense (benefit) attributable to income from operations were as follows:

	Year Ended			
	September 30,			
(in millions)	2018	2017	2016	
Current taxes:				
U.S. federal	\$0.8	\$0.7	\$1.3	
U.S. State and local	0.5	1.2	0.8	
International	22.4	16.7	16.8	
Total current taxes	23.7	18.6	18.9	
Deferred taxes	22.3	(9.8)	(0.8)	
Income tax benefit attributable to interest income	_	_	(0.1)	
Income tax expense	\$46.0	\$8.8	\$18.0	

U.S. and international components of (loss) income from operations, before tax, was as follows:

	Year Ended			
	September 30,			
(in millions)	2018	2017	2016	
U.S.	\$9.9	\$(13.9)	\$4.8	
International	91.6	29.1	67.9	
Income from operations, before tax	\$101.5	\$15.2	\$72.7	

Items accounting for the difference between income taxes computed at the federal statutory rate and income tax expense were as follows:

	Year Ended September		
	30,		
	2018	2017	2016
Federal statutory rate effect of:	24.5 %	35.0 %	35.0 %
U.S. State and local income taxes	0.8 %	(2.6)%	1.3 %
Foreign earnings and losses taxed at lower rates	(0.8)%	11.5 %	(11.0)%
Change in foreign valuation allowance	(0.8)%	(1.4)%	(0.3)%
Change in state valuation allowance	%	4.1 %	_ %
U.S. permanent items	(0.2)%	3.6 %	0.8 %
Foreign permanent items	2.1 %	8.1 %	1.9 %
U.S. bargain purchase gain	— %	%	(3.0)%
Remeasurement of deferred tax	8.5 %	%	_ %
Repatriation Transition tax	11.0 %	%	%
Other reconciling items	0.2 %	(0.6)%	0.3 %

The components of deferred income tax assets and liabilities were as follows:

(in millions)	September 30, 2018	September 30, 2017
Deferred tax assets:		
Share-based compensation	\$ 2.8	\$ 3.7
Pension liability	_	0.1
Deferred compensation	1.4	2.0
Foreign net operating loss carryforwards	4.2	5.6
U.S. State and local net operating loss carryforwards	8.7	6.6
U.S. federal net operating loss carryforwards	_	21.9
Intangible assets	1.8	6.1
Bad debt reserve	1.5	1.4
Tax credit carryforwards	_	1.6
Foreign tax credit carryforwards	6.5	_
Other compensation	3.4	3.6
Other	0.9	1.9
Total gross deferred tax assets	31.2	54.5
Less valuation allowance	(3.5)	(4.0)
Deferred tax assets	27.7	50.5
Deferred income tax liabilities:		
Unrealized gain on securities	2.6	3.2
Prepaid expenses	1.8	2.5
Property and equipment	3.1	2.2
Pension liability	0.4	_
Deferred income tax liabilities	7.9	7.9
Deferred income taxes, net	\$ 19.8	\$ 42.6

Deferred income tax balances reflect the effects of temporary differences between the carrying amounts of assets and liabilities and their tax bases and are stated at enacted tax rates expected to be in effect when taxes are actually paid or recovered.

As of September 30, 2018 and 2017, the Company has net operating loss carryforwards for U.S. federal, state, local, and foreign income tax purposes of \$9.4 million and \$30.1 million, net of valuation allowances, respectively, which are available to offset future taxable income in these jurisdictions. The Company utilized the \$21.9 million U.S. federal net operating loss in the current year against the mandatory repatriation transition tax. The state and local net operating loss carryforwards of \$5.7 million, net of valuation allowance, begin to expire after September 2020. INTL Asia Pte. Ltd. has a net operating loss carryforward of \$2.9 million. This Singapore net operating loss has an indefinite carryforward and, in the judgment of management, is more likely than not to be realized. As a result of Tax Reform, the AMT credit carryforward deferred tax asset has been reclassified to income taxes receivable. The Company can continue to utilize AMT credits to offset regular income tax liability in fiscal years 2019 through 2021. Any remaining amount is fully refundable by fiscal year 2022. In the current year, the Company generated \$6.5 million in foreign tax credit carryforwards as part of the mandatory repatriation transition tax. These credits expire in fiscal year 2028. In the judgment of management, the Company believes that sufficient taxable income will be earned to utilize the foreign tax credit carryforwards within 10 years.

The valuation allowance for deferred tax assets as of September 30, 2018 was \$3.5 million. The net change in the total valuation allowance for the year ended September 30, 2018 was a decrease of \$0.5 million. The valuation allowances as of September 30, 2018 and 2017 were primarily related to U.S. state and local and foreign net operating loss carryforwards that, in the judgment of management, are not more likely than not to be realized.

The Company incurred U.S. federal, state, and local taxable losses for the years ended September 30, 2018 (excluding the taxable income associated with the mandatory repatriation transition tax), 2017, and 2016 of \$(3.7) million,

\$(20.5) million, and \$(9.7) million, respectively. The differences between actual levels of past taxable losses and pre-tax book income (losses) are primarily attributable to temporary differences in these jurisdictions, such as tax deductible amortization and bonus depreciation. When evaluating if U.S. federal, state, and local deferred taxes are realizable, the Company considered deferred tax liabilities of \$5.0 million that are scheduled to reverse from 2019 to 2021 and \$2.5 million of deferred tax liabilities associated with unrealized gains in securities which the Company could sell, if necessary. Furthermore, the Company considered its ability to implement business and tax planning strategies that would allow the remaining U.S. federal, state, and local deferred tax assets, net of valuation allowances, to be realized in less than 5 years. Based on the tax planning strategies

that can be implemented, management believes that it is more likely than not that the Company will realize the tax benefit of the deferred tax assets, net of the existing valuation allowance, in the future.

The total amount of undistributed earnings in the Company's foreign subsidiaries, for income tax purposes, was \$354.7 million as of September 30, 2018. The Company recognized the mandatory repatriation tax related to these undistributed earnings as part of Tax Reform and, as a result, repatriation of these amounts would not be subject to additional U.S. federal income tax but may be subject to applicable withholding taxes in the relevant jurisdictions. The Company's intent is to permanently reinvest these funds outside of the United States, with the exception of \$13.0 million that will be distributed in fiscal year 2019. Foreign withholding tax is not applicable to this distribution.

A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows:

The Company has a minimal balance of unrecognized tax benefits as of September 30, 2018, that, if recognized, would affect the effective tax rate. While it is expected that the amount of unrecognized tax benefits will change in the next twelve months, the Company does not expect this change to have a material impact on the results of operations or the financial position of the Company.

Accrued interest and penalties are included in the related tax liability line in the consolidated balance sheets. The Company had no accrued interest and penalties included in the consolidated balance sheets as of September 30, 2018 and 2017.

The Company recognizes accrued interest and penalties related to income taxes as a component of income tax expense. The Company had no amount of interest, net of federal benefit, and penalties recognized as a component of income tax expense during the years ended September 30, 2018, 2017, and 2016.

The Company and its subsidiaries file income tax returns with the U.S. federal jurisdiction and various U.S. state and local and foreign jurisdictions. The Company has open tax years ranging from September 30, 2010 through September 30, 2018 with U.S. federal and state and local taxing authorities. In the U.K., the Company has open tax years ending September 30, 2017 to September 30, 2018. In Brazil, the Company has open tax years ranging from December 31, 2013 through December 31, 2017. In Argentina, the Company has open tax years ranging from September 30, 2011 to September 30, 2018. In Singapore, the Company has open tax years ranging from September 30, 2014 to September 30, 2018.

Note 19 – Acquisitions

The Company's consolidated financial statements include the operating results of the acquired businesses from the dates of acquisition.

Acquisitions in Fiscal 2018

PayCommerce Financial Solutions, LLC

On September 5, 2018, the Company acquired all of the outstanding membership interests of PayCommerce Financial Solutions, LLC ("PCFS"). Subsequent to the acquisition, the Company renamed PCFS to INTL Technology Services, LLC ("ITS"). ITS is a fully accredited SWIFT Service Bureau provider. This acquisition enables the Company to act as a SWIFT Service Bureau for its 300-plus correspondent banking network, thus providing another important service for delivering local currency, cross-border payments to the developing world. The purchase price was approximately \$3.8 million of cash consideration. The purchase price allocation resulted in \$0.7 million in receivables, \$0.8 million in property, plant, and equipment, \$0.5 million in equity investments, and \$2.2 million in liabilities assumed. Additionally, the Company acquired identifiable, definite lived client relationship and client list assets that have been assigned a fair value of \$1.3 million and a useful life of 5 years. The fair value of the consideration transferred exceeded the fair value of identifiable assets acquired and liabilities assumed. The excess of the purchase consideration over the fair value of net tangible and identifiable intangible assets acquired of \$2.6 million was

recorded as goodwill. Management believes that the goodwill represents the synergies expected from the incremental revenue that can be realized from combining the technologies acquired with the Company's pre-existing correspondent banking network. The estimated fair value assigned to the tangible assets, identifiable intangible assets, and assumed liabilities were based on management's estimates and assumptions.

This business has been included within the Company's Global Payments Segment. The Company's consolidated income statement for the year ended September 30, 2018 includes the post-acquisition results of ITS, which was immaterial in relation to the Company's consolidated results.

Carl Kliem S.A.

On June 12, 2018, the Company executed a sale and purchase agreement to acquire the entire issued and outstanding share capital of Carl Kliem S.A. Carl Kliem S.A. is an independent interdealer broker based in Luxembourg, a leading European financial hub, which provides foreign exchange, interest rate and fixed income products to a diverse, institutional client base across the European Union. Carl Kliem S.A. employs approximately 40 people and has over 400 active institutional clients. This acquisition is expected to provide the Company with a strong European client base and a European Union based footprint following the completion of Brexit. The closing of the agreement was conditional upon approval of the Luxembourg financial sector supervisory authority, the Commission de Surveillance du Secteur Financier ("CSSF"). In November 2018, the Company received regulatory approval from the CSSF to complete the acquisition and the acquisition closed effective November 30, 2018. The purchase price is equal to the net tangible book value on the closing date minus restructuring costs and is not material to the Company. The initial accounting for the purchase price allocation is not yet complete.

Acquisition in Fiscal 2017

ICAP's EMEA Oils Broking Business

Effective October 1, 2016, the Company's subsidiary, INTL FCStone Ltd acquired the London-based EMEA oils business of ICAP Plc. The business included more than 30 front office employees across the fuel, crude, middle distillates, futures and options desks that have relationships with more than 200 commercial and institutional clients throughout Europe, the Middle East and Africa. The terms of the agreement included cash consideration of \$6.0 million paid directly to ICAP as well as incentive amounts payable to employees acquired based upon their continued employment. The cash consideration paid to ICAP was dependent upon the number of brokers who accepted INTL FCStone Ltd's employment offer. The transaction was accounted for as an asset acquisition in accordance with FASB ASC 805-50 and FASB ASC 350. The cash consideration paid was allocated entirely to the intangible asset recognized related to the client base acquired. The intangible asset was assigned to the Clearing and Execution Services segment and will be amortized over a useful life of 5 years.

Acquisition in Fiscal 2016

Sterne Agee

Effective July 1, 2016, the Company acquired all of the equity interests of Sterne Agee, LLC's (a wholly-owned subsidiary of Stifel Financial Corp.) legacy independent brokerage and clearing businesses, Sterne Agee & Leach, Inc.; Sterne Agee Clearing, Inc.; Sterne Agee Financial Services, Inc. Effective August 1, 2016, the Company acquired all of the equity interests of Sterne Agee, LLC's legacy Registered Investment Advisor ("RIA") business, Sterne Agee Asset Management, Inc. and Sterne Agee Investment Advisor Services, Inc. - collectively ("Sterne Agee") for cash consideration. Effective July 1, 2017, Sterne Agee & Leach, Inc. was merged into the Company's wholly-owned regulated U.S. subsidiary, INTL FCStone Financial. Additionally, during 2017, Sterne Agee Clearing, Inc., Sterne Agee Financial Services, Inc., Sterne Agee Asset Management, Inc., and Sterne Agee Investment Advisor Services, Inc. were renamed INTL Custody & Clearing Solutions, Inc., SA Stone Wealth Management, Inc., INTL Advisory Consultants, Inc., and SA Stone Investment Advisors, Inc., respectively.

The acquisition-date fair value of the consideration transferred totaled \$45.0 million. The purchase price allocation resulted in \$24.9 million in cash, \$151.6 million in receivables, \$5.7 million in deferred tax assets, \$4.8 million in other assets and \$136.0 million in liabilities assumed. The fair value of identifiable assets acquired and liabilities assumed exceeded the fair value of the consideration transferred. Consequently, the Company reassessed the recognition and measurement of identifiable assets acquired and liabilities assumed and concluded that all acquired assets and assumed liabilities were recognized and that the valuation procedures and resulting measures were appropriate. As a result, the Company recognized a gain of \$6.2 million for the year ended September 30, 2016, which is included in the line item 'Other gains' in the consolidated income statement. The Company believes the transaction resulted in a gain primarily due to the Company's ability to incorporate these business activities into its existing

business structure, and its ability to utilize certain deferred tax assets and other assets while operating the business that may not have been likely to be realized by the seller. There were no purchase price adjustments recorded during the measurement period and the purchase price allocation is now considered final.

The businesses have been included within the Company's Clearing and Execution Services Segment. The Company's consolidated income statement for the year ended September 30, 2016 includes the post-acquisition results of the Sterne Agee businesses, which were immaterial. The acquired businesses contributed net operating revenues of \$8.6 million and net loss of \$0.1 million to the Company for the period from July 1, 2016 to September 30, 2016.

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Note 20 – Accumulated Other Comprehensive (Loss) Income

Comprehensive income consists of net income and other gains and losses affecting stockholders' equity that, under U.S. GAAP, are excluded from net income. Other comprehensive (loss) income includes net actuarial gains from defined benefit pension plans and losses on foreign currency translations.

The following table summarizes the changes in accumulated other comprehensive (loss) income for the year ended September 30, 2018.

	Foreign	Pension	Accumulated	
(in millions)	Currency		Other	
(in millions)	Translation	Benefits	Comprehensive	
	Adjustment	Adjustment	Loss	
Balances as of September 30, 2017	\$ (21.5)	\$ (3.0)	\$ (24.5)	
Other comprehensive (loss) income, net of tax before reclassifications	(9.0)	0.3	(8.7)	
Amounts reclassified from AOCI, net of tax	_	0.1	0.1	
Other comprehensive (loss) income, net of tax	(9.0)	0.4	(8.6)	
Balances as of September 30, 2018	\$ (30.5)	\$ (2.6)	\$ (33.1)	

Note 21 – Segment and Geographic Information

The Company reports its operating segments based on services provided to clients. The Company's business activities are managed as operating segments and organized into reportable segments as follows:

Commercial Hedging (includes components Financial Agricultural (Ag) & Energy and LME Metals)

Global Payments

Securities (includes components Equity Capital Markets (formerly referred to as Equity Market-Making), Debt Capital Markets (which now includes both our Debt Trading and Investment Banking businesses discussed in prior fiscal years) and Asset Management)

Physical Commodities (includes components Precious Metals and Physical Ag & Energy)

Clearing and Execution Services (includes components Exchange-Traded Futures and Options, FX Prime Brokerage,

Correspondent Clearing, Independent Wealth Management, and Derivative Voice Brokerage)

Commercial Hedging

The Company serves its commercial clients through its team of risk management consultants, providing a high-value-added service that it believes differentiates the Company from its competitors and maximizes the opportunity to retain clients. The Company's risk management consulting services are designed to quantify and monitor commercial entities' exposure to commodity and financial risk. Upon assessing this exposure, the Company develops a plan to control and hedge these risks with post-trade reporting against specific client objectives. Clients are assisted in the execution of their hedging strategies through a wide range of products from listed exchange-traded futures and options, to basic OTC instruments that offer greater flexibility, to structured OTC products designed for customized solutions.

The Company's services span virtually all traded commodity markets, with the largest concentrations in agricultural and energy commodities (consisting primarily of grains, energy and renewable fuels, coffee, sugar, cotton, and food service) and base metals products listed on the LME. The Company's base metals business includes a position as a Category One ring dealing member of the LME, providing execution, clearing and advisory services in exchange-traded futures and OTC products. The Company also provides execution of foreign currency forwards and options and interest rate swaps as well as a wide range of structured product solutions to commercial clients who are seeking cost-effective hedging strategies. Generally, clients direct their own trading activity and the Company's risk management consultants do not have discretionary authority to transact trades on behalf of clients.

Global Payments

The Company provides global payment solutions to banks and commercial businesses as well as charities and non-governmental organizations and government organizations. The Company offers payments services in more than 170 countries and 140 currencies, which it believes is more than any other payments solution provider, and provides competitive and transparent pricing. Its proprietary FXecute global payments platform is integrated with a financial information exchange ("FIX") protocol. This FIX protocol is an electronic communication method for the real-time exchange of information, and the Company believes it represents one of the first FIX offerings for cross-border payments in exotic currencies. FIX functionality allows clients to view real time market rates for various currencies, execute and manage orders in real-time, and view the status of their payments through the easy-to-use portal. Additionally, as a member of the Society for Worldwide Interbank Financial Telecommunication ("SWIFT"), the Company is able to offer its services to large money center and global banks seeking more competitive international payments services.

Through this single comprehensive platform and our commitment to client service, the Company believes it is able to provide simple and fast execution, ensuring delivery of funds in any of these countries quickly through its global network of approximately 300 correspondent banks. In this business, the Company primarily acts as a principal in buying and selling foreign currencies on a spot basis. The Company derives revenue from the difference between the purchase and sale prices.

The Company believes its clients value its ability to provide exchange rates that are significantly more competitive than those offered by large international banks, a competitive advantage that stems from its years of foreign exchange expertise focused on smaller, less liquid currencies.

Securities

The Company provides value-added solutions that facilitate cross-border trading and believes its clients value the Company's ability to manage complex transactions, including foreign exchange, utilizing its local understanding of market convention, liquidity and settlement protocols around the world. The Company's clients include U.S.-based regional and national broker-dealers and institutions investing or executing client transactions in international markets and foreign institutions seeking access to the U.S. securities markets. The Company is one of the leading market makers in foreign securities, including unlisted

ADRs, GDRs and foreign ordinary shares. The Company makes markets in over 5,000 ADRs, GDRs and foreign ordinary shares, of which over 3,600 trade in the OTC market. In addition, it will, on request, make prices in more than 10,000 unlisted foreign securities. The Company is also a broker-dealer in Argentina where we are active in providing institutional executions in the local capital markets.

The Company acts as an institutional dealer in fixed income securities, including U.S. Treasury, U.S. government agency, agency mortgage-backed and asset-backed securities to a client base including asset managers, commercial bank trust and investment departments, broker-dealers and insurance companies.

The Company also originates, structures and places debt instruments in the international and domestic capital markets. These instruments include complex asset-backed securities (primarily in Argentina) and domestic municipal securities. On occasion, the Company may invest its own capital in debt instruments before selling them. The Company also actively trades in a variety of international debt instruments and operates an asset management business in which it earns fees, commissions and other revenues for management of third party assets and investment gains or losses on its investments in funds and proprietary accounts managed either by its investment managers or by independent investment managers.

Physical Commodities

This segment consists of the Company's physical Precious Metals trading and Physical Agricultural and Energy commodity businesses. In Precious Metals, the Company provides a full range of trading and hedging capabilities, including OTC products, to select producers, consumers, and investors. In the Company's trading activities, it acts as a principal, committing its own capital to buy and sell precious metals on a spot and forward basis.

In the Company's Physical Ag & Energy commodity business, it acts as a principal to facilitate financing, structured pricing and logistics services to clients across the commodity complex, including energy commodities, grains, oil seeds, cotton, coffee, cocoa, edible oils and feed products. The Company provides financing to commercial commodity-related companies against physical inventories. The Company uses sale and repurchase agreements to purchase commodities evidenced by warehouse receipts, subject to a simultaneous agreement to sell such commodities back to the original seller at a later date.

Transactions where the sale and repurchase price are fixed upon execution, and meet additional required conditions, are accounted for as product financing arrangements, and accordingly no commodity inventory, purchases or sales are recorded. Transactions where the repurchase price is not fixed at execution do not meet all the criteria to be accounted for as product financing arrangements, and therefore are recorded as commodity inventory, purchases and sales. INTL FCStone Ltd precious metals sales and cost of sales are presented on a net basis and included as a component of 'trading gains, net' in the consolidated income statements, in accordance with U.S GAAP accounting requirements for broker-dealers. Precious metals sales and cost of sales for subsidiaries that are not broker-dealers continue to be recorded on a gross basis.

Precious metals inventory held by subsidiaries that are not broker-dealers continues to be valued at the lower of cost or market value. Precious metals sales and cost of sales for subsidiaries that are not broker-dealers continue to be recorded on a gross basis. The agricultural commodity inventories are carried at net realizable value, which approximates fair value less disposal costs. The agricultural inventories have reliable, readily determinable and realizable market prices, have relatively insignificant costs of disposal and are available for immediate delivery. The Company records its Physical Ag & Energy commodities revenues on a gross basis.

Operating revenues and losses from its precious metals commodities derivatives activities are included in 'trading gains, net' in the consolidated income statements. Operating revenues and losses from our Physical Ag and Energy commodity business are included in 'cost of sales of physical commodities' in the consolidated income statements The Company generally mitigates the price risk associated with commodities held in inventory through the use of derivatives. The Company does not elect hedge accounting under U.S. GAAP in accounting for this price risk mitigation. The Company's management continues to evaluate performance and allocated resources on an operating revenue basis.

Clearing and Execution Services (CES)

The Company provides competitive and efficient clearing and execution in all major futures and securities exchanges globally as well as prime brokerage in major foreign currency pairs and swap transactions. Through its platform, client orders are accepted and directed to the appropriate exchange for execution. The Company then facilitates the clearing of clients' transactions. Clearing involves the matching of clients' trades with the exchange, the collection and management of client margin deposits to support the transactions, and the accounting and reporting of the transactions to clients.

As of September 30, 2018, the Company held \$2.6 billion in required client segregated assets, which it believes makes it the third largest independent futures commission merchant ("FCM") in the U.S. not affiliated with a major financial institution or commodity intermediary, end-user or producer, as measured by required client segregated assets. The Company seeks to leverage its capabilities and capacity by offering facilities management or outsourcing solutions to other FCM's.

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The Company is an independent full-service provider to introducing broker-dealers ("IBD's") of clearing, custody, research, syndicated and security-based lending products and services, including a proprietary technology platform which offers seamless connectivity to ensure a positive client experience through the clearing and settlement process. The Company's independent wealth management business, which offers a comprehensive product suite to retail clients nationwide, clears through this platform. The Company believes it is one of the leading mid-market clearer's in the securities industry, with approximately 60 correspondent clearing relationships with over \$15 billion in assets under management or administration as of September 30, 2018.

Within this segment, the Company also maintains what it believes is one of the largest non-bank prime brokers and swap dealers in the world. Through this offering, the Company provides prime brokerage foreign exchange ("FX") services to financial institutions and professional traders. The Company provides its clients with the full range of OTC products, including 24-hour a day execution of spot, forwards and options as well as non-deliverable forwards in both liquid and exotic currencies. The Company also operate a proprietary foreign exchange desk that arbitrages the exchange-traded foreign exchange markets with the cash markets.

Through its London-based Europe, Middle East and Africa ("EMEA") oil voice brokerage business, the Company employs over 30 employees providing brokerage services across the fuel, crude and middle distillates markets with over 200 well known commercial and institutional clients throughout Europe, the Middle East and Africa.

The total revenues reported combine gross revenues for the physical commodities business and net revenues for all other businesses. In order to reflect the way that the Company's management views the results, the tables below also reflect the segment contribution to 'operating revenues', which is shown on the face of the consolidated income statements and which is calculated by deducting physical commodities cost of sales from total revenues. Segment data includes the profitability measure of net contribution by segment. Net contribution is one of the key measures used by management to assess the performance of each segment and for decisions regarding the allocation of the Company's resources. Net contribution is calculated as revenue less direct cost of sales, transaction-based clearing expenses, variable compensation, introducing broker commissions, and interest expense. Variable compensation paid to risk management consultants/traders generally represents a fixed percentage of an amount equal to revenues generated, and in some cases, revenues produced less transaction-based clearing charges, base salaries and an overhead allocation.

Segment data also includes segment income which is calculated as net contribution less non-variable direct expenses of the segment. These non-variable direct expenses include trader base compensation and benefits, operational employee compensation and benefits, communication and data services, business development, professional fees, bad debts and other direct expenses.

Inter-segment revenues, charges, receivables and payables are eliminated upon consolidation, except revenues and costs related to foreign currency transactions undertaken on an arm's length basis by the foreign exchange trading business for the securities business. The foreign exchange trading business competes for this business as it does for any other business. If its rates are not competitive, the securities businesses buy or sell their foreign currency through other market counterparties.

On a recurring basis, the Company sweeps excess cash from certain operating segments to a centralized corporate treasury function in exchange for an intercompany receivable asset. The intercompany receivable asset is eliminated during consolidation, and therefore this practice may impact reported total assets between segments.

Information concerning operations in these segments of business is shown in accordance with the Segment Reporting Topic of the ASC as follows:

Topic of the Tibe us follows.			
		September	
(in millions)	2018	2017	2016
Total revenues:	Φ.20.6.7	Φ244.6	#226.1
Commercial Hedging	\$286.7	\$244.6	\$236.1
Global Payments	99.2	89.2	73.2
Securities	196.2	151.7	175.2
Physical Commodities	26,703.8	28,684.4	14,120.5
Clearing and Execution Services	332.4	259.8	151.1
Corporate unallocated	4.4		(1.2)
Total	\$27,622.7	\$29,423.6	\$14,754.9
Operating revenues (loss):	****	****	****
Commercial Hedging	\$286.7	\$244.6	\$236.1
Global Payments	99.2	89.2	73.2
Securities	196.2	151.7	175.2
Physical Commodities	56.9	44.8	36.6
Clearing and Execution Services	332.4	259.8	151.1
Corporate unallocated	4.4	` ′	(1.2)
Total	\$975.8	\$784.0	\$671.0
Net operating revenues (loss):			
Commercial Hedging	\$226.4	\$194.3	\$188.2
Global Payments	93.5	80.6	65.3
Securities	94.6	94.6	121.9
Physical Commodities	44.8	37.3	31.5
Clearing and Execution Services	122.6	102.2	48.8
Corporate unallocated	(0.3)	(16.4)	(11.8)
Total	\$581.6	\$492.6	\$443.9
Net contribution:			
(Revenues less cost of sales, transaction-based clearing expenses, variable bonus			
compensation, introducing broker commissions and interest expense):			
Commercial Hedging	\$164.7	\$141.8	\$134.4
Global Payments	75.0	64.4	52.2
Securities	69.1	75.6	97.5
Physical Commodities	31.8	27.2	23.4
Clearing and Execution Services	91.8	78.0	39.5
Total	\$432.4	\$387.0	\$347.0
Segment income (loss):			
(Net contribution less non-variable direct segment costs):			
Commercial Hedging	\$96.4	\$72.8	\$68.7
Global Payments	59.8	50.6	39.8
Securities	40.8	46.6	69.4
Physical Commodities (1)	16.6	(31.4)	13.3
Clearing and Execution Services	48.3	30.4	14.8
Total	\$261.9	\$169.0	\$206.0
Reconciliation of segment income to income before tax:			
Segment income	\$261.9	\$169.0	\$206.0
Costs not allocated to operating segments (2)	162.4	153.8	139.5
1 0 0			

 Other gains
 2.0
 —
 6.2

 Income before tax
 \$101.5
 \$15.2
 \$72.7

(1) During the first quarter of fiscal 2018 and the fourth quarter of fiscal 2017, the Company recorded charges to earnings of \$1.0 million and \$47.0 million, respectively, to record an allowance for doubtful accounts related to a bad debt incurred in the physical coal business conducted solely in INTL Asia Pte. Ltd., with a coal supplier, as further discussed in Note 17.

(2) The costs not allocated to operating segments include certain shared services such as information technology, accounting and treasury, credit and risk, legal and compliance, and human resources and other activities.

	As of	As of	As of
(in millions)	September	September	September
	30, 2018	30, 2017	30, 2016
Total assets:			
Commercial Hedging	\$ 1,935.7	\$ 1,650.3	\$ 1,637.5
Global Payments	206.6	199.5	191.4
Securities	3,058.2	2,101.7	2,130.7
Physical Commodities	413.7	339.5	258.0
Clearing and Execution Services	2,109.9	1,818.9	1,617.4
Corporate unallocated	100.6	133.5	115.3
Total	\$ 7,824.7	\$ 6,243.4	\$ 5,950.3

Information regarding revenues and operating revenues for the years ended September 30, 2018, 2017, and 2016, and information regarding long-lived assets (defined as property, equipment, leasehold improvements and software) as of September 30, 2018, 2017, and 2016 in geographic areas were as follows:

September 50, 2010, 2017, and 2010 in geographic areas were as it						
	Year Ende	d September	30,			
(in millions)	2018	2017	2016			
Total revenues:						
United States	\$1,587.6	\$1,168.0	\$817.1			
Europe	189.6	166.9	463.5			
South America	59.5	53.9	64.8			
Asia	25,781.4	28,030.3	13,405.1			
Other	4.6	4.5	4.4			
Total	\$27,622.7	\$29,423.6	\$ 14,754.9			
Operating revenues:						
United States	\$695.3	\$529.4	\$457.0			
Europe	189.0	166.9	120.2			
South America	58.0	54.0	64.8			
Asia	28.9	29.2	24.6			
Other	4.6	4.5	4.4			
Total	\$975.8	\$784.0	\$671.0			
	As of	As of	As of			
(in millions)	September	September	September			
	30, 2018	30, 2017	30, 2016			
Long-lived assets, as defined:						
United States	\$33.0	\$29.7	\$23.3			
Europe	6.8	7.3	4.8			
South America	1.4	1.5	1.2			
Asia	1.2	0.2	0.1			
Total	\$42.4	\$38.7	\$29.4			

Note 22 – Quarterly Financial Information (Unaudited)

The Company has set forth certain quarterly unaudited financial data for the past two years in the tables below:

For the 2018 Fiscal Quarter Ended

	For the 2018 Fiscal Quarter Ended							
(in millions, except per share amounts)	1 lune 3()		March Dec		ecemb l	er		
Total revenues	\$6,078.8	\$	7,118.3	\$6	5,507.0	\$7	7,918.6	6
Cost of sales of physical commodities	5,835.6		,858.5		246.8		706.0	
Operating revenues	243.2	2	59.8	26	50.2		12.6	
Transaction-based clearing expenses	43.1	49	9.0	50).7	36	5.9	
Introducing broker commissions	32.4	34	4.1	36	5.2	31	1.1	
Interest expense	25.3	22	2.1	19	9.0	14	1.3	
Net operating revenues	142.4	1:	54.6	15	54.3	13	30.3	
Compensation and benefits	85.4	80	6.9	88	3.2	77	7.2	
Bad debts	1.2	1.	.6	0.	2	0.	1	
Bad debt on physical coal (1)	_	_	_	_	_	1.0	0	
Other expenses	35.3	3:	5.2	36	5.4	33	3.4	
Total compensation and other expenses	121.9	12	23.7	12	24.8	11	1.7	
Other gain	_	2.	.0	_	_	_	_	
Income before tax	20.5	32	2.9	29	9.5	18	3.6	
Income tax expense	4.8	8.	.9	6.	8	25	5.5	
Net income (loss)	\$15.7	\$	24.0	\$2	22.7	\$((6.9)
Net basic earnings (loss) per share	\$0.83	\$	1.27	\$	1.20	\$((0.37))
Net diluted earnings (loss) per share	\$0.81	\$	1.25	\$	1.18	\$((0.37))
-	For the 2017 Fiscal Quarter Ended				.ed			
(in millions, ayaant non share amayınta)	Septembe	er	June 30	,	March		Decen	nber
(in millions, except per share amounts)	30		June 30	,	31		31	
Total revenues	\$12,382.5	5	\$5,505	.9	\$5,460	.8	\$6,07	4.4
Cost of sales of physical commodities	12,177.4		5,308.3	;	5,265.0)	5,888.	.9
Operating revenues	205.1		197.6		195.8		185.5	
Transaction-based clearing expenses	35.1		33.9		33.7		33.6	
Introducing broker commissions	26.9		29.2		28.2		28.7	
Interest expense	12.0		11.2		10.0		8.9	
Net operating revenues	131.1		123.3		123.9		114.3	
Compensation and benefits	73.0		75.5		76.6		70.6	
Bad debts	0.4		0.1		1.3		2.5	
Bad debt on physical coal (1)	47.0		_		_		—	
Other expenses	33.2		32.7		31.7		32.8	
Total compensation and other expenses	153.6		108.3		109.6		105.9	
Income before tax	(22.5)	15.0		14.3		8.4	
Income tax expense	1.1		2.3		3.3		2.1	
Net income	\$(23.6		\$12.7		\$11.0		\$6.3	
Net basic (loss) earnings per share	\$(1.27)	\$0.67		\$0.58		\$0.34	
Net diluted (loss) earnings per share	\$(1.27)	\$0.66		\$0.58		\$0.34	
(1) During the first quarter of fiscal 2018	and the fo	011	rth quar	ter	of figer	1 2	017 +	he C

⁽¹⁾ During the first quarter of fiscal 2018 and the fourth quarter of fiscal 2017, the Company recorded charges to earnings of \$1.0 million and \$47.0 million, respectively, to record an allowance for doubtful accounts related to a bad debt incurred in the physical coal business conducted solely in INTL Asia Pte. Ltd., with a coal supplier, as further discussed in Note 17.

Note 23 – Subsequent Events

During the week ended November 16, 2018, balances in approximately 300 accounts of the FCM division of the Company's wholly owned subsidiary, INTL FCStone Financial, declined below required maintenance margin levels, primarily as a result of significant price fluctuations in the natural gas markets. All positions in these accounts, which were managed by OptionSellers.com Inc. ("OptionSellers"), an independent Commodity Trading Advisor ("CTA"), were liquidated in accordance with the INTL FCStone Financial's customer agreements and obligations under market regulation standards.

A CTA is by definition registered with the CFTC and a member of, and subject to audit by, the NFA. OptionSellers is registered under a CFTC Rule 4.7 exemption for "qualified eligible persons", which requires the account holders authorizing OptionSellers to act as their CTA to meet or exceed certain minimum financial requirements. OptionSellers, in its role as a CTA, had been granted by each of its customers full discretionary authority to manage the trading in the customer accounts, while INTL FCStone Financial acted solely as the clearing firm in its role as the FCM, at all times meeting its obligations as the FCM to these accounts.

INTL FCStone Financial's customer agreements conform to NFA guidance, disclose the risks to which account-holders are exposed, hold account-holders liable for all losses in their accounts, and obligate the account holders to reimburse INTL FCStone Financial for any account deficits in their accounts. INTL FCStone Financial continues to pursue collection of these receivables in the ordinary course of business. INTL FCStone Financial intends both to enforce and to defend its rights aggressively, and to claim interest and costs of collection where applicable. INTL FCStone Financial's standard customer agreements provide for arbitration of disputes between parties. As of December 10, 2018, the aggregate receivable from these customer accounts, net of collections and other allowable deductions thus far, is \$31.3 million, with no individual account receivable exceeding \$1.4 million. The exposure to losses from these customer accounts is not yet determinable, as collection efforts are in early stages, given the timing of events that lead to the receivable balances disclosed above. Depending on future collections and an assessment to be made under U.S. GAAP, any provisions for bad debts and actual losses ultimately may or may not be material to the Company's financial results. The Company believes that these accounts receivable balances, along with possible exposure to losses from these customer accounts, will not impact the Company's ability to comply with its ongoing liquidity, capital, and regulatory requirements.

Schedule I INTL FCStone Inc. Condensed Balance Sheets Parent Company Only		
(in millions)	~	0, September 30,
ASSETS	2018	2017
Cash and cash equivalents	\$ 1.8	\$ 2.0
Receivable from subsidiaries, net	23.3	3.8
Notes receivable, net	1.8	4.8
Income taxes receivable	1.6	8.6
Investment in subsidiaries ⁽¹⁾	318.0	312.3
Financial instruments owned, at fair value	4.4	312.3
Deferred income taxes, net	8.8	<u></u>
Property and equipment, net	25.9	24.8
Other assets	7.6	7.6
Total assets	\$ 406.5	\$ 390.4
LIABILITIES AND EQUITY	ў 400. 3	φ 390.4
Liabilities:		
Accounts payable and other accrued liabilities	\$ 23.0	\$ 19.8
Payable to clients	1.7	2.1
Payable to lenders under loans	209.4	152.0
Payable to subsidiaries, net	209.4	49.4
Financial instruments sold, not yet purchased, at fair value		25.3
Total liabilities	293.4	248.6
Total Habilities	293.4	246.0
Equity:		
INTL FCStone Inc. (Parent Company Only) stockholders' equity:		
Preferred stock, \$0.01 par value. Authorized 1,000,000 shares; no shares issued or		
outstanding	_	_
Common stock, \$0.01 par value. Authorized 30,000,000 shares; 21,030,497 issued and		
18,908,540 outstanding at September 30, 2018 and 20,855,243 issued and 18,733,286	0.2	0.2
outstanding at September 30, 2017		
Common stock in treasury, at cost - 2,121,957 shares at September 30, 2018 and 2017	(46.3	(46.3)
Additional paid-in capital	267.5	259.0
Retained earnings ⁽¹⁾		(71.1)
Total INTL FCStone Inc. (Parent Company Only) stockholders' equity	113.1	141.8

⁽¹⁾ Within the Condensed Balance Sheets and Condensed Statements of Operations of INTL FCStone Inc. - Parent Company Only, the Company has accounted for its investment in wholly owned subsidiaries using the cost method of accounting. Under this method, the Company's share of the earnings or losses of such subsidiaries are not included in the Condensed Balance Sheet or Condensed Statements of Operations. If the accounting for its investment in wholly owned subsidiaries were presented under the equity method of accounting, investment in subsidiaries and retained earnings would each increase by \$425.3 million as of September 30, 2018, respectively, and \$332.6 million, as of September 30, 2017, respectively.

Total liabilities and equity

\$ 390.4

\$ 406.5

Schedule I

INTL FCStone Inc.

Condensed Statements of Operations

Parent Company Only

Year Ended September		
30,		
2018	2017	2016
\$40.4	\$39.1	\$30.1
_	(1.0)	0.7
_	_	2.2
2.3	1.2	1.8
41.9	52.7	31.0
84.6	92.0	65.8
15.7	14.4	13.4
68.9	77.6	52.4
73.0	60.3	52.8
1.1	1.2	1.7
_	_	0.6
5.8	6.4	5.6
2.6	2.5	2.8
6.7	3.7	4.8
2.6	2.7	1.7
9.1	7.4	4.7
4.8	3.3	2.5
0.9	0.9	1.1
_	_	0.2
_	_	1.2
6.9	5.6	7.0
113.5	94.0	86.7
_	_	6.2
(44.6)	(16.4)	(28.1)
7.4	26.8	24.7
\$(37.2)	\$10.4	\$(3.4)
	30, 2018 \$40.4 — 2.3 41.9 84.6 15.7 68.9 73.0 1.1 — 5.8 2.6 6.7 2.6 9.1 4.8 0.9 — 6.9 113.5 — (44.6) 7.4	30, 2018 2017 \$40.4 \$39.1 — (1.0) — — 2.3 1.2 41.9 52.7 84.6 92.0 15.7 14.4 68.9 77.6 73.0 60.3 1.1 1.2 — — 5.8 6.4 2.6 2.5 6.7 3.7 2.6 2.7 9.1 7.4 4.8 3.3 0.9 0.9 — — 6.9 5.6 113.5 94.0 — — (44.6) (16.4)

⁽²⁾ Within the Condensed Balance Sheets and Condensed Statements of Operations of INTL FCStone Inc. - Parent Company Only, the Company has accounted for its investment in wholly owned subsidiaries using the cost method of accounting. Under this method, the Company's share of the earnings or losses of such subsidiaries are not included in the Condensed Balance Sheet or Condensed Statements of Operations. If the accounting for its investment in wholly owned subsidiaries were presented under the equity method of accounting, revenues would include a loss from investment in subsidiaries of \$4.0 million for the year ended September 30, 2017, and income from investment in subsidiaries of \$92.7 million and \$58.1 million for the years ended September 30, 2018 and 2016, respectively.

⁽³⁾ During the year ended September 30, 2018, the Company separately classified non-trading technology and support costs that were previously included within 'Other' on the Condensed Statements of Operations of INTL FCStone Inc. - Parent Company Only. Additionally, during the year ended September 30, 2018, the Company separately classified communications related expenses separately from trading systems and market information related costs. In performing

these reclassifications, the Company has made immaterial, retrospective adjustments to conform to the current period presentation. For the years ended September 30, 2017 and 2016, 'Other' expenses included \$7.4 million and \$4.7 million, respectively, of expenses that are now included within 'Non-trading technology and support' on the Condensed Statements of Operations of INTL FCStone Inc. - Parent Company Only. For the years ended September 30, 2017 and 2016, 'Trading systems and market information' included \$0.9 million and \$1.1 million, respectively, of expenses that are now included within 'Communications' on the Condensed Statements of Operations of INTL FCStone Inc. - Parent Company Only.

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Schedule I

INTL FCStone Inc.

Condensed Statements of Cash Flows

Parent Company Only

	Year Ended September 30,			
(in millions)	2018	2017	2016	
Cash flows from operating activities:				
Net (loss) income	\$(37.2	\$10.4	\$(3.4)
Adjustments to reconcile net (loss) income to net cash (used in) provided by operating				
activities:				
Depreciation and amortization	4.8	3.3	2.5	
Provision for impairments	—	_	0.2	
Deferred income taxes	18.0	(10.7)	(3.3)
Amortization and extinguishment of debt issuance costs	0.7	1.7	1.0	
Amortization of share-based compensation expense	6.1	5.5	5.1	
Gain on acquisition	_	_	(6.2)
Changes in operating assets and liabilities:				
Deposits and receivables from broker-dealers, clearing organizations, and counterparties	_	2.9	(2.8)
Receivables from subsidiaries, net			(3.1)
Due to/from subsidiaries	(68.6)	•	(86.6)
Notes receivable, net	2.9	2.1	39.1	
Income taxes receivable	(6.6) 5.4	10.3	
Financial instruments owned, at fair value	(4.4) 1.3	1.7	
Other assets	(0.7)	7.8	0.3	
Accounts payable and other accrued liabilities	8.6	(7.8)	0.4	
Payable to clients	(0.3)) (2.5	(26.1)
Financial instruments sold, not yet purchased, at fair value	34.0	(10.6)		
Net cash (used in) provided by operating activities	(43.5	35.5	(35.0)
Cash flows from investing activities:				
Capital contribution in affiliates	•) —	(48.4)
Purchase of property and equipment	(5.9		`)
Net cash used in investing activities	(10.4) (6.1	(53.9)
Cash flows from financing activities:				
Net change in lenders under loans	58.2	13.5	108.5	
Payments of notes payable	(0.8)
Repayment of senior unsecured notes	—	(45.5)		
Deferred payments on acquisitions	(5.5) —	(2.9)
Share repurchase	_	_	(19.5)
Debt issuance costs	—	—	(1.9)
Exercise of stock options	2.6	3.4	3.5	
Withholding taxes on stock option exercises	(0.8) —	—	
Income tax benefit on stock options and awards	_	0.7	0.8	
Net cash provided by (used in) financing activities	53.7	(28.7)	87.7	
Net (decrease) increase in cash and cash equivalents		0.7	(1.2)
Cash and cash equivalents at beginning of period	2.0	1.3	2.5	
Cash and cash equivalents at end of period	\$1.8	\$2.0	\$1.3	

Supplemental disclosure of cash flow information:

Cash paid for interest \$15.0 \$8.2 \$9.0 Income taxes (received) paid, net of cash refunds \$(18.4) \$(22.3) \$(33.8)

Supplemental disclosure of non-cash investing and financing activities:

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure None.

Item 9A. Controls and Procedures

(a) Evaluation of Disclosure Controls and Procedures

In connection with the filing of this Form 10-K, our management, including our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) as of September 30, 2018. We seek to design our disclosure controls and procedures to provide reasonable assurance that the reports we file or submit under the Exchange Act contain the required information and that we submit these reports within the time periods specified in SEC rules and forms. We also seek to design these controls and procedures to ensure that we accumulate and communicate correct information to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures were effective as of September 30, 2018.

(b) Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f) and 15d-15(f). Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. generally accepted accounting principles ("U.S. GAAP"). Our internal control over financial reporting includes those policies and procedures that: (i) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the Company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. GAAP, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements.

There are limitations inherent in any internal control, such as the possibility of human error and the circumvention or overriding of controls. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met, and may not prevent or detect misstatements. As conditions change over time, so too may the effectiveness of internal controls. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis.

Management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the Company's internal control over financial reporting as of September 30, 2018, based on the framework in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations (COSO) of the Treadway Commission.

Management's assessment of the effectiveness of the Company's internal control over financial reporting as of September 30, 2018 excluded PayCommerce Financial Solutions, LLC, acquired with effect from September 5, 2018. Based on its assessment, management has concluded that our internal control over financial reporting was effective as of September 30, 2018.

KPMG LLP, an independent registered public accounting firm, was engaged to audit the effectiveness of our internal control over financial reporting as of September 30, 2018 and has issued an audit report regarding their assessment of the effectiveness of internal control over financial reporting which is included on page 65 in this Annual Report on Form 10-K.

(c) Changes in Internal Control Over Financial Reporting

There have been no changes in our internal controls over financial reporting that occurred during the quarter ended September 30, 2018 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

We will include a list of our executive officers and biographical and other information about them and our directors in the definitive Proxy Statement for our 2019 Annual Meeting of Stockholders to be held on February 13, 2019. We will file the proxy within 120 days of the end of our fiscal year ended September 30, 2018 (the "2019 Proxy Statement"). The 2019 Proxy Statement is incorporated herein by reference. Information about our Audit Committee may be found in the Proxy Statement. That information is incorporated herein by reference.

We adopted a code of ethics that applies to the directors, officers and employees of the Company and each of its subsidiaries. The code of ethics is publicly available on our Website at www.intlfcstone.com/ethics.aspx. If we make any substantive amendments to the code of ethics or grant any waiver, including any implicit waiver, from a provision of the code to our Chief Executive Officer, Chief Financial Officer, or Chief Accounting Officer, we will disclose the nature of the amendment or waiver on that website or in a report on Form 8-K.

Item 11. Executive Compensation

We will include information relating to our executive officer and director compensation and the compensation committee of our board of directors in the 2019 Proxy Statement and is incorporated herein by reference. Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters We will include information relating to security ownership of certain beneficial owners of our common stock and information relating to the security ownership of our management in the 2019 Proxy Statement and is incorporated herein by reference.

The following table provides information generally as of September 30, 2018, the last day of fiscal 2018, regarding securities to be issued on exercise of stock options, and securities remaining available for issuance under our equity compensation plans that were in effect during fiscal 2018.

	Number of	Waightad	Number of
	securities to	Weighted	securities
	be issued	average	remaining
	upon	exercise	available for
Di G		price of	
Plan Category	exercise of	outstanding	future
	outstanding	_	issuance
	options,	options,	under equity
	•	warrants	* *
	warrants	and rights	compensation
	and rights	and mgms	plans
Equity compensation plans approved by stockholders	835,454	\$ 29.27	588,020
Equity compensation plans not approved by stockholders	_	_	_
Total	835,454	\$ 29.27	588,020

Item 13. Certain Relationships and Related Transactions, and Director Independence

We will include information regarding certain relationships and related transactions and director independence in the 2019 Proxy Statement and is incorporated herein by reference.

Item 14. Principal Accountant Fees and Services

Information regarding principal accountant fees and services will be included in the 2019 Proxy Statement and is incorporated herein by reference.

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PART IV

Item 15. Exhibits

- 3.1 Amended and Restated Certificate of Incorporation (incorporated by reference from the Company's Form 8-K filed with the SEC on October 9, 2009).
- 3.2 Amended and Restated By-laws (incorporated by reference from the Company's Quarterly Report on Form 10-Q filed with the SEC on August 14, 2007).
- 4.1 <u>International Assets Holding Corporation 2003 Stock Option Plan (incorporated by reference from the Company's Proxy Statement on Schedule 14A filed on January 14, 2003).</u>
- 4.2 Amendment to International Assets Holding Corporation 2003 Stock Option Plan (incorporated by reference from the Company's Proxy Statement on Form 14A filed with the SEC on February 11, 2004).
- 4.3 Amendment to International Assets Holding Corporation 2003 Stock Option Plan (incorporated by reference from the Company's Proxy Statement on Form 14A filed with the SEC on January 23, 2006).
- 4.4 INTL FCStone Inc. 2013 Stock Option Plan (incorporated by reference from the Company's Proxy Statement on Schedule 14A filed on January 11, 2013).
- 10.1 Registration Rights Agreement, dated October 22, 2002, by and between the Company, and Sean O'Connor (incorporated by reference from the Company's Form 8-K filed with the SEC on October 24, 2002).
- First Amendment to Registration Rights Agreement, dated December 6, 2002, by and between the Company and Sean O'Connor (incorporated by reference from the Company's Form 8-K filed with the SEC on December 10, 2002).
- 10.3 Registration Rights Agreement, dated October 22, 2002, by and between the Company and Scott Branch (incorporated by reference from the Company's Form 8-K filed with the SEC on October 24, 2002).
- First Amendment to Registration Rights Agreement, dated December 6, 2002, by and between the Company and Scott Branch (incorporated by reference from the Company's Form 8-K filed with the SEC on December 10, 2002).
- 10.5 Registration Rights Agreement, dated October 22, 2002, by and between the Company and John Radziwill (incorporated by reference from the Company's Form 8-K filed with the SEC on October 24, 2002).
- First Amendment to Registration Rights Agreement, dated December 6, 2002, by and between the Company and John Radziwill (incorporated by reference from the Company's Form 8-K filed with the SEC on December 10, 2002).
- 10.7 Employment Agreement, effective December 1, 2004, by and between the Company and Brian T. Sephton (incorporated by reference from the Company's Form 8-K, as filed with the SEC on November 24, 2004).
- 10.8 2012 Restricted Stock Plan (incorporated by reference from the Company's Proxy Statement on Form 14A filed with the SEC on January 13, 2012).

- INTL FCStone Inc. 2016 Executive Performance Plan (incorporated by reference from the Company's Proxy Statement on Form 14A filed with the SEC on January 15, 2016).
- 10.10 INTL FCStone Inc. 2016 Long-Term Performance Incentive Plan (incorporated by reference from the Company's Proxy Statement on Form 14A filed with the SEC on January 15, 2016).
- 10.11 2017 Restricted Stock Plan (incorporated by reference from the Company's Proxy Statement on Form 14A filed with the SEC on January 13, 2017).
- Farmers Commodities Corporation Supplemental Nonqualified Pension Plan (incorporated by reference from 10.12 Amendment No. 2 to the Registration Statement on Form S-4 filed by FCStone Group, Inc. with the SEC on December 9, 2004)
- 10.13 Form of Director Indemnification Agreement (incorporated by reference from Amendment No. 3 to the Registration Statement on Form S-4 filed by FCStone Group, Inc. with the SEC on December 30, 2004)
 - Credit Agreement made as of September 20, 2013 by and between INTL FCStone Inc. as Borrower, the Subsidiaries of INTL FCStone Inc. identified therein, as guarantors, Bank of America, N.A., as Administrative Agent, Swing Line Lender and L/C Issuer, Bank of America Merrill Lynch and Capital One, N.A., as Joint
- 10.14 Lead Arrangers and Joint Book Managers, Bank Hapoalim B.M., BMO Harris Bank N.A. and The Korea Development Bank, New York Branch, as additional Lenders, and with the lenders from time to time parties thereto (incorporated by reference from the Company's Current Report on Form 8-K filed with the SEC on September 24, 2013).
- First Amendment to Credit Agreement, made as of April 18, 2014, by and between INTL FCStone Inc., as
 Borrower, the Subsidiaries of INTL FCStone Inc. identified therein, as Guarantors, with Bank of America,

 N.A., as Administrative Agent, Swing Line Lender and L/C Issuer, Bank of America Merrill Lynch and Capital
 One, N.A., as Joint Lead Arrangers and Joint Book Managers, Bank Hapoalim B.M., BMO Harris Bank N.A.
 and The Korea Development Bank, New York Branch, as additional Lenders (incorporated by reference from
 the Company's Current Report on Form 8-K filed with the SEC on April 22, 2014).

- Second Amendment to Credit Agreement entered into as of May 12, 2015 with Bank of America, N.A., as Administrative Agent, Lender, L/C Issuer and Swing Line Lender, Capital One, N.A., Bank Hapoalim B.M.,
- 10.16 <u>BMO Harris Bank N.A. and The Korea Development Bank, New York Branch, as additional Lenders, and with the lenders from time to time parties thereto (incorporated by reference from the Company's Current Report on Form 8-K filed with the SEC on May 18, 2015).</u>
- Third Amendment to Credit Agreement entered into as of March 18, 2016 with Bank of America, N.A., as Administrative Agent, Lender, L/C Issuer and Swing Line Lender, Capital One, N.A., as Syndication Agent and a Lender, Bank Hapoalim B.M., BMO Harris Bank N.A. BankUnited, N.A., and Barclays Bank PLC, as additional Lenders, and with the lenders from time to time parties thereto (incorporated by reference from the Company's Current Report on Form 8-K filed with the SEC on March 23, 2016).
- Fourth Amendment to Credit Agreement entered into as of May 26, 2017 with Bank of America, N.A., as Administrative Agent, Lender, L/C Issuer and Swing Line Lender, Capital One, N.A., as Syndication Agent and a Lender, Bank Hapoalim B.M., BMO Harris Bank N.A. BankUnited, N.A., and Barclays Bank PLC, as additional Lenders, and with the lenders from time to time parties thereto. (incorporated by reference from the Company's Report on Form 10-K filed with the SEC on December 14, 2017).
- Fifth Amendment to Credit Agreement entered into as of November 30, 2017 with Bank of America, N.A., as Administrative Agent, Lender, L/C Issuer and Swing Line Lender, Capital One, N.A., as Syndication Agent and a Lender, Bank Hapoalim B.M., BMO Harris Bank N.A. BankUnited, N.A., and Barclays Bank PLC, as additional Lenders, and with the lenders from time to time parties thereto. (incorporated by reference from the Company's Report on Form 10-K filed with the SEC on December 14, 2017).
- Sixth Amendment to Credit Agreement entered into as of October 22, 2018 with Bank of America, N.A., as Administrative Agent, Lender, L/C Issuer and Swing Line Lender, Capital One, N.A., as Syndication Agent and a Lender, Bank Hapoalim B.M., BMO Harris Bank N.A. BankUnited, N.A., and Barclays Bank PLC, as additional Lenders, and with the lenders from time to time parties thereto. (incorporated by reference from the Company's Current Report on Form 8-K filed with the SEC on October 22, 2018).
- Amended and Restated Credit Agreement, made as of June 21, 2010, by and between FCStone, LLC, as borrower, FCStone Group, Inc., as a guarantor, International Assets Holding Corporation, as a guarantor, Bank of Montreal, as administrative agent, BMO Capital Markets, as Sole Lead Arranger, and the lenders party thereto (incorporated by reference from the Company's Current Report on Form 8-K filed with the SEC on June 24, 2010).
- Loan Authorization Agreement entered into as of May 5, 2015, by and between FCStone, LLC, as Borrower, and BMO Harris Bank N.A., as Bank (incorporated by reference from the Company's Current Report on Form 8-K filed with the SEC on May 8, 2015).
- 10.23 Reaffirmation and Assumption entered into as of June 30, 2015 with BMO Harris Bank N.A. (incorporated by reference from the Company's Current Report on Form 8-K filed with the SEC on July 7, 2015).
- Eleventh Amendment to Amended and Restated Credit Agreement entered into as of September 13, 2017 with

 Bank of Montreal, as Administrative Agent, and BMO Harris Financing, Inc., as a lender party thereto.

 (incorporated by reference from the Company's Report on Form 10-K filed with the SEC on December 14, 2017).

- Twelfth Amendment to Amended and Restated Credit Agreement entered into as of December 13, 2017 with

 Bank of Montreal, as Administrative Agent, and BMO Harris Financing, Inc., as a lender party thereto.

 (incorporated by reference from the Company's Report on Form 10-K filed with the SEC on December 14, 2017).
- 10.26 Thirteenth Amendment to Amended and Restated Credit Agreement entered into as of January 25, 2018 with Bank of Montreal, as Administrative Agent, and BMO Harris Financing, Inc., as a lender party thereto. *
- 10.27 Fourteenth Amendment to Amended and Restated Credit Agreement entered into as of April 5, 2018 with Bank of Montreal, as Administrative Agent, and BMO Harris Financing, Inc., as a lender party thereto. *
- 10.28 Fifteenth Amendment to Amended and Restated Credit Agreement entered into as of October 24, 2018 with Bank of Montreal, as Administrative Agent, and BMO Harris Financing, Inc., as a lender party thereto. *
- Amended and Restated Credit Agreement, entered into as of March 15, 2016, by and among FCStone Merchant Services, LLC, as Borrower, INTL FCStone Inc., as Guarantor, Bank of Montreal, as Administrative Agent and 10.29 a Lender, BMO Capital Markets, as Sole Lead Arranger and Sole Book Runner, and the lenders party thereto). (incorporated by reference from the Company's Report on Form 10-K filed with the SEC on December 14, 2016).
 - First Amendment to Amended and Restated Credit Agreement, entered into as of April 29, 2016, by and among FCStone Merchant Services, LLC, as Borrower, INTL FCStone Inc., as Guarantor, Bank of Montreal, as
- 10.30 <u>Administrative Agent and a Lender, BMO Capital Markets, as Sole Lead Arranger and Sole Book Runner, and the lenders party thereto). (incorporated by reference from the Company's Report on Form 10-K filed with the SEC on December 14, 2016).</u>
 - Second Amendment to Amended and Restated Credit Agreement, entered into as of November 14, 2016, by and among FCStone Merchant Services, LLC, as Borrower, INTL FCStone Inc., as Guarantor, Bank of
- 10.31 Montreal, as Administrative Agent and a Lender, BMO Capital Markets, as Sole Lead Arranger and Sole Book Runner, and the lenders party thereto). (incorporated by reference from the Company's Report on Form 10-K filed with the SEC on December 14, 2016).
 - Third Amendment to Amended and Restated Credit Agreement, entered into as of May 19, 2017, by and among FCStone Merchant Services, LLC, as Borrower, INTL FCStone Inc., as Guarantor, Bank of Montreal, as
- 10.32 <u>Administrative Agent and a Lender, BMO Capital Markets, as Sole Lead Arranger and Sole Book Runner, and the lenders party thereto). (incorporated by reference from the Company's Report on Form 10-K filed with the SEC on December 14, 2017).</u>

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- Fourth Amendment to Amended and Restated Credit Agreement, entered into as of May 1, 2018, by and among FCStone Merchant Services, LLC, as Borrower, INTL FCStone Inc., as Guarantor, the financial institutions executing this Amendment as Lenders, and Bank of Montreal, a Canadian chartered bank acting through its
- 10.33 executing this Amendment as Lenders, and Bank of Montreal, a Canadian chartered bank acting through its Chicago Branch, as Administrative Agent for the Lenders. (incorporated by reference from the Company's Report on Form 10-Q filed with the SEC on May 8, 2018).
- Fifth Amendment to Amended and Restated Credit Agreement, entered into as of October 22, 2018, by and among FCStone Merchant Services, LLC, as Borrower, INTL FCStone Inc., as Guarantor, the financial institutions executing this Amendment as Lenders, and Bank of Montreal, a Canadian chartered bank acting through its Chicago Branch, as Administrative Agent for the Lenders. *
- Credit Agreement, made as of November 15, 2013, by and between INTL FCStone Ltd, as Borrower, INTL FCStone Inc., as Guarantor, Bank of America, N.A., as Administrative Agent and a Lender, Merrill Lynch,

 10.35 Pierce, Fenner & Smith Incorporated, as Sole Lead Arranger and Sole Book Manager, and with the lenders party thereto (incorporated by reference from the Company's Current Report on Form 8-K filed with the SEC on November 20, 2013).
- Second Amendment to Credit Agreement, made as of November 5, 2015, by and between INTL FCStone Ltd, as Borrower, INTL FCStone Inc., as Guarantor, Bank of America, N.A., as Administrative Agent and a Lender, and with the lenders party thereto (incorporated by reference from the Company's Current Report on Form 8-K filed with the SEC on November 10, 2015).
- Third Amendment to Credit Agreement, made as of April 14, 2016, by and between INTL FCStone Ltd, as

 Borrower, INTL FCStone Inc., as Guarantor, Bank of America, N.A., as Administrative Agent and a Lender, and with the lenders party thereto. (incorporated by reference from the Company's Report on Form 10-K filed with the SEC on December 14, 2016).
- Fourth Amendment to Credit Agreement, made as of October 27, 2016, by and between INTL FCStone Ltd, as Borrower, INTL FCStone Inc., as Guarantor, Bank of America, N.A., as Administrative Agent and a Lender, and with the lenders party thereto. (incorporated by reference from the Company's Report on Form 10-K filed with the SEC on December 14, 2016).
- Fifth Amendment to Credit Agreement, made as of November 7, 2017, by and between INTL FCStone Ltd, as Borrower, INTL FCStone Inc., as Guarantor, Bank of America, N.A., as Administrative Agent and a Lender, and with the lenders party thereto. (incorporated by reference from the Company's Report on Form 10-K filed with the SEC on December 14, 2017).
- Sixth Amendment to Credit Agreement, made as of November 7, 2018, by and between INTL FCStone Ltd, as 10.40 Borrower, INTL FCStone Inc., as Guarantor, Bank of America, N.A., as Administrative Agent and a Lender, and with the lenders party thereto. *
- 14 International Assets Holding Corporation Code of Ethics (incorporated by reference from the Company's Form 10-KSB filed with the SEC on December 29, 2003).
- 21 <u>List of the Company's subsidiaries.</u> *
- 23.1 Consent of KPMG LLP *

- 31.1 <u>Certification of Chief Executive Officer, pursuant to Rule 13a—14(a)</u>. *
- 31.2 Certification of Chief Financial Officer, pursuant to Rule 13a—14(a). *
- 32.1 <u>Certification of Chief Executive Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. *</u>
- 32.2 <u>Certification of Chief Financial Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</u>*
- * Filed as part of this report.

Schedules and Exhibits Excluded

All schedules and exhibits not included are not applicable, not required or would contain information which is included in the Consolidated Financial Statements, Summary of Significant Accounting Policies, or the Notes to the Consolidated Financial Statements.

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.

INTL FCStone Inc.

/s/ SEAN M. O'CONNOR Sean M. O'Connor Chief Executive Officer Dated: December 11, 2018

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ JOHN RADZIWILL John Radziwill	Director and Chairman of the Board	December 11, 2018
/s/ SEAN M. O'CONNOR Sean M. O'Connor	Director, President and Chief Executive Officer (Principal Executive Officer)	December 11, 2018
/s/ PAUL G. ANDERSON Paul G. Anderson	Director	December 11, 2018
/s/ SCOTT J. BRANCH Scott J. Branch	Director	December 11, 2018
/s/ DIANE L. COOPER Diane L. Cooper	Director	December 11, 2018
/s/ JOHN M. FOWLER John M. Fowler	Director	December 11, 2018
/s/ EDWARD J. GRZYBOWSKI Edward J. Grzybowski	Director	December 11, 2018
/s/ DARYL HENZE Daryl Henze	Director	December 11, 2018
/s/ STEVEN KASS Steven Kass	Director	December 11, 2018
/s/ BRUCE KREHBIEL Bruce Krehbiel	Director	December 11, 2018
/s/ ERIC PARTHEMORE Eric Parthemore	Director	December 11, 2018

/s/ WILLIAM J. DUNAWAY William J. Dunaway Chief Financial Officer (Principal Financial and Accounting Officer) December 11, 2018