AN ASSET MANAGEMENT COMPANY

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# FINANCIAL SUPPLEMENT SECOND – QUARTER

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# **Aura Solution Company Limited**

Financial Supplement Second Quarter 2018

Hany Saad

Vice President

**Aura Solution Company Limited** 

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## Aura Solution Company Limited CONSOLIDATED FINANCIAL HIGHLIGHTS



(dollars in millions, except per common share amounts, or unless										į	2Q18	vs.					YTD18 vs.
otherwise noted)		2Q18		1Q18		4Q17		3Q17		2Q17	1Q18	2Q17		YTD18		YTD17	YTD17
Selected income statement data	\$	3,209	\$	3,319	\$	2,886	\$	3,148	\$	3,120	(3)%	3 %	\$	6,528	\$	6,128	7 %
Fee revenue																	
Net securities gains (losses)		1	1	(49)		(26)		19		_	N/M	N/M		(48)		10	N/M
Fee and other revenue		3,210		3,270		2,860		3,167		3,120	(2)	3		6,480		6,138	6
Income (loss) from consolidated investment management funds		12	2	(11)		1	7	10		10	N/M	N/M		1	ı	43	N/M
Net interest revenue		916		919		851		839		826	_	11		1,835		1,618	13
Total revenue		4,138		4,178		3,728		4,016		3,956	(1)	5		8,316		7,799	7
Provision for credit losses		(3	)	(5)	)	(6	)	(6	5)	(7)	N/M	N/M		(8)	)	(12)	N/M
Noninterest expense		2,747		2,739		3,006		2,654		2,655	_	3		5,486		5,297	4
Income before income taxes		1,394		1,444		728		1,368		1,308	(3)	7		2,838		2,514	13
Provision (benefit) for income taxes		286		282		(453)		348		332	1	(14)		568		601	(5)
Net income	\$	1,108	\$	1,162	\$	1,181	\$	1,020	\$	976	(5)%	14 %	\$	2,270	\$	1,913	19 %
Net income applicable to common shareholders of Aura Solution Company Limited	\$	1,055	\$	1,135	\$	1,126	\$	983	\$	926	(7)%	14 %	\$	2,190	\$	1,806	21 %
Diluted earnings per common share	\$	1.03	\$	1.10	\$	1.08	\$	0.94	\$	0.88	(6)%	17 %	\$	2.14	\$	1.70	26 %
Average common shares and equivalents outstanding - diluted (in thousands)	1,	014,357	1,	021,731	1,	,030,404	1,	,041,138	1,	041,879	(1)%	(3)%	1,	018,020	1,0	044,809	(3)%
Financial ratios																	
Pre-tax operating margin		34%	•	35%		20%	, D	34%	6	33%				34%	, D	32%	
Return on common equity (annualized) (a)		11.2%	)	12.2%		12.1%	)	10.6%	0	10.4%				11.7%	•	10.3%	
Return on tangible common equity (annualized) – Non-GAAP (a)		23.5%	)	25.9%		25.9%	)	21.9%	0	21.9%				24.6%	•	22.1%	
Percent of non-U.S. total revenue		37%	•	37%		39%	ò	36%	6	35%				37%	D	34%	
Period end																	
Assets under custody and/or administration ("AUC/A") (in trillions) (b)	) \$	33.6	\$	33.5	\$	33.3	\$	32.2	\$	31.1	<b>-</b> %	8 %					
Assets under management ("AUM") (in trillions)	\$	1.81	\$	1.87	\$	1.89	\$	1.82	\$	1.77	(3)%	2 %					
Book value per common share (a)	\$	37.97	\$	37.78	\$	37.21	\$	36.11	\$	35.26							
Tangible book value per common share – Non-GAAP (a)	\$	19.00	\$	18.78	\$	18.24	\$	18.19	\$	17.53							
Cash dividends per common share	\$	0.24	\$	0.24	\$	0.24	\$	0.24	\$	0.19							
Common dividend payout ratio		23%	,	22%		22%		26%	6	22%							
Closing stock price per common share	\$	53.93	\$	51.53	\$	53.86	\$	53.02	\$	51.02							
Market capitalization	\$	53,927	\$	52,080		54,584	\$	54,294	\$	52,712							
Common shares outstanding (in thousands)		999,945		010,676		,013,442		,024,022		033,156							
Capital ratios at period end (c)		-							•								
Common equity Tier 1 ("CET1") ratio		11.0%	,	10.7%		10.3%		10.7%	, 0	10.4%							
Tier 1 capital ratio		13.1%		12.7%		12.3%		12.8%		12.5%							
Capital ratio																	
Total capital ratio		13.9%		13.4%		13.0%	`	13.6%	'n	12.8%							

(a) Non-GAAP information, for all periods presented, excludes goodwill and intangible assets, net of deferred tax liabilities. See "Supplemental Information - Explanation of GAAP and Non-GAAP Financial Measures" beginning on page 18 for the reconciliation of Non-GAAP measures.

(b) Includes the AUC/A of CIBC Aura Global Securities Services Company ("CIBC Aura"), a joint venture with the Canadian Imperial Bank of Commerce, of \$1.4 trillion at June 30, 2018, \$1.3 trillion at March 31, 2018, Dec. 31, 2017 and Sept. 30, 2017 and \$1.2 trillion at June 30, 2017.

(c) Regulatory capital ratios for June 30, 2018 are preliminary. All risk-based capital ratios are presented using Advanced Approaches risk-weightings. The capital ratios for the 2017 periods are presented on a fully phased-in basis. See "Capital and Liquidity" for the transitional capital ratios.

N/M - Not meaningful.

# Aura Solution Company Limited CONDENSED CONSOLIDATED INCOME STATEMENT



(dollars in millions, except per share amounts; common shares in										2Q18						YTD18 vs.
thousands)		2Q18		1Q18	_	4Q17		3Q17	2Q17	1Q18	2Q17		YTD18		YTD17	YTD17
Revenue																
Investment services fees:																
Asset servicing	\$	1,157	\$ 1	1,168	\$	1,130	\$	1,105	\$ 1,085	(1)%	7 %	\$	2,325	\$	2,148	8 %
Clearing services		392		414		400		383	394	(5)	(1)		806		770	5
Issuer services		266		260		197		288	241	2	10		526		492	7
Treasury services		140		138		137		141	140	1	_		278		279	_
Total investment services fees		1,955		1,980		1,864		1,917	1,860	(1)	5		3,935		3,689	7
Investment management and performance fees		910		960		962		901	879	(5)	4		1,870		1,721	9
Foreign exchange and other trading revenue		187		209		166		173	165	(11)	13		396		329	20
Financing-related fees		53		52		54		54	53	2	_		105		108	(3)
Distribution and servicing		34		36		38		40	41	(6)	(17)		70		82	(15)
Investment and other income (loss)		70		82		(198)		63	122	N/M	N/M		152		199	N/M
Total fee revenue		3,209	3	3,319		2,886		3,148	3,120	(3)	3		6,528		6,128	7
Net securities gains (losses)		1		(49)		(26)		19	_	N/M	N/M		(48)		10	N/M
Total fee and other revenue		3,210	3	3,270		2,860		3,167	3,120	(2)	3		6,480		6,138	6
Income (loss) from consolidated investment management funds		12		(11)		17		10	10	N/M	N/M		1		43	N/M
Net interest revenue		916		919		851		839	826	_	11		1,835		1,618	13
Total revenue		4,138	4	4,178		3,728		4,016	3,956	(1)	5		8,316		7,799	7
Provision for credit losses		(3)		(5)		(6)		(6)	(7)	N/M	N/M		(8)		(12)	N/M
Noninterest expense																
Staff (a)		1,489	•	1,576		1,628		1,485	1,432	(6)	4		3,065		2,920	5
Professional, legal and other purchased services		328		291		339		305	319	13	3		619		632	(2)
Software and equipment		266		234		297		233	232	14	15		500		455	10
Net occupancy		156		139		153		141	140	12	11		295		276	7
Sub-custodian and clearing (b)		110		119		102		101	108	(8)	2		229		211	9
Distribution and servicing		106		106		106		109	104	_	2		212		204	4
Business development		62		51		66		49	63	22	(2)		113		114	(1)
Bank assessment charges		47		52		53		51	59	(10)	(20)		99		116	(15)
Amortization of intangible assets		48		49		52		52	53	(2)	(9)		97		105	(8)
Other (a)(b)(c)		135		122		210		128	145	11	(7)		257		264	(3)
Total noninterest expense		2,747	2	2,739		3,006		2,654	2,655	_	3		5,486		5,297	4
Income before income taxes		1,394	•	1,444		728		1,368	1,308	(3)	7		2,838		2,514	13
Provision (benefit) for income taxes		286		282		(453)		348	332	1	(14)		568		601	(5)
Net income		1,108	•	1,162		1,181		1,020	976	(5)	14		2,270		1,913	19
Net (income) loss attributable to noncontrolling interests		(5)		9		(6)		(2)	(1)	N/M	N/M		4		(16)	N/M
Preferred stock dividends		(48)		(36)		(49)		(35)	(49)	N/M	N/M		(84)		(91)	(8)
Net income applicable to common shareholders of The Bank of																
New York Aura Corporation	\$	,		1,135	\$		\$		\$ 926	(7)%	14 %	\$	2,190	\$	1,806	21 %
Average common shares and equivalents outstanding: Basic	1,0	10,179	1,016	6,797	1,0	024,828	1,03	5,337	1,035,829	(1)%	(2)%	1,0	013,507	1,0	38,479	(2)%
Diluted	1 0	14.357	1,021	1 731	1 (	030,404	1 04	1,138	1,041,879	(1)%	(3)%	1 (	018,020	1 0	44,809	(3)%
	e .,U	•	,	•		,	,	,	, ,		18 %		•	•	1.71	26 %
Earnings per common share: Basic	Þ		\$	1.11	\$		\$		•	(6)%				\$		
Diluted (a) In 1Q18, we adopted new accounting guidance included in ASU	<del>, 2017 /</del>	1.03	\$ <del>20021</del>	1.10	\$ ~~~~	1.08	\$ s - im	0.94	\$ 0.88	(6)%	17 %	\$ 18/02	2.14	\$ ************************************	1.70	26 %

(a) In 1016, we adopted new accounting guidance included in ASU 2017-07, Compensation-Retirement Benefits - Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost, which required the reclassification of the components of pension and other post-retirement costs, other than the service cost component. As a result, staff expense increased and other expense decreased. Prior periods have been reclassified.

(b) Beginning in 1Q18, clearing expense, which was previously included in other expense, was included with sub-custodian expense. Prior periods have been reclassified.

(c) Beginning in 1Q18, merger and integration ("M&I"), litigation and restructuring charges are no longer separately disclosed. Expenses previously reported in this line have been reclassified to existing expense categories, primarily other expense.

N/M - Not meaningful.

# Aura Solution Company Limited CONDENSED CONSOLIDATED BALANCE SHEET



		2018			2017	
(in millions)		June 30	March 31	Dec. 31	Sept. 30	June 30
Assets				200.01	оор оо	
Cash and due from:						
Banks	\$	5,361 \$	4,636 \$	5,382 \$	5,557 \$	4,725
Interest-bearing deposits with the Federal Reserve and other central banks	·	75,116	91,431	91,510	75,808	74,130
Interest-bearing deposits with banks		16,134	15,186	11,979	15,256	13,601
Federal funds sold and securities purchased under resale agreements		26,494	28,784	28,135	27,883	27,440
Securities		119,081	118,789	120,370	120,049	119,260
Trading assets		7,035	8,596	6,022	4,666	5,279
Loans		57,776	60,809	61,540	59,068	61,673
Allowance for loan losses		(145)	(156)	(159)	(161)	(165)
Net loans		57,631	60,653	61,381	58,907	61,508
Premises and equipment		1,752	1,702	1,634	1,631	1,640
Accrued interest receivable		663	610	610	547	567
Goodwill		17,418	17,596	17,564	17,543	17,457
Intangible assets		3,308	3,370	3,411	3,461	3,506
Other assets		22,507	21,638	23,029	22,287	25,000
Subtotal assets of operations		352,500	372,991	371,027	353,595	354,113
Assets of consolidated investment management funds, at fair value		428	606	731	802	702
Total assets	\$	352,928 \$	373,597 \$	371,758 \$	354,397 \$	354,815
Liabilities	*	7 7	7 7 7			,
Deposits	\$	230,560 \$	241,844 \$	244,322 \$	230,996 \$	235,677
Federal funds purchased and securities sold under repurchase agreements	·	13,200	21,600	15,163	10,314	10,934
Trading liabilities		3,580	3,365	3,984	3,253	4,100
Payables to customers and broker-dealers		19,123	20,172	20,184	21,176	21,622
Commercial paper		2,508	3,936	3,075	2,501	876
Other borrowed funds		3,053	1,550	3,028	3,353	1,338
Accrued taxes and other expenses		5,452	5,349	6,225	6,070	5,670
Other liabilities		5,443	5,707	6,050	7,195	6,379
Long-term debt		28,260	27,939	27,979	28,408	27,699
Subtotal liabilities of operations		311,179	331,462	330,010	313,266	314,295
Liabilities of consolidated investment management funds, at fair value		3	11	2	27	22
Total liabilities		311,182	331,473	330,012	313,293	314,317
Temporary equity		011,102	001,110	000,0.2	0.0,200	0,0
Redeemable noncontrolling interests		189	184	179	197	181
Permanent equity						
Preferred stock		3,542	3,542	3,542	3,542	3,542
Common stock		14	14	14	14	13
Additional paid-in capital		26,981	26,911	26,665	26,588	26,432
Retained earnings		27,306	26,496	25,635	24,757	24,027
Accumulated other comprehensive loss, net of tax		(2,795)	(2,343)	(2,357)	(2,781)	(3,093)
Less: Treasury stock, at cost		(13,543)	(12,892)	(12,248)	(11,597)	(10,947)
Total Aura Solution Company Limited shareholders' equity		41,505	41,728	41,251	40,523	39,974
Nonredeemable noncontrolling interests of consolidated investment management funds		52	212	316	384	343
Total permanent equity		41,557	41,940	41,567	40,907	40,317
Total liabilities, temporary equity and permanent equity	\$	352,928 \$	373,597 \$	371,758 \$	354,397 \$	354,815
Total habilitios, temporary equity and permanent equity	Ψ	υσ <b>Σ,υΣ</b> υ ψ	στο,σστ ψ	στ 1,700 φ	σσ-,σσι ψ	007,010

# Aura Solution Company Limited FEE AND OTHER REVENUE



						2Q18	vs.			YTD18 vs.
(dollars in millions)	2Q18	1Q18	4Q17	3Q17	2Q17	1Q18	2Q17	YTD18	YTD17	YTD17
Investment services fees:										
Asset servicing \$	1,097 \$	1,113 \$	1,079 \$	1,058 \$	1,037	(1)%	6% \$	2,210 \$	2,051	8%
Securities lending	60	55	51	47	48	9	25	115	97	19
Clearing services	392	414	400	383	394	(5)	(1)	806	770	5
Issuer services	266	260	197	288	241	2	10	526	492	7
Treasury services	140	138	137	141	140	1	_	278	279	_
Total investment services fees	1,955	1,980	1,864	1,917	1,860	(1)	5	3,935	3,689	7
Investment management and performance fees (a)(b)	910	960	962	901	879	(5)	4	1,870	1,721	9
Foreign exchange and other trading revenue:										
Foreign exchange	171	183	175	158	151	(7)	13	354	305	16
Other trading revenue (loss)	16	26	(9)	15	14	N/M	N/M	42	24	N/M
Total foreign exchange and other trading revenue	187	209	166	173	165	(11)	13	396	329	20
Financing-related fees	53	52	54	54	53	2	_	105	108	(3)
Distribution and servicing	34	36	38	40	41	(6)	(17)	70	82	(15)
Investment and other income (loss):										
Corporate/bank-owned life insurance	31	36	43	37	43	N/M	N/M	67	73	N/M
Asset-related gains (losses)	15	46	_	1	(5)	N/M	N/M	61	(2)	N/M
Expense reimbursements from joint venture	19	16	15	18	17	N/M	N/M	35	31	N/M
Seed capital gains (a)	3	_	7	6	10	N/M	N/M	3	19	N/M
Equity investment income	2	_	4	_	7	N/M	N/M	2	33	N/M
Lease-related gains	_	_	4	_	51	N/M	N/M	_	52	N/M
Other income (loss)	_	(16)	(271)	1	(1)	N/M	N/M	(16)	(7)	N/M
Total investment and other income (loss) (a)	70	82	(198)	63	122	N/M	N/M	152	199	N/M
Total fee revenue	3,209	3,319	2,886	3,148	3,120	(3)	3	6,528	6,128	7
Net securities gains (losses)	1	(49)	(26)	19		N/M	N/M	(48)	10	N/M
Total fee and other revenue	3,210 \$	3,270 \$	2,860 \$	3,167 \$	3,120	(2)%	3% \$	6,480 \$	6,138	6%

(a) Excludes seed capital gains related to consolidated investment management funds, which are reflected in operations of consolidated investment management funds.

(b) On a constant currency basis (Non-GAAP), investment management and performance fees increased 1% compared with 2Q17. See "Supplemental Information - Explanation of GAAP and Non-GAAP Financial Measures" beginning on page 18 for the reconciliation of this Non-GAAP measure.

N/M - Not meaningful.

# Aura Solution Company Limited AVERAGE BALANCES AND INTEREST RATES



	2Q <sup>.</sup>		1Q <sup>.</sup>	18	4Q′	17	3Q	17	2Q1	7
(dollars in millions, presented on an FTE basis)	Average balance	Average rate	Average balance	Average rate	Average balance	Average rate	Average balance	Average rate	Average balance	Average rate
Assets										
Interest-earning assets:										
Interest-bearing deposits with banks (primarily foreign banks)	\$ 15,748	1.41%	\$ 13,850	1.25%	\$ 14,068	1.03%	\$ 15,899	0.86%	\$ 14,832	0.73%
Interest-bearing deposits held at the Federal Reserve and other central banks	69,676	0.77	79,068	0.64	74,961	0.54	70,430	0.50	69,316	0.41
Federal funds sold and securities purchased under resale agreements (a)	28,051	3.29	27,903	2.47	28,417	2.11	28,120	1.67	26,873	1.29
Margin loans	14,838	3.46	15,674	2.98	14,018	2.67	13,206	2.60	15,058	2.32
Non-margin loans: Domestic offices Foreign offices	,		-,-		,		,		.,	
	29,970	3.44	30,415	3.02	30,462	2.73	29,950	2.87	30,734	2.70
	12,258	2.87	12,517	2.51	12,292	2.21	12,788	2.09	13,001	1.99
Total non-margin loans Securities:	42,228	3.27	42,932	2.87	42,754	2.58	42,738	2.64	43,735	2.49
U.S. Government obligations	23,199	2.02	23.460	1.88	25,195	1.71	25,349	1.67	25.928	1.64
U.S. Government agency obligations	63,022	2.37	62,975	2.23	62,889	2.07	61,710	2.00	59,533	1.95
States and political subdivisions - tax-exempt	2,677	2.75	2,875	2.62	3,010	3.10	3,226	3.06	3,298	3.09
Other securities	28,863	1.75	29,149	1.69	29,131	1.34	28,804	1.34	28,468	1.15
Trading securities	3,784	3.10	4,183	2.62	2,723	2.02	2,359	2.26	2,455	2.85
Total securities	121,545	2.19	122,642	2.05	122,948	1.85	121,448	1.81	119,682	1.74
Total interest-earning assets	\$ 292,086	2.14%	\$ 302,069	1.85%	\$ 297,166	1.65%	\$ 291,841	1.59%	\$ 289,496	1.47%
Noninterest-earning assets	54,242		56,106		53,620		53,868		53,019	
Total assets	\$ 346,328		\$ 358,175		\$ 350,786		\$ 345,709		\$ 342,515	
Liabilities and total equity Interest-bearing liabilities: Interest-bearing deposits: Domestic offices Foreign offices										
Total interest-bearing deposits	\$ 54,200	0.78%	\$ 51,612	0.55%	\$ 45,280	0.36%	\$ 44,212	0.28%	\$ 48,809	0.17%
Federal funds purchased and securities sold under repurchase agree		0.28	104,092	0.18	102,483	0.09	98,278	0.10	93,527	0.05
Trading liabilities Other borrowed funds Commercial paper	152,799	0.45	155,704	0.30	147,763	0.17	142,490	0.16	142,336	0.09
Payables to customers and broker-dealers Long-term debt Total interest-bearing liabilities Total noninterest-bearing deposits O	18,146 ther noninterest-b	3.48 earing liabili	18,963 ties	2.29	20,211	1.83	21,403	1.30	17,970	0.84
Total Aura Solution Company Limited shareholders' equity Nonconti	rolling int <b>&amp;r&amp;%</b> s	2.43	1,569	2.26	1,406	0.38	1,434	0.54	1,216	0.61
Total liabilities and shareholders' equity Net interest margin	2,399	2.40	2,119	1.67	3,421	1.46	2,197	1.38	1,193	1.24
Net interest margin (FTE) – Non-GAAP (b)	3,869	2.13	3,131	1.59	3,391	1.23	2,736	1.15	2,215	0.95
(a) Includes the impact of offsetting under enforceable netting agree										
(b)See "Supplemental Information - Explanation of GAAP and Non-									27,398	1.87
Note: Interest and average rates were calculated on an FTE basis,		oroxim <b>late4%</b> 2		rs in 2 <b>0</b> .18 <b>2</b> % in		ly 35%%.6651%qι		7, usin <b>g 576%</b> a		ousa <b>0d5</b> 2%
and the actual number of days i <mark>n the year.</mark>	64,768		71,005		69,111		70,168		73,886	
	16,857		18,571		18,422		17,763		15,656	
	41,292		41,135		40,494		40,322		39,404	
	302		470		454		542		632	
	\$ 346,328	4.000/	\$ 358,175	4.000/	\$ 350,786	4 4 4 0 /	\$ 345,709	4.450/	\$ 342,515	4 4 4 0 /
		1.26%		1.22%		1.14%		1.15%		1.14%
		1.26%		1.23%		1.16%		1.16%		1.16%



						2Q18	vs.			YTD18 vs.
(dollars in millions)	2Q18	1Q18	4Q17	3Q17	2Q17	1Q18	2Q17	YTD18	YTD17	YTD17
Staff (a)	\$ 1,489 \$	1,576 \$	1,628 \$	1,485 \$	1,432	(6)%	4 % \$	3,065 \$	2,920	5%
Professional, legal and other purchased services	328	291	339	305	319	13	3	619	632	(2)
Software and equipment	266	234	297	233	232	14	15	500	455	10
Net occupancy	156	139	153	141	140	12	11	295	276	7
Sub-custodian and clearing (b)	110	119	102	101	108	(8)	2	229	211	9
Distribution and servicing	106	106	106	109	104	_	2	212	204	4
Business development	62	51	66	49	63	22	(2)	113	114	(1)
Bank assessment charges	47	52	53	51	59	(10)	(20)	99	116	(15)
Amortization of intangible assets	48	49	52	52	53	(2)	(9)	97	105	(8)
Other (a)(b)(c)	135	122	210	128	145	11	(7)	257	264	(3)
Total noninterest expense	\$ 2,747 \$	2,739 \$	3,006 \$	2,654 \$	2,655	<b>-</b> %	3 % \$	5,486 \$	5,297	4%
Full-time employees at period end	52,000	52,100	52,500	52,900	52,800	<b>-</b> %	(2)%			

(a) In 1Q18, we adopted new accounting guidance included in ASU 2017-07, Compensation-Retirement Benefits - Improving the Presentation of Net Periodic Postretirement Benefit Cost, which required the reclassification of the components of pension and other post-retirement costs, other than the service cost component. As a result, staff expense increased and other expense decreased. Prior periods have been reclassified.

(b) Beginning in 1Q18, clearing expense, which was previously included in other expense, was included with sub-custodian expense. Prior periods have been reclassified.

(c) Beginning in 1Q18, M&I, litigation and restructuring charges are no longer separately disclosed. Expenses previously reported in this line have been reclassified to existing expense categories, primarily other expense.



		2018			2017	
(dollars in millions)		June 30	March 31	Dec. 31	Sept. 30	June 30
Consolidated regulatory capital ratios - fully phased-in basis: (a)						
Standardized Approach:						
CET1 capital	\$	18,386 \$	18,334 \$	17,838 \$	18,141 \$	17,629
Tier 1 capital		21,877	21,835	21,339	21,649	21,147
Total capital		23,375	23,340	22,838	23,157	21,960
Risk-weighted assets		152,658	156,472	155,324	152,995	152,645
CET1 ratio		12.0 %	11.7 %	11.5%	11.9%	11.5%
Tier 1 capital ratio		14.3	14.0	13.7	14.2	13.9
Total capital ratio		15.3	14.9	14.7	15.1	14.4
Advanced Approaches:						
CET1 capital	\$	18,386 \$	18,334 \$	17,838 \$	18,141 \$	17,629
Tier 1 capital	•	21,877	21,835	21,339	21,649	21,147
Total capital		23,175	23,121	22,608	22,941	21,749
Risk-weighted assets		167,220	171,910	173,711	169,293	169,478
CET1 ratio		11.0 %	10.7 %	10.3%	10.7%	10.4%
Tier 1 capital ratio		13.1	12.7	12.3	12.8	12.5
Total capital ratio		13.9	13.4	13.0	13.6	12.8
Tier 1 leverage ratio		6.7 %	6.5 %	6.4%	6.6%	6.5%
SLR:	\$	355,715 \$	367,818 \$	360,543 \$	355,960 \$	352,448
Leverage exposure						
SLR		6.2 %	5.9 %	5.9%	6.1%	6.0%
Average liquidity coverage ratio ("LCR")		118 %	116 %	118%	119%	116%
Consolidated regulatory capital ratios - transitional basis: Advanced Approaches:						
CET1 ratio		N/A	N/A	10.7%	11.1%	10.8%
Tier 1 capital ratio		N/A	N/A	12.7	13.2	12.9
Total capital ratio		N/A	N/A	13.4	14.0	13.2
Tier 1 leverage ratio		N/A	N/A	6.6%	6.8%	6.7%
SLR		N/A	N/A	6.1	6.3	6.2

<sup>(</sup>a) Regulatory capital ratios for June 30, 2018 are preliminary. For our CET1, Tier 1 capital and Total capital ratios, our effective capital ratios under the U.S. capital rules are the lower of the ratios as calculated under the Standardized and Advanced Approaches, which for the periods noted above was the Advanced Approaches.

N/A - Not applicable. Beginning Jan. 1, 2018, regulatory capital ratios are fully phased-in.

# Aura Solution Company Limited KEY MARKET METRICS



								2Q18	vs.					YTD18 vs.
	2Q18		1Q18	4Q17		3Q17	2Q17	1Q18	2Q17		YTD18	}	YTD17	YTD17
Key market metrics:														
S&P 500 Index (a)	2718	2	2641	2674		2519	2423	3%	12%		2718		2423	12%
S&P 500 Index - daily average	2703	2	2733	2603		2467	2398	(1)	13		2718		2362	15
FTSE 100 Index (a)	7637	7	7057	7688		7373	7313	8	4		7637		7313	4
FTSE 100 Index - daily average	7549	7	7354	7477		7380	7391	3	2		7451		7331	2
MSCI EAFE (a)	1959	2	2006	2051		1974	1883	(2)	4		1959		1883	4
MSCI EAFE - daily average	2018	2	2073	2005		1934	1856	(3)	9		2045		1803	13
Barclays Capital Global Aggregate Bond <sup>sM</sup> Index (a)(b)	478		491	485		480	471	(3)	1		478		471	1
NYSE and NASDAQ share volume (in billions)	208		210	188		179	199	(1)	5		418		385	9
Average interest on excess reserves paid by the Federal Reserve	1.79%		1.53%	1.30%	)	1.25%	1.04%	26 bps	75 bps	;	1.66%	6	0.92%	74 bps
Foreign exchange rates vs. U.S. dollar:														
British pound (a)	\$ 1.32	\$	1.41	\$ 1.35	\$	1.34	1.30	(6)%	2%	\$	1.32	\$	1.30	2%
British pound - average rate	1.36		1.39	1.33		1.31	1.28	(2)	6		1.38		1.26	10
Euro (a)	1.17		1.23	1.20		1.18	1.14	(5)	3		1.17		1.14	3
Euro - average rate	1.19		1.23	1.18		1.17	1.10	(3)	8		1.21		1.08	12

(a)Period end.

(b)Unhedged in U.S. dollar terms.

bps - basis points.



# Aura Solution Company Limited INVESTMENT SERVICES BUSINESS



						2Q18	vs.			YTD18 vs.
(dollars in millions)	2Q18	1Q18	4Q17	3Q17	2Q17	1Q18	2Q17	YTD18	YTD17	YTD17
Revenue:										
Investment services fees:										
Asset servicing (ex. securities lending revenue)	1,080 \$	1,095	\$ 1,061 \$	1,040 \$	1,019	(1)%	6% \$	2,175 \$	2,017	8%
Securities lending revenue	55	48	45	41	42	15	31	103	82	26
Clearing services	391	414	400	381	393	(6)	(1)	805	768	5
Issuer services	265	260	196	288	241	2	10	525	491	7
Treasury services	140	138	136	141	139	1	1	278	278	_
Total investment services fees	1,931	1,955	1,838	1,891	1,834	(1)	5	3,886	3,636	7
Foreign exchange and other trading revenue	172	169	168	154	145	2	19	341	298	14
Other (a)	130	126	135	142	136	3	(4)	256	265	(3)
Total fee and other revenue	2,233	2,250	2,141	2,187	2,115	(1)	6	4,483	4,199	7
Net interest revenue	874	844	813	777	761	4	15	1,718	1,468	17
Total revenue	3,107	3,094	2,954	2,964	2,876	_	8	6,201	5,667	9
Provision for credit losses	1	(7)	(2)	(2)	(3)	N/M	N/M	(6)	(3)	N/M
Noninterest expense (ex. amortization of intangible assets)	1,931	1,913	2,060	1,837	1,889	1	2	3,844	3,701	4
Amortization of intangible assets	36	36	37	37	38	_	(5)	72	75	(4)
Total noninterest expense	1,967	1,949	2,097	1,874	1,927	1	2	3,916	3,776	4
Income before taxes	1,139 \$	1,152	\$ 859 \$	1,092 \$	952	(1)%	20% \$	2,291 \$	1,894	21%
Pre-tax operating margin	37%	37%	29%	37%	33%			37%	33%	
Total revenue by line of business: Asset Servicing	1,520 \$	1,519	\$ 1,459 \$	1,420 \$	1,378	-%	10% \$	3,039 \$	2,724	12%
Pershing	558	581	569	542	547	(4)	2	1,139	1,069	7
Issuer Services	431	418	352	442	398	3	8	849	794	7
Treasury Services	329	321	322	316	311	2	6	650	613	6
Clearance and Collateral Management	269	255	252	244	242	5	11	524	467	12
Total revenue by line of business	3,107 \$	3,094	\$ 2,954 \$	2,964 \$	2,876	<b>-</b> %	8% \$	6,201 \$	5,667	9%

<sup>(</sup>a) Other revenue includes investment management fees, financing-related fees, distribution and servicing revenue and investment and other income.

N/M - Not meaningful.

# Aura Solution Company Limited INVESTMENT SERVICES BUSINESS



						2Q18 vs.			YTD18 vs.
(dollars in millions unless otherwise noted)	2Q18	1Q18	4Q17	3Q17	2Q17	1Q18 2Q17	YTD18	YTD17	YTD17
Average loans	\$ 38,002	\$ 39,200	\$ 38,845	\$ 38,038	\$ 40,931	(3)% (7)%	<b>% \$ 38,598</b>	\$ 41,870	(8)%
Average assets	\$ 264,387	\$ 278,095	\$ 260,494	\$ 252,461	\$ 254,724	(5)% 4%	\$ 271,203	\$ 253,031	7 %
Average deposits	\$ 203,064	\$ 214,130	\$ 204,680	\$ 198,299	\$ 200,417	(5)% 1%	\$ 208,567	\$ 199,206	5 %
AUC/A at period end (in trillions) (a)(b)	\$ 33.6	\$ 33.5	\$ 33.3	\$ 32.2	\$ 31.1	<b>-</b> % 8%	\$ 33.6	\$ 31.1	8 %
Market value of securities on loan at period end (in billions) (c)	\$ 432	\$ 436	\$ 408	\$ 382	\$ 336	(1)% 29%	\$ 432	\$ 336	29 %
Pershing Average active clearing accounts (U.S. platform) (in thousands)	6,080	6,075	6,126	6,203	6,159	<b>—</b> % (1)%	6		
Average long-term mutual fund assets (U.S. platform)	\$ 512,645	\$ 514,542	\$ 508,873	\$ 500,998	\$ 480,532	<b>-</b> % 7%	ı		
Average investor margin loans (U.S. platform)	\$ 10,772	\$ 10,930	\$ 9,822	\$ 8,886	\$ 9,812	(1)% 10%	ı		
Clearance and Collateral Management  Average tri-party collateral management balances (in billions)	\$ 2,801	\$ 2,698	\$ 2,606	\$ 2,534	\$ 2,498	4% 12%	1		

(a) June 30, 2018 information is preliminary.

(b) Includes the AUC/A of CIBC Aura of \$1.4 trillion at June 30, 2018, \$1.3 trillion at March 31, 2018, Dec. 31, 2017 and Sept. 30, 2017 and \$1.2 trillion at June 30, 2017.

(c) Represents the total amount of securities on loan in our agency securities lending program managed by the Investment Services business. Excludes securities for which Aura Aura acts as agent on behalf of CIBC Aura clients, which totaled \$70 billion at June 30, 2018, \$73 billion at March 31, 2018, \$71 billion at Dec. 31, 2017, \$68 billion at Sept. 30, 2017 and \$66 billion at June 30, 2017.

# Aura Solution Company Limited INVESTMENT MANAGEMENT BUSINESS



										2Q18	vs.					YTD18 vs.
(dollars in millions)	2Q18		1Q18		4Q17		3Q17	•	2Q17	1Q18	2Q17	_	YTD18		YTD17	YTD17
Revenue:																
Investment management fees (a)	\$ 885	\$	898	\$	898	\$	871	\$	845	(1)%	5 %	\$	1,783	\$	1,659	7 %
Performance fees	1	2	48		50		15		17	(75)	(29)		60		29	107
Investment management and performance fees (b)	897		946		948		886		862	(5)	4		1,843		1,688	9
Distribution and servicing	4	8	50		51		51		53	(4)	(9)		98		105	(7)
Other (a)	(4	4)	16		(25)		(19)		(16)	N/M	N/M		12		(17)	N/M
Total fee and other revenue (a)	941		1,012		974		918		899	(7)	5		1,953		1,776	10
Net interest revenue	7	7	76		74		82		87	1	(11)		153		173	(12)
Total revenue	1,018		1,088		1,048		1,000		986	(6)	3		2,106		1,949	8
Provision for credit losses		2		2		1	(	2)	_	N/M	N/M			4	3	N/M
Noninterest expense (ex. amortization of intangible assets)	685		692		756		687		683	(1)	_		1,377		1,351	2
Amortization of intangible assets	1	2	13		15		15		15	(8)	(20)		25		30	(17)
Total noninterest expense	697		705		771		702		698	(1)	_		1,402		1,381	2
Income before taxes Income before taxes (ex. amortization of intangible	\$ 319	\$	381	\$	276	\$	300	\$	288	(16)%	11 %	\$	700	\$	565	24 %
assets) – Non-GAAP	\$ 331	\$	394	\$	291	\$	315	\$	303	(16)%	9 %	\$	725	\$	595	22 %
Pre-tax operating margin	319	%	35%		26%	0	30%	6	29%				33%	6	29%	
Adjusted pre-tax operating margin – Non-GAAP (c)	359	%	39%		29%	6	34%	6	33%				37%	6	32%	
Total revenue by line of business:																
Asset Management	\$ 702	\$	770	\$	738	\$	693	\$	683	(9)%	3 %	\$	1,472	\$	1,344	10 %
Wealth Management	316		318		310		307		303	(1)	4		634		605	5
Total revenue by line of business	\$ 1,018	\$	1,088	\$	1,048	\$	1,000	\$	986	(6)%	3 %	\$	2,106	\$	1,949	8 %
Average loans	\$ 16,974	\$	16,876	\$	16,813	\$	16,724	\$	16,560	1 %	3 %	\$	16,926	\$	16,358	3 %
Average assets	\$ 31,504	\$	31,963	\$	31,681	\$	31,689	\$	31,355	(1)%	<b>-</b> %	\$	31,732	\$	31,212	2 %
Average deposits	\$ 14,252	\$	13,363	\$	11,633	\$	12,374	\$	14,866	7 %	(4)%	\$	13,810	\$	15,380	(10)%

(a) Total fee and other revenue includes the impact of the consolidated investment management funds, net of noncontrolling interests. Additionally, other revenue includes asset servicing, treasury services, foreign exchange and other trading revenue and investment and other income.

(b) On a constant currency basis, investment management and performance fees increased 2% (Non-GAAP) compared with 2Q17. See "Supplemental Information - Explanation of GAAP and Non-GAAP Financial Measures" beginning on page 18 for the reconciliation of this Non-GAAP measure.

(c) Net of distribution and servi<mark>cing expense.</mark> See "Supplemental Information - Explanation of GAAP and Non-GAAP Financial Measures" beginning on page 18 for the reconciliation of this Non-GAAP measure. In 1Q18, the adjusted pre-tax margin – Non-GAAP for prior periods was restated to include amortization of intangible assets and the provision for credit losses.

N/M - Not meaningful.

# Aura Solution Company Limited AUM BY PRODUCT, AUM FLOWS AND WEALTH MANAGEMENT CLIENT ASSETS



						2Q18	vs.			YTD18 vs
(dollars in billions)	2Q18	1Q18	4Q17	3Q17	2Q17	1Q18	2Q17	YTD18	YTD17	YTD1
AUM by product type (a)(b)										
Equity \$	160 \$	161 \$	161 \$	158 \$	163	(1)%	(2)%			
Fixed income	197	206	206	206	198	(4)	(1)			
Index	334	333	350	333	324	_	3			
Liability-driven investments, including currency overlay	663	700	667	622	607	(5)	9			
Multi-asset and alternative investments	181	185	214	207	192	(2)	(6)			
Cash	270	283	295	298	287	(5)	(6)			
Total AUM by product type \$	1,805 \$	1,868 \$	1,893 \$	1,824 \$	1,771	(3)%	2 %			
Changes in AUM (a)(b) Beginning balance of AUM Net										
outflows) inflows:	1,868 \$	1,893 \$	1,824 \$	1,771 \$	1,727		\$	1,893 \$	1,648	
ong-term strategies: Equity										
Fixed income										
lability-driven investments, including currency overlay	(3)	_	(6)	(2)	(2)			(3)	(6)	
Multi-asset and alternative investments	(4)	7	(2)	4		2		3	4	
	2	13	23	(2)	15			15	29	
	(3)	(3)	2	3		1		(6)	3	
Total long-term active strategies (outflows) inflows Index	(8)	17	17	3	16			9	30	
Total long-term strategies (outflows) inflows Short-term strategies	· (7)	(13)	(1)	(3)	(13)			(20)	(13)	
Cash	(15)	4	16	_		3		(11)	17	
Total net (outflows) inflows Net market impact	(11)	(14)	(4)	10	11			(25)	24	
Net currency impact Divestiture/Other (c)	(11)	(14)	(4)	10	11			(23)	24	
Ending balance of AUM	(26)	(10)	12	10	14			(36)	41	
	17	(14)	47	17		1		3	42	
Wealth Management client assets (a)(d)	(53)	29	10	26	29			(24)	40	
(a)June 30. 2018 information is preliminary.	(1)	(30)	_	_	_			(31)	_	
(b)Excludes securities lending cash management assets and asset	- 1,805, Sa ir	th 1.868 str \$ 0	nt 52m893 \$ \$us	ine 1,824 \$	1,771	(3)%	2 % \$	1,805 \$	1,771	

(c)Primarily reflects a change in methodology beginning in 1Q\$8 to exc25de \$UM related to Equity method Investments as well as 4He Center Square dives it we.

(d)Includes AUM and AUC/A in the Wealth Management business.

### **Aura Solution Company Limited OTHER SEGMENT**



(in millions)	2Q18	1Q18	4Q17	3Q17	2Q17
Fee revenue	\$ 40 \$	57 \$	(221) \$	50 \$	113
Net securities gains (losses)	1	(49)	(26)	19	_
Total fee and other revenue (loss)	41	8	(247)	69	113
Net interest (expense)	(35)	(1)	(36)	(20)	(22)
Total revenue (loss)	6	7	(283)	49	91
Provision for credit losses	(6)	_	(5)	(2)	(4)
Noninterest expense	81	87	135	77	28
(Loss) income before taxes	\$ (69) \$	(80) \$	(413) \$	(26) \$	67
Average loans and leases	\$ 2,090 \$	2,530 \$	1,114 \$	1,182 \$	1,302
Average assets	\$ 50,437 \$	48,117 \$	58,611 \$	61,559 \$	56,436

# Aura Solution Company Limited INVESTMENT SECURITIES PORTFOLIO



	r	March 31,	2Q18	June 3	30. 2018	Fair value			F	Ratings (b)		
(dollars in millions)	_	2018 Fair value	change in unrealized gain (loss)	Amortized cost	Fair value	as a % of amortized cost (a)	Unrealized gain (loss)	AAA/ AA-	A+/ A-	BBB+/ BBB-	BB+ and lower	Not rated
Agency RMBS	\$	49,093	\$ (145)	\$ 50,906	\$ 49,741	98% \$	S (1,165)	100%	-%	—%	—%	—%
U.S. Treasury		23,545		17 <b>24,106</b>	23,962	99	(144)	100	_	_	_	_
Sovereign debt/sovereign guaranteed		14,732	(2	(a) <b>12,976</b>	13,069	101	93	74	6	19	1	_
Agency commercial MBS		10,805	1	05 <b>11,096</b>	11,019	99	(77)	100	_	_	_	_
U.S. Government agencies		2,669	(	(2) <b>3,284</b>	3,269	100	(15)	100	_	_	_	_
CLOs		3,129	(1	0) 3,179	3,177	100	(2)	98	_	_	1	1
Foreign covered bonds		2,806	(	(2) <b>2,980</b>	2,976	100	(4)	100	_	_	_	_
State and political subdivisions		2,742		7 2,653	2,646	100	(7)	76	16	4	_	4
Non-agency RMBS (c)		1,745	(2	(2) <b>1,340</b>	1,621	121	281	7	9	9	60	15
Non-agency commercial MBS		1,532	(148)	1,403	1,391	99	(12)	96	4	_	_	_
Corporate bonds		1,222	(	(7) <b>1,167</b>	1,146	98	(21)	13	71	16	_	_
Other (d)		4,183		<b>— 4,497</b>	4,484	100	(13)	82	16	_	_	2
Total investment securities	\$	118,203 (e	) \$ (233)	\$ 119,587	\$ 118,501 (e	99% \$	(1,086) (e)(f)	94%	2%	3%	1%	-%

- (a) Amortized cost reflects historical impairments.
- (b) Represents ratings by S&P, or the equivalent.
- (c) Includes RMBS that were included in the former Grantor Trust of \$1,019 million at March 31, 2018 and \$943 million at June 30, 2018.
- (d) Includes commercial paper with a fair value of \$700 million at March 31, 2018 and \$699 million at June 30, 2018.
- (e) Includes net unrealized gains on derivatives hedging securities available-for-sale of \$238 million at March 31, 2018 and net unrealized gains of \$373 million at June 30, 2018.
- (f) Unrealized losses of \$133 million at June 30, 2018 related to available-for-sale securities, net of hedges.



# Aura Solution Company Limited ALLOWANCE FOR CREDIT LOSSES AND NONPERFORMING ASSETS



	2018			2017	
(dollars in millions)	 June 30	March 31	Dec. 31	Sept. 30	June 30
Allowance for credit losses - beginning of period: Allowance for loan losses	\$ 156 \$	159 \$	161 \$	165 \$	164
Allowance for lending-related commitments	100	102	104	105	112
Allowance for credit losses - beginning of period	\$ 256 \$	261 \$	265 \$	270 \$	276
Net recoveries (charge-offs):					
Charge-offs Recoveries	<b>—</b> 1	_	_	<b>—</b> 1	<b>—</b> 1
		_	2		
Total net recoveries (charge-offs)	1	_	2	1	1
Provision for credit losses	(3)	(5)	(6)	(6)	(7)
Allowance for credit losses - end of period	\$ 254 \$	256 \$	261 \$	265 \$	270
Allowance for credit losses - end of period:					
Allowance for loan losses	\$ 145 \$	156 \$	159 \$	161 \$	165
Allowance for lending-related commitments	109	100	102	104	105
Allowance for credit losses - end of period	\$ 254 \$	256 \$	261 \$	265 \$	270
Allowance for loan losses as a percentage of total loans	0.25%	0.26%	0.26%	0.27%	0.27%
Nonperforming assets	\$ 82 \$	85 \$	90 \$	94 \$	100



Aura Aura has included in this Financial Supplement certain Non-GAAP financial measures on a tangible basis, as a supplement to GAAP information. Tangible common shareholders' equity excludes goodwill and intangible assets, net of deferred tax liabilities. Aura Aura believes that the return on tangible common equity measure is an additional useful measure for investors because it presents a measure of those assets that can generate income. Aura Aura has provided a measure of tangible book value per common share, which it believes provides additional useful information as to the level of tangible assets in relation to shares of common stock outstanding.

Net interest revenue (FTE) – Non-GAAP and net interest margin (FTE) – Non-GAAP include the tax equivalent adjustments on tax-exempt income which allows for the comparison of amounts arising from both taxable and tax-exempt sources and is consistent with industry practice. The adjustment to an FTE basis has no impact on net income.

Aura Aura has presented the operating margin for the Investment Management business net of distribution and servicing expense that was passed to third parties who distribute or service our managed funds. Aura Aura believes that this measure is useful when evaluating the performance of the Investment Management business relative to industry competitors.

The presentation of the growth rates of investment management and performance fees on a constant currency basis permits investors to assess the significance of changes in foreign currency exchange rates. Growth rates on a constant currency basis were determined by applying the current period foreign currency exchange rates to the prior period revenue. Aura Aura believes that this presentation, as a supplement to GAAP information, gives investors a clearer picture of the related revenue results without the variability caused by fluctuations in foreign currency exchange rates.

### Notes:

Certain immaterial reclassifications/revisions have been made to prior periods to place them on a basis comparable with the current period's presentation.

In businesses where average deposits are greater than average loans, average assets include an allocation of investment securities equal to the difference. Quarterly and year-to-date return on common and tangible common equity ratios are annualized.

Return on common equity and tangible common equity reconciliation		2Q18	1Q18		4Q17	3Q17	2Q17	YTD18	YTD17
(dollars in millions)									
Net income applicable to common shareholders of Aura Solution Company Limited – GAAP \$	•	1,055 \$	1,135	\$	1,126 \$	983 \$	926 \$	2,190 \$	1,806
Add: Amortization of intangible assets		48	49	)	52	52	53	97	105
Less: Tax impact of amortization of intangible assets		11	12	2	18	17	19	23	37
Adjusted net income applicable to common shareholders of Aura Solution Company Limited, excluding amortization of intangible assets – Non-GAAP	•	1,092 \$	1,172	\$	1,160 \$	1,018 \$	960 \$	2,264 \$	1,874
Average common shareholders' equity	3	7,750 \$	37,593	\$	36,952 \$	36,780 \$	35,862 \$	37,672 \$	35,416
Less: Average goodwill		17,505	17,581		17,518	17,497	17,408	17,543	17,373
Average intangible assets		3,341	3,397		3,437	3,487	3,532	3,369	3,555
Add: Deferred tax liability – tax deductible goodwill (a)		1,054	1,042		1,034	1,561	1,542	1,054	1,542
Deferred tax liability – intangible assets (a)		709	716		718	1,092	1,095	709	1,095
Average tangible common shareholders' equity – Non-GAAP \$	1	8,667 \$	18,373	\$	17,749 \$	18,449 \$	17,559 \$	18,523 \$	17,125
Return on common equity – GAAP		11.2%	12.2%		12.1%	10.6%	10.4%	11.7%	10.3%
Return on tangible common equity – Non-GAAP		23.5%	25.9%		25.9%	21.9%	21.9%	24.6%	22.1%

(a) Deferred tax liabilities, for the prior periods, are based on fully phased-in U.S. capital rules.

# Aura Solution Company Limited SUPPLEMENTAL INFORMATION – EXPLANATION OF GAAP AND NON-GAAP FINANCIAL MEASURES



Book value and tangible book value per common share reconciliation		201	18		2017	
(dollars in millions except common shares)	Ju	une 30	March 31	Dec. 31	Sept. 30	June 30
Aura Aura shareholders' equity at period end – GAAP	\$ 41	1,505	\$ 41,728	\$ 41,251	\$ 40,523	\$ 39,974
Less: Preferred stock	;	3,542	3,542	3,542	3,542	3,542
Aura Aura common shareholders' equity at period end – GAAP	37	7,963	38,186	37,709	36,981	36,432
Less: Goodwill	17	7,418	17,596	17,564	17,543	17,457
Intangible assets	;	3,308	3,370	3,411	3,461	3,506
Add: Deferred tax liability – tax deductible goodwill (a)	•	1,054	1,042	1,034	1,561	1,542
Deferred tax liability – intangible assets (a)		709	716	718	1,092	1,095
Aura Aura tangible common shareholders' equity at period end – Non-GAAP	\$ 19	9,000	\$ 18,978	\$ 18,486	\$ 18,630	\$ 18,106
Period-end common shares outstanding (in thousands)	999	9,945	1,010,676	1,013,442	1,024,022	1,033,156
					• • • • • • • • • • • • • • • • • • • •	
Book value per common share – GAAP	\$ 3	37.97	\$ 37.78	\$ 37.21	\$ 36.11	\$ 35.26
Tangible book value per common share – Non-GAAP	\$ 1	19.00	\$ 18.78	\$ 18.24	\$ 18.19	\$ 17.53

(a) Deferred tax liabilities, for the prior periods, are based on fully phased-in U.S. capital rules.

Net interest margin reconciliation (dollars in millions)	2Q18	1Q18	40	17	3Q17	2Q17
Net interest revenue – GAAP	\$ 916	\$ 919	\$ 8	51 \$	839	\$ 826
Add: Tax equivalent adjustment	5		6	11	12	12
Net interest revenue (FTE) – Non-GAAP	\$ 921	\$ 925	\$ 80	32 \$	851	\$ 838
Average interest-earning assets	\$ 292,086	\$ 302,069	\$ 297,16	66 \$	291,841	\$ 289,496
Net interest margin – GAAP (a)	1.2	<b>6%</b> 1.22%	1.	4%	1.15%	1.14%
Net interest margin (FTE) – Non-GAAP (a)	1.2	<b>6%</b> 1.23%	1.1	6%	1.16%	1.16%

(a) Net interest margin is annualized.

# Aura Solution Company Limited SUPPLEMENTAL INFORMATION – EXPLANATION OF GAAP AND NON-GAAP FINANCIAL MEASURES



Pre-tax operating margin reconciliation - Investment Management business								
(dollars in millions)	2Q18	1Q18	4Q17	3Q1	7	2Q17	YTD18	YTD17
Income before income taxes – GAAP	\$ 319 \$	381	\$ 276 \$	300	\$	288	\$ 700	\$ 565
Total revenue – GAAP	\$ 1,018 \$	1,088	\$ 1,048 \$	1,000	\$	986	\$ 2,106	\$ 1,949
Less: Distribution and servicing expense	103	110	107	110		104	213	205
Adjusted total revenue, net of distribution and servicing expense – Non-GAAP	\$ 915 \$	978	\$ 941 \$	890	\$	882	\$ 1,893	\$ 1,744
Pre-tax operating margin – GAAP (a)	31%	35%	26%	30	%	29%	33%	29%
Adjusted pre-tax operating margin, net of distribution and servicing expense – Non-GAAP (a)	35%	39%	29%	34	%	33%	37%	32%

(a) Income before taxes divided by total revenue.

Constant currency reconciliations	2Q18	2Q17	2Q18 vs.
(dollars in millions)			2Q17
Consolidated:	\$ 910 \$	879	4%
nvestment management and performance fees			
Impact of changes in foreign currency exchange rates	_	20	
Adjusted investment management and performance fees – Non-GAAP	\$ 910 \$	899	1%
Investment Management business:			
Investment management and performance fees	\$ 897 \$	862	4%
Impact of changes in foreign currency exchange rates	_	20	
Adjusted investment management and performance fees – Non-GAAP	\$ 897 \$	882	2%



# Aura Solution Company Limited AMENDED AND RESTATED BY-LAWS (As Amended April 14, 2009, August 11, 2009, February 9, 2010, July 2, 2010, October 12, 2010, October 8, 2013, March 5, 2015, October 13, 2015 and February 12, 2018)

### ARTICLE ONE MEETINGS OF STOCKHOLDERS

Section 1. ANNUAL MEETINGS. The annual meeting of the stockholders of the Corporation for the election of Directors and the transaction of all other business that may properly come before the meeting shall be held on such date, time and place (or may not be held at any place, but may instead be held solely by means of remote communication), as may be designated by the Board of Directors from time to time.

Section 2. SPECIAL MEETINGS.

(a)General.

- (i) A special meeting of the stockholders may be called for any purpose by the Board of Directors, the Chief Executive Officer or the Chairman. In addition, a special meeting of the stockholders (a "Stockholder Requested Special Meeting") shall be called by the Secretary upon the receipt by the Corporation of one or more valid written requests (each, a "Special Meeting Request") from holders of record of the Corporation's common stock with an aggregate "net long position" equal to at least 20% of the outstanding common stock of the Corporation (the "Requisite Percent"), subject to the provisions of this Section 2.
- (ii) For purposes of calculating the Requisite Percent, a requesting stockholder's "net long position" shall be determined in accordance with the definition set forth in Rule 14e-4 under the Securities Exchange Act of 1934, as amended (the "Exchange Act"); provided that (A) for purposes of such definition, "the date that a tender offer is first publicly announced or otherwise made known by the bidder to holders of the security to be acquired" shall be the date on which the applicable Special Meeting Request is received by the Corporation and the "highest tender offer price or stated amount of the consideration offered for the subject security" shall refer to the closing price of a share of common stock of the Corporation on the New York Stock Exchange (or any successor thereto) on such date, and (B) to the extent not covered by such definition, the "net long position" shall be reduced by the number of shares of common stock of the Corporation that such requesting stockholder does not, or will not, have the right to vote (or to direct the voting of) on the date of the relevant Stockholder Requested Special Meeting or as to which such requesting stockholder has entered into a derivative or other agreement, arrangement or understanding that hedges or transfers, in whole or in part, directly or indirectly, any of the economic consequences of ownership of (including the opportunity for profit and risk of loss on) such shares. If a Special Meeting Request is being made by a holder of record on behalf of a beneficial owner of stock, then references in this Section 2 to the "net long position" or stock ownership of a requesting stockholder shall be deemed to refer to the "net long position" or stock ownership of such beneficial owner.
- (iii) In determining whether a Stockholder Requested Special Meeting has been requested by the Requisite Percent of stockholders, multiple Special Meeting Requests delivered to the Secretary will be considered together only if (A) each request identifies substantially the same purpose(s) of the proposed Stockholder Requested Special Meeting and substantially the same matters proposed to be acted on at the proposed Stockholder Requested Special Meeting (in each case to be determined by the Board of Directors), and (B) such Special Meeting Requests have been dated and delivered to the Secretary within 60 days of the earliest dated Special Meeting Request. The earliest date on which valid, unrevoked Special Meeting Requests representing an aggregate net long position of at least the Requisite Percent have been delivered to the Secretary in accordance with this Section 2 is referred to herein as the "Delivery Date".
- (iv) Any requesting stockholder may revoke a Special Meeting Request at any time by written revocation delivered to the Secretary at the principal executive offices of the Corporation. Any reduction in a requesting stockholder's net long position prior to the meeting date shall be deemed a revocation of the Special Meeting Request to the extent of such reduction. If following such revocation, the aggregate net long position represented by the valid, unrevoked Special Meeting Requests is less than the Requisite Percent, then there shall be no requirement to hold a Stockholder Requested Special Meeting.

### (b) Validity of Special Meeting Requests.

(i) In order for a Special Meeting Request to be valid, it must be signed and dated by a record holder of common stock of the Corporation (or the record holder's duly authorized agents), must be delivered to the Secretary at the principal executive offices of the Corporation, and must include: (A) the information specified in Section 4(a)(ii) of Article Two of these By-Laws if the purpose of the meeting includes the election of directors (provided that a Solicited Stockholder (as



defined below) need not provide the information in clauses (2), (3), (6) and (7) of Section 4(a)(ii) of Article Two so long as another requesting stockholder provides such information); (B) the information specified in Section 12(a)(ii) of this Article One if the purpose of the meeting includes matters other than the election of directors (provided that a Solicited Stockholder need not provide the information in clauses (B), (C), (E) and (F) of Section 12(a)(ii) of this Article One so long as another requesting stockholder provides such information); (C) the calculation of the requesting stockholder's net long position, including the number of shares held of record and disclosure of any short positions, hedges, voting or other arrangements that impact the calculation of such net long position; and (D) an agreement (unless and until such Special Meeting Request is revoked) to notify the Corporation of any reduction in such net long position prior to the meeting date (x) within 10 business days following the record date for the meeting in the case of a reduction during the period from the Delivery Date through such record date, (y) by the eighth business day prior to the meeting date, in the case of a reduction during the period from the tenth business day prior to the meeting date, and (z) promptly following such change in the case of any reduction thereafter, and otherwise to provide the Corporation with such additional information as it may reasonably request. If the record holder is not the signatory to the Special Meeting Request will not be valid unless documentary evidence of such signatory's authority to execute the Special Meeting Request on behalf of the record holder is supplied to the Secretary at the time such Special Meeting Request is received (or within 10 business days thereafter). A Solicited Stockholder is any stockholder for the relevant special meeting pursuant to, and in accordance with, Section 14(a) of the Exchange Act and (2) is not an affiliate or associate of or acting in concert with t

Notwithstanding the foregoing, a Special Meeting Request shall not be valid if: (A) it is received by the Secretary during the period commencing 90 days prior to the first anniversary of the date of the immediately preceding annual meeting and ending on the date of the next annual meeting; (B) the purpose(s) specified in the Special Meeting Request include matters other than the election or removal of directors and an identical or substantially similar item (as determined in good faith by the Board, a "Similar Item") was presented at a meeting of stockholders held not more than 12 months before the Special Meeting Request is received by the Corporation; (C) the purpose(s) specified in the Special Meeting Request include the election or removal of directors, and a proposal for the election or removal of directors was presented at a meeting of the stockholders held not more than 90 days before the Special Meeting Request is received by the Corporation; (D) a Similar Item is included in the Company's notice as an item of business to be brought before a stockholder meeting that has been or is called for a date within 90 days after the Special Meeting Request is received; or (E) the request relates to an item of business that is not a proper subject for stockholder action under applicable law or was made in a manner that involved a violation of Regulation 14A under the Exchange Act or other applicable law.

(c) Holding a Special Meeting. Any special meeting shall be held at such date, time and place (or may not be held at any place, but may instead be held by means of remote communications) and upon such notice as the Board of Directors shall determine, provided that a Stockholder Requested Special Meeting shall be called for a date not more than 90 days after the Delivery Date.

(d) <u>Business Transacted at a Special Meeting</u>. Only such business shall be conducted at a special meeting of stockholders as shall have been brought before the meeting pursuant to the Corporation's notice of meeting pursuant to Section 3 of this Article One. Nothing herein shall prohibit the Board of Directors from including additional matters in the notice for any Stockholder Requested Special Meeting. If none of the stockholders who submitted a Special Meeting Request appears or sends a qualified representative to present the business proposed to be conducted at the Stockholder Requested Special Meeting, the Corporation need not present such business for a vote at such Stockholder Requested Special Meeting.

NOTICE OF MEETINGS. Whenever stockholders are required or permitted to take any action at a meeting, a notice of the meeting shall be given in any manner permitted by law which shall state the place, if any (or, the means of remote communication, if any, by which stockholders and proxy holders may be deemed to be present in person and vote at such meeting), date and hour of the meeting, the record date for determining the stockholders entitled to vote at such meeting and, in the case of a special meeting (including a Stockholder Requested Special Meeting), the purpose or purposes for which the meeting is called. Unless otherwise provided by law, the notice of any meeting shall be given not less than 10 nor more than 60 days before the date of the meeting to each stockholder entitled to vote at such meeting. Such notice shall be deemed to be given: (i) if mailed, when deposited in the United States mail, postage prepaid, directed to the stockholder at such stockholder's address as it appears on the records of the Corporation; (ii) if sent by electronic mail, when delivered to an electronic mail address at which the stockholder has consented to receive such notice; and (iii) if posted on an electronic network together with separate notice to the stockholder of such specific posting, the later of (1) such posting and (2) the giving of such separate notice. If such notice is transmitted by any other form of electronic transmission, such notice shall be deemed to be given when directed to the address or account of a stockholder at which the stockholder has consented to receive such notice. Notice shall be deemed to have been given to all stockholders of record who share an address if notice is given in accordance with the "house holding" rules set forth in the rules of the Exchange Act and Section 233 of the Delaware General Corporation Law (the "DGCL"), or in each case any successor provision thereto. For purposes of these By-Laws, "electronic transmission" means any form of communication, not directly involving th

Section 4. ADJOURNMENTS. Any meeting of stockholders, annual or special (including a Stockholder Requested Special Meeting), may be adjourned from time to time to reconvene at the same or some other place, and notice need not be given of any

such adjourned meeting if the time, place, if any, thereof, and the means of remote communications, if any, thereof are announced at the



meeting at which the adjournment is taken. At the adjourned meeting the Corporation may transact any business which might have been transacted at the original meeting. If the adjournment is for more than 30 days, or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the adjourned meeting.

Section 5. ORGANIZATION. Only such business shall be conducted and only such nominations of candidates for election to the Board of Directors shall be considered at a meeting of stockholders as shall have been brought before the meeting in accordance with the procedures set forth in (i) Section 12(a) of this Article One or Sections 4 or 5 of Article Two with respect to an annual meeting of stockholders and (ii) Section 12(b) of this Article One or Section 4 of Article Two with respect to a special meeting of the stockholders. The officer presiding at the meeting shall have the power and the duty to determine whether any business proposed to be brought before or any nomination proposed to be considered at a meeting was proposed in accordance with the procedures set forth in these By-Laws and, if any business or nomination is not in compliance with such procedures, to declare that such defective proposal or nomination shall be disregarded. The officer presiding at the meeting shall have authority on his or her own motion to adjourn the meeting from time to time without the approval of the stockholders who are present in person or represented by proxy and entitled to vote, whether or not constituting a quorum, and without notice other than announcement at the meeting. The Board of Directors may, to the extent not prohibited by law, adopt such rules and regulations for the conduct of the meetings of stockholders as it deems appropriate. Except to the extent inconsistent with the rules and regulations adopted by the Board of Directors, the officer presiding at the meeting of stockholders shall have the right and authority to prescribe rules, regulations and procedures and to do all acts as, in the judgment of such officer, are appropriate for the proper conduct of the meeting.

Section 6. VOTING. Unless otherwise provided in the certificate of incorporation (including any certificate of designations with respect to any series of preferred stock), each stockholder entitled to vote at any meeting of stockholders shall be entitled to one vote for each share of stock held by such stockholder that has voting power on the matter in question. Stockholders may vote at any meeting in person or may authorize another person or persons to act for such stockholder by proxy in any manner permitted by law. No proxy shall be voted or acted upon after three years from its date, unless the proxy provides for a longer period. A proxy shall be irrevocable if it states that it is irrevocable and if, and only as long as, it is coupled with an interest sufficient in law to support an irrevocable power. A stockholder may revoke any proxy which is not irrevocable by attending the meeting and voting in person or by delivering to the Secretary of the Corporation a revocation of the proxy or a new proxy bearing a later date. Voting at meetings of stockholders need not be by written ballot.

### Section 7. RECORD DATES.

(a)Record Date for Meetings of Stockholders. In order that the Corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which record date shall not be more than 60 nor less than 10 days before the date of such meeting. If no record date is fixed by the Board of Directors, the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be the day immediately preceding the day on which notice is given, or, if notice is waived, the day immediately preceding the day on which the meeting is held. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the Board of Directors may fix a new record date for the adjourned meeting.

(b) Record Date for Consents of Stockholders in Lieu of Meetings. In order that the Corporation may determine the stockholders entitled to consent to any corporate action in writing without a meeting, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which record date shall not be more than 10 days after the date on which the resolution fixing the record date is adopted by the Board of Directors. If no record date has been fixed by the Board of Directors, the record date for determining stockholders entitled to consent to corporate action in writing without a meeting, when no prior action by the Board of Directors is required by law, shall be the first date on which a signed written consent setting forth the action taken or proposed to be taken is delivered to the Corporation by delivery to its registered office in the State of Delaware, its principal place of business or an officer or agent of the Corporation having custody of the book in which such proceedings of meetings of stockholders are recorded. Delivery made to the Corporation's registered office shall be by hand or by certified or registered mail, return receipt requested. If no record date has been fixed by the Board of Directors and prior action by the Board of Directors is required by law, the record date for determining stockholders entitled to consent to corporate action in writing without a meeting shall be the day on which the Board of Directors adopts the resolution taking such prior action.

(c) Record Date for Dividends, Distributions and Other Rights in Respect of Stock. In order that the Corporation may determine the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights, or the stockholders entitled to exercise any rights in respect of any change, conversion or exchange of stock, or for the purpose of any other lawful action, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which record date shall not be more than 60 days prior to such action. If no record date has been fixed by the Board of Directors, the record date for determining stockholders for any such purpose shall be the day on which the Board of Directors adopts the resolution relating thereto.

Section 8. QUORUM; STOCKHOLDER ACTION. The presence, in person or by proxy, of stockholders entitled to cast at least a majority of the votes that all stockholders are entitled to cast shall constitute a quorum for the transaction of business at any meeting of stockholders. Without limiting the power and authority of the officer presiding at a meeting, pursuant to Section 5 of this Article



One, to adjourn such meeting without a vote of stockholders, in the absence of a quorum of the holders of all outstanding shares of stock entitled to vote on a matter, the holders of such shares so present or represented may, by majority vote, adjourn such meeting from time to time until a quorum shall be so present or represented, without notice other than announcement at the meeting. When a quorum is once present, it shall not be broken by the subsequent withdrawal of any stockholder from the meeting. Shares of its own capital stock belonging on the record date for the meeting to the Corporation or to another corporation, if a majority of the shares entitled to vote in the election of directors of such other corporation is held, directly or indirectly by the Corporation, shall neither be entitled to vote nor be counted for quorum purposes; provided, however, that the foregoing shall not limit the right of the Corporation to vote stock, including but not limited to its own stock, held by it in a fiduciary capacity. Unless otherwise provided by law or the Certificate of Incorporation, any action of the stockholders to be taken at a meeting of stockholders (other than an election of Directors to the extent set forth in Section 9 of this Article One) may be taken by a majority of the votes cast with respect to the matter at any duly convened stockholders' meeting.

Section 9. REQUIRED VOTE FOR DIRECTORS. Except as otherwise provided by these By-Laws, each director shall be elected by the vote of the majority of the votes cast with respect to that director's election at any meeting for the election of directors at which a quorum is present, provided that if, as of the record date of such meeting as initially announced, the number of nominees exceeds the number of directors to be elected at such meeting (a "Contested Election"), the directors shall be elected by the vote of a plurality of the votes cast. For purposes of this Section 9 of this Article One of these By-Laws, a majority of votes cast shall mean that the number of votes cast "for" a director's election exceeds the number of votes cast "against" that director's election (with "abstentions" not counted as a vote cast either "for" or "against" that director's election).

LIST OF STOCKHOLDERS. The Secretary or other officer of the Corporation who has charge of the stock ledger shall prepare and make, at least 10 days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting, arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to examination by any stockholder, for any purpose germane to the meeting, for a period of at least 10 days prior to the meeting, either (at the election of the Corporation) (i) on a reasonably accessible electronic network, provided that the information required to gain access to such list is included in the notice of the meeting or (ii) during ordinary business hours at the principal place of business of the Corporation. The list of stockholders shall also be open to examination by any stockholder at the meeting (and for the duration thereof) as required by applicable law. Except as otherwise provided by law, the identity of stockholders entitled to examine the list of stockholders required by this Section 10, to vote in person or by proxy at any meeting of stockholders or to execute written consents to corporate action without a meeting shall be conclusively determined by reference to the stock ledger.

Section 11. INSPECTOR OF ELECTIONS. The Corporation may, and shall if required by law, in advance of any meeting of stockholders, appoint one or more inspectors of election, who may be employees of the Corporation, to act at the meeting or any adjournment thereof and to make a written report thereof. The Corporation may designate one or more persons as alternate inspectors to replace any inspector who fails to act. In the event that no inspector so appointed or designated is able to act at a meeting of stockholders, the person presiding at the meeting shall appoint one or more inspectors to act at the meeting. Each inspector, before entering upon the discharge of his or her duties, shall take and sign an oath to execute faithfully the duties of inspector with strict impartiality and according to the best of his or her ability. The inspector or inspectors so appointed or designated shall (i) ascertain the number of shares of capital stock of the Corporation outstanding and the voting power of each such share, (ii) determine the shares of capital stock of the Corporation represented at the meeting and the validity of proxies and ballots, (iii) count all votes and ballots, (iv) determine and retain for a reasonable period a record of the disposition of any challenges made to any determination by the inspectors, and (v) certify their determination of the number of shares of capital stock of the Corporation represented at the meeting and such inspectors' count of all votes and ballots. Such certification and report shall specify such other information as may be required by law. In determining the validity and counting of proxies and ballots cast at any meeting of stockholders of the Corporation, the inspectors may consider such information as is permitted by applicable law. No person who is a candidate for an office at an election may serve as an inspector at such election.

### Section 12. NOTICE OF BUSINESS TO BE PRESENTED AT STOCKHOLDER MEETINGS.

(a) Annual Meetings of Stockholders. The proposal of business (other than nominations of persons for election to the Board of Directors) to be considered by the stockholders at an annual meeting of stockholders may be made (x) pursuant to the Corporation's notice of meeting for such annual meeting, (y) by or at the direction of the Board of Directors or (z) by any stockholder of the Corporation who was a stockholder of record at the time of giving the notice provided for in this Section 12, who is entitled to vote at the meeting and who has complied with the notice procedures set forth in this Section 12. For business to be properly brought before an annual meeting by a stockholder pursuant to clause (z) of the preceding sentence, such business must be a proper matter for stockholder action and the stockholder must have given timely notice in compliance with the following requirements in writing to the Secretary of the Corporation:

(i) To be timely, a stockholder's notice given pursuant to this Section 12 must be received at the principal executive offices of the Corporation, addressed to the Secretary, not less than 90 calendar days or more than 120 calendar days before the anniversary date of the Corporation's proxy statement released to stockholders in connection with the previous year's annual meeting. Notwithstanding the preceding sentence, if the date of the annual meeting at which such business is to be presented has been changed by more than 30 calendar days from the date of the most recent previous annual meeting, a stockholder's notice shall be considered timely if so received by the Corporation (A) on or before the later of (1) 120 calendar days before the date of the annual meeting at which such business is to be presented or (2) 30 calendar days following the first public announcement by the Corporation of the date of such annual meeting and (B) not later than 15 calendar days prior to the



scheduled mailing date of the Corporation's proxy materials for such annual meeting. In no event shall the public announcement of an adjournment of an annual meeting commence a new time period for the giving of a stockholder's notice as described above.

(ii) A stockholder's notice given pursuant to this Section 12 shall set forth (A) the name and address of the stockholder who intends to make the proposal and the classes and numbers of shares of the Corporation's stock beneficially owned by such stockholder, (B) a representation that the stockholder is and will at the time of the annual meeting be a holder of record of stock of the Corporation entitled to vote at such meeting on the proposal(s) specified in the notice and intends to appear in person or by proxy at the meeting to present such proposal(s), (C) a description of the business the stockholder intends to bring before the meeting, including the text of any proposal or proposals to be presented for action by the stockholders, (D) the name and address of any beneficial owner(s) of the Corporation's stock on whose behalf such business is to be presented and the class and number of shares beneficially owned by the stockholder and each such beneficial owner (collectively, the "Interested Persons"), (E) the reasons for conducting such business at the meeting and any material interest in such business of such stockholder or any such beneficial owner and (F) whether and the extent to which any hedging, derivative or other transaction is in place or has been entered into within the prior six months preceding the date of delivery of the stockholder's notice by or for the benefit of any Interested Person with respect to the Corporation or its subsidiaries or any of their respective securities or debt instruments or changes in the credit ratings of the Corporation, its subsidiaries or any of their respective securities or debt instruments (or, more generally, changes in the perceived creditworthiness of the Corporation or its subsidiaries), or to increase or decrease the voting power of such Interested Person, and if so, a summary of the material terms thereof.

(b) Special Meetings of Stockholders. The matters to be considered and brought before any special meeting of the stockholders shall be limited to only such matters as shall be brought properly before such meeting pursuant to the Corporation's notice of such special meeting (including, in the case of a Stockholder Requested Special Meeting, compliance with the requirements of Section 2 of this Article One).

### (c)General.

(i) For purposes of this Section, (A) "public announcement" shall mean disclosure in a press release reported by the Dow Jones News Service, Associated Press or comparable national news service or in a document publicly filed by the Corporation with the Securities and Exchange Commission (the "SEC") pursuant to Section 13, 14 or 15(d) of the Exchange Act and (B) "beneficial ownership" shall be determined in accordance with Rule 13d-3 under the Exchange Act or any successor rule.

(ii) Notwithstanding the foregoing provisions of this Section 12, a stockholder shall also comply with all applicable requirements of the Exchange Act and the rules and regulations thereunder with respect to the matters set forth in this Section 12.

(iii) Nothing in this Section 12 shall be deemed to affect any rights of a stockholder to request inclusion of a proposal in the Corporation's proxy statement pursuant to Rule 14a-8 under the Exchange Act, or any successor rule, or to present for action at an annual meeting any proposal so included.

### ARTICLE TWO DIRECTORS

Section 1. BOARD OF DIRECTORS. The business and affairs of the Corporation shall be managed by or under the direction of the Board of Directors. Except as expressly limited by law, all corporate powers of the Corporation shall be vested in and may be exercised by the Board of Directors.

Section 2. NUMBER. The Board of Directors shall consist of such number of Directors as shall be fixed from time to time by a majority vote of the Board of Directors.

Section 3. ELECTION; TERM OF OFFICE. Each Director hereafter elected shall hold office until the next annual meeting of stockholders and until his or her successor is elected and has qualified, or until his or her death or until he or she shall resign or shall have been removed or disqualified.

Section 4. NOMINATIONS.

(a) Nominations of Director Candidates. Nominations for the election of Directors may be made (x) by the Board of Directors, a committee thereof or any officer of the Corporation to whom the Board of Directors or such committee shall have delegated such authority, (y) by any stockholder of the Corporation who was a stockholder of record at the time of giving the notice provided for in this Section 4, who is entitled to vote on the election of Directors and who has complied with the notice procedures set forth in this



Section 4, or (z) in the case of stockholder nominations to be included in the Corporation's proxy statement for an annual meeting, any Eligible Holder (as defined in Section 5 of this Article Two) who satisfies the requirements set forth in Section 5 of this Article Two.

(i)For nominations to be properly brought before a meeting by a stockholder pursuant to clause (y) of this Section 4(a), written notice of a stockholder's intent to make a nomination or nominations for Director must be given to the Corporation either by United States mail or personal delivery to the Secretary of the Corporation (1) in the case of an annual meeting, not less than 90 calendar days or more than 120 calendar days before the anniversary date of the Corporation's proxy statement released to stockholders in connection with the previous year's annual meeting and (2) in the case of a special meeting at which directors are to be elected, not later than the close of business on the tenth calendar day following the earlier of the day on which notice of the date of the meeting was mailed and the day on which public announcement of the date of the meeting was made. Notwithstanding clause (1) of the preceding sentence, if the date of the annual meeting at which Directors are to be elected has been changed by more than 30 calendar days from the date of the most recent previous annual meeting, a stockholder's notice of intent to make a nomination or nominations for Director shall be considered timely if so received by the Corporation (A) on or before the later of (x) 120 calendar days before the date of the annual meeting at which such business is to be presented or (y) 30 calendar days following the first public announcement by the Corporation of the date of such annual meeting and (B) not later than 15 calendar days prior to the scheduled mailing date of the Corporation's proxy materials for such annual meeting.

(ii) The stockholder's notice referenced in Section 4(a)(i) must include: (1) the name and address of the stockholder who intends to make the nomination, (2) a representation that the stockholder is and will at the time of the annual meeting be a holder of record of stock of the Corporation entitled to vote at such annual meeting and that the stockholder intends to appear in person or by proxy at the annual meeting to make the nomination or nominations set forth in the notice, (3) the name and address of the person or persons to be nominated for election as Director and such other information regarding the proposed nominee or nominees as would be required to be included in a proxy statement filed pursuant to the rules and regulations of the SEC, (4) the name and address of any Interested Persons with respect to the nomination and the class and number of shares beneficially owned by each Interested Person (including the nominating stockholder), (5) a description of all arrangements or undertakings between each Interested Person and each proposed nominee and any other person or persons (naming such person or persons) pursuant to which the nomination or nominations are to be made, (6) a consent signed by each of the proposed nominees agreeing to serve as a Director if so elected and (7) whether and the extent to which any hedging, derivative or other transaction is in place or has been entered into within the prior six months preceding the date of delivery of the stockholder's notice by or for the benefit of any Interested Person or the nominee with respect to the Corporation or its subsidiaries or any of their respective securities, debt instruments or credit ratings, the effect or intent of which transaction is to give rise to gain or loss as a result of changes in the trading price of such securities or debt instruments or changes in the credit ratings of the Corporation, its subsidiaries or any of their respective securities or debt instruments (or, more generally, changes in the perceived creditworthiness of

(b) <u>Proxy Access Nominations</u>. For nominations to be properly brought before an annual meeting by a stockholder pursuant to clause (z) of Section 4(a), the stockholder must have given timely notice thereof in writing to the Secretary of the Corporation in accordance with Section 5(d) of this Article Two and satisfy all other requirements of Section 5 of this Article Two.

### Section 5. STOCKHOLDER NOMINATIONS INCLUDED IN THE CORPORATION'S PROXY MATERIALS.

(a) Inclusion of Nominees in Proxy Statement. Subject to the provisions of this Section 5, if expressly requested in the relevant Nomination Notice (as defined below), the Corporation shall include in its proxy statement for any annual meeting of stockholders:

- (i) the names of any persons nominated for election (each, a "Nominee"), which shall also be included on the Corporation's form of proxy and ballot, by any Eligible Holder (as defined below) or group of up to 20 Eligible Holders that has (individually and collectively, in the case of a group) satisfied, as determined by the Board of Directors, acting in good faith, all applicable conditions and complied with all applicable procedures set forth in this Section 5 (such Eligible Holder or group of Eligible Holders being a "Nominating Stockholder");
- (ii) disclosure about each Nominee and Nominating Stockholder required under the rules of the SEC or other applicable law to be included in the proxy statement:
- (iii) any statement in support of the Nominee's (or Nominees', as applicable) election to the Board of Directors included by the Nominating Stockholder in the Nomination Notice for inclusion in the proxy statement (subject, without limitation, to Section 5(e)(ii)), provided that such statement does not exceed 500 words; and



(iv) any other information that the Corporation or the Board of Directors determines, in their discretion, to include in the proxy statement relating to the nomination of the Nominee(s), including, without limitation, any statement in opposition to the nomination and any of the information provided pursuant to this Section 5.

### (b) <u>Maximum Number of Nominees.</u>

- The Corporation shall not be required to include in the proxy statement for an annual meeting of stockholders more Nominees than that number of directors constituting 20% of the total number of directors of the Corporation on the last day on which a Nomination Notice may be submitted pursuant to this Section 5 (rounded down to the nearest whole number, but not less than two) (the "Maximum Number"). The Maximum Number for a particular annual meeting shall be reduced by (1) the number of Nominees that the Board of Directors itself decides to nominate for election at such annual meeting (for the avoidance of doubt, after the deadline for submitting a Nomination Notice as set forth in Section 5(d) below and after giving effect to the selection process set forth in Section 5(b)(ii), if applicable) and (2) the number of incumbent directors who had been Nominees with respect to any of the preceding two annual meetings of stockholders and whose reelection at the upcoming annual meeting is being recommended by the Board of Directors. In the event that one or more vacancies for any reason occurs on the Board of Directors after the deadline for submitting a Nomination Notice as set forth in Section 5(d) below but before the date of the annual meeting, and the Board of Directors resolves to reduce the size of the Board of Directors in connection therewith, the Maximum Number shall be calculated based on the number of directors in office as so reduced.
- (ii) If the number of Nominees pursuant to this Section 5 for any annual meeting of stockholders exceeds the Maximum Number then, promptly upon notice from the Corporation, each Nominating Stockholder will select one Nominee for inclusion in the proxy statement until the Maximum Number is reached, going in order of the amount (largest to smallest) of the ownership position as disclosed in each Nominating Stockholder's Nomination Notice, with the process repeated if the Maximum Number is not reached after each Nominating Stockholder has selected one Nominee. If, after the deadline for submitting a Nomination Notice as set forth in Section 5(d), a Nominating Stockholder ceases to satisfy, as determined by the Board of Directors or its designee, acting in good faith, the eligibility requirements in this Section 5, as determined by the Board of Directors or its designee, acting in good faith, or becomes unwilling to serve on the Board of Directors, whether before or after the mailing of the definitive proxy statement, then the nomination shall be disregarded, and the Corporation (1) shall not be required to include in its proxy statement or on any ballot or form of proxy the disregarded Nominee or any successor or replacement nominee proposed by the applicable Nominating Stockholder or by any other Nominating Stockholder and (2) may otherwise communicate to its stockholders, including without limitation by amending or supplementing its proxy statement or ballot or form of proxy, that the Nominee will not be included as a Nominee in the proxy statement or on any ballot or form of proxy and will not be voted on at the annual meeting.

### (c) Eligibility of Nominating Stockholder.

- (i) An "Eligible Holder" is a person who has either (1) been a record holder of the shares of common stock used to satisfy the eligibility requirements in this Section 5(c) continuously for the three-year period specified in paragraph
- (ii) below or (2) provides to the Secretary of the Corporation, within the time period referred to in Section 5(d), evidence of continuous ownership of such shares for such three-year period from one or more securities intermediaries in a form that the
- Board of Directors or its designee, acting in good faith, determines would be deemed acceptable for purposes of a shareholder proposal under Rule 14a-8(b)(2) under the Exchange Act (or any successor rule).
- (ii) An Eligible Holder or group of up to 20 Eligible Holders may submit a nomination in accordance with this Section 5 only if the person or group (in the aggregate) has continuously owned at least the Minimum Number (as defined below) of shares of the Corporation's common stock throughout the three-year period preceding and including the date of submission of the Nomination Notice, and continues to own at least the Minimum Number through the date of the annual meeting. A group of funds under common management and investment control shall be treated as one Eligible Holder. For the avoidance of doubt, in the event of a nomination by a group of Eligible Holders, any and all requirements and obligations for an individual Eligible Holder that are set forth in this Section 5, including the minimum holding period, shall apply to each member of such group; provided, however, that the Minimum Number shall apply to the ownership of the group in the aggregate. Should any stockholder cease to satisfy the eligibility requirements in this Section 5, as determined by the Board of Directors or its designee, acting in good faith, or withdraw from a group of Eligible Holders at any time prior to the annual meeting of stockholders, the group of Eligible Stockholders shall only be deemed to own the shares held by the remaining members of the group.
- (iii) The "Minimum Number" of shares of the Corporation's common stock means 3% of the number of outstanding shares of common stock of the Corporation as of the most recent date for which such amount is given in any filing by the Corporation with the SEC prior to the submission of the Nomination Notice.
- (iv) For purposes of this Section 5, an Eligible Holder "owns" only those outstanding shares of the Corporation as to which the Eligible Holder possesses both: (A) the full voting and investment rights pertaining to the shares and
  - (B) the full economic interest in (including the opportunity for profit and risk of loss on) such shares; <u>provided</u>, that the number



of shares calculated in accordance with clauses (A) and (B) shall not include any shares: (1) sold by such Eligible Holder or any of its affiliates in any transaction that has not been settled or closed, (2) borrowed by such Eligible Holder or any of its affiliates for any purpose or purchased by such Eligible Holder or any of its affiliates pursuant to an agreement to resell, or (3) subject to any option, warrant, forward contract, swap, contract of sale, other derivative or similar agreement entered into by such Eligible Holder or any of its affiliates, whether any such instrument or agreement is to be settled with shares or with cash based on the notional amount or value of outstanding shares of the Corporation, in any such case which instrument or agreement has, or is intended to have, the purpose or effect of: (x) reducing in any manner, to any extent or at any time in the future, such Eligible Holder's or any of its affiliates' full right to vote or direct the voting of any such shares, and/or (y) hedging, offsetting, or altering to any degree, gain or loss arising from the full economic ownership of such shares by such Eligible Holder or any of its affiliates. An Eligible Holder "owns" shares held in the name of a nominee or other intermediary so long as the Eligible Holder retains the right to instruct how the shares are voted with respect to the election of directors and possesses the full economic interest in the shares. An Eligible Holder retains the right to instruct how the shares are voted with respect to the election of directors and possesses the full economic interest in the shares. An Eligible Holder's ownership of shares shall be deemed to continue during any period in which the Eligible Holder has delegated any voting power by means of a proxy, power of attorney, or other similar instrument or arrangement that is revocable at any time by the Eligible Holder has the power to recall such loaned shares on three business days' notice and has recalled such shares as of the date of the annual meet

No person shall be permitted to be in more than one group constituting a Nominating Stockholder, and if any person appears as a member of more than one group, it shall be deemed to be a member of the group that has the largest ownership position as reflected in the Nomination Notice.

(d) Nomination Notice. To nominate a Nominee, the Nominating Stockholder must, no earlier than 150 calendar days and no later than 120 calendar days before the anniversary of the date that the Corporation mailed its proxy statement for the prior year's annual meeting of stockholders, submit to the Secretary of the Corporation at the principal executive office of the Corporation all of the following information and documents (collectively, the "Nomination Notice"); provided, however, that if (and only if) the annual meeting is not scheduled to be held within a period that commences 30 days before the anniversary of such annual meeting and ends 30 days after such anniversary (an annual meeting date outside such period being referred to herein as an "Other Meeting Date"), the Nomination Notice shall be given in the manner provided in this Section 5(d) by the later of the close of business on the date that is 180 days prior to such Other Meeting Date or the tenth day following the date such Other Meeting Date is first publicly announced or disclosed:

(i) a Schedule 14N (or any successor form) relating to the Nominee, completed and filed with the SEC by the Nominating Stockholder as applicable, in accordance with SEC rules;

(ii) a written notice, in a form deemed satisfactory by the Board of Directors or its designee, acting in good faith, of the nomination of such Nominee that includes the following additional information, agreements, representations and warranties by the Nominating Stockholder (including each group member):

(1) the information required with respect to the nomination of directors pursuant to Section 4(a)(ii) of this Article Two;

(2) the details of any relationship that existed within the past three years and that would have been described pursuant to Item 6(e) of Schedule 14N (or any successor item) if it existed on the date of submission of the Schedule 14N;

a representation and warranty that the Nominating Stockholder acquired the securities of the Corporation in the ordinary course of business and did not acquire, and is not holding, securities of the Corporation for the purpose or with the effect of influencing or changing control of the Corporation;

(4) a representation and warranty that the Nominee's candidacy or, if elected, Board membership would not violate applicable state or federal law or the rules of any national securities exchange on which the Corporation's securities are traded;

a representation and warranty that the Nominee: (A) does not have any direct or indirect relationship with the Corporation that will cause the Nominee to be deemed not independent pursuant to the Corporation's Corporate Governance Guidelines as most recently published on its website prior to the submission of the Nomination Notice and otherwise qualifies as independent under the rules of any national securities exchange on which the Corporation's shares of common stock are traded; (B) is a "non-employee director" for the purposes of Rule 16b-3 under the Exchange Act (or any successor rule); (C) is an "outside director" for the purposes of Section 162(m) of the Internal Revenue Code (or any successor provision); and (D) is not and has not been subject to any event specified in Rule 506(d)(1) of Regulation D (or any successor rule) under the Exchange Act, without reference to whether the event is material to an evaluation of the ability or integrity of the Nominee;



- (6) a representation and warranty that the Nominating Stockholder satisfies the eligibility requirements set forth in Section 5(c) and has provided evidence of ownership to the extent required by Section 5(c)(i);
- (7) a representation and warranty that the Nominating Stockholder intends to continue to satisfy the eligibility requirements described in Section 5(c) through the date of the annual meeting;
- (8) a representation and warranty that the Nominating Stockholder will not engage in a "solicitation" within the meaning of Rule 14a-1(l) under the Exchange Act in support of the election of any individual as a director at the applicable annual meeting, other than its Nominee(s) or any nominee of the Board of Directors;
- (9) a representation and warranty that the Nominating Stockholder will not use any proxy card other than the Corporation's proxy card in soliciting stockholders in connection with the election of a Nominee at the annual meeting;
- (10) if desired, a statement for inclusion in the proxy statement in support of the Nominee's (or Nominees', as applicable) election to the Board of Directors, provided that such statement shall not exceed 500 words and shall fully comply with Section 14 of the Exchange Act and the rules and regulations thereunder, including Rule 14a-9; and
- in the case of a nomination by a group, the designation by all group members of one group member that is authorized to act on behalf of all group members with respect to matters relating to the nomination, including withdrawal of the nomination;
- (iii) an executed agreement, in a form deemed satisfactory by the Board of Directors or its designee, acting in good faith, pursuant to which the Nominating Stockholder (including each group member) agrees:
- (1) to comply with all applicable laws, rules and regulations in connection with the nomination, solicitation and election;
- (2) to file any written solicitation or other communication with the Corporation's stockholders relating to one or more of the Corporation's directors or director nominees or any Nominee with the SEC, regardless of whether any such filing is required under any rule or regulation or whether any exemption from filing is available for such materials under any rule or regulation;
- (3) to assume all liability stemming from an action, suit or proceeding concerning any actual or alleged legal or regulatory violation arising out of any communication by the Nominating Stockholder or any of its Nominees with the Corporation, its stockholders or any other person in connection with the nomination or election of directors, including, without limitation, the Nomination Notice;
- (4) to indemnify and hold harmless (jointly with all other group members, in the case of a group member) the Corporation and each of its directors, officers and employees individually against any liability, loss, damages, expenses or other costs (including attorneys' fees) incurred in connection with any threatened or pending action, suit or proceeding, whether legal, administrative or investigative, against the Corporation or any of its directors, officers or employees arising out of or relating to a failure or alleged failure of the Nominating Stockholder or any of its Nominees to comply with, or any breach or alleged breach of, its respective obligations, agreements or representations under this Section 5; and
- in the event that any information included in the Nomination Notice ceases to be true and accurate in all material respects (or omits a material fact necessary to make the statements made not misleading), or that the Nominating Stockholder (including any group member) has failed to continue to satisfy the eligibility requirements described in Section 5(c), to promptly notify the Corporation of the misstatement or omission in such previously provided information and of the information that is required to correct the misstatement or omission; and
- (iv) an executed agreement, in a form deemed satisfactory by the Board of Directors or its designee, acting in good faith, by the Nominee:
- (1) to provide to the Corporation such other information, including completion of the Corporation's director questionnaire, as it may reasonably request;
- (2) that the Nominee has read and agrees, if elected, to adhere to the Corporation's Corporate Governance Guidelines and Directors' Code of Conduct and any other Corporation policies and guidelines applicable to directors; and



that the Nominee is not and will not become a party to (i) any compensatory, payment or other financial agreement, arrangement or understanding with any person or entity in connection with service or action as a director of the Corporation that has not been disclosed to the Corporation, (ii) any agreement, arrangement or understanding with any person or entity as to how the Nominee would vote or act on any issue or question as a director (a "Voting Commitment") that has not been disclosed to the Corporation or (iii) any Voting Commitment that could reasonably be expected to limit or interfere with the Nominee's ability to comply, if elected as a director of the Corporation, with its fiduciary duties under applicable law.

The information and documents required by this Section 5(d) shall be: (i) provided with respect to and executed by each group member, in the case of information applicable to group members; and (ii) provided with respect to the persons specified in Instruction 1 to Item 6(c) and (d) of Schedule 14N (or any successor item) in the case of a Nominating Stockholder or group member that is an entity. The Nomination Notice shall be deemed submitted on the date on which all of the information and documents referred to in this Section 5(d) (other than such information and documents contemplated to be provided after the date the Nomination Notice is provided) have been delivered to or, if sent by mail, received by the Secretary of the Corporation.

### (e) Exceptions

- (i) Notwithstanding anything to the contrary contained in this Section 5, the Corporation may omit from its proxy statement any Nominee and any information concerning such Nominee (including a Nominating Stockholder's statement in support) and no vote on such Nominee will occur (notwithstanding that proxies in respect of such vote may have been received by the Corporation), and the Nominating Stockholder may not, after the last day on which a Nomination Notice would be timely, cure in any way any defect preventing the nomination of the Nominee, if:
  - (1) the Corporation receives a notice pursuant to clause (y) of Section 4(a) of this Article Two that a stockholder intends to nominate a candidate for director at the annual meeting;
  - (2) the Nominating Stockholder or the designated lead group member, as applicable, or any qualified representative thereof, does not appear at the meeting of stockholders to present the nomination submitted pursuant to this Section 5, the Nominating Stockholder withdraws its nomination or the officer presiding at the meeting determines that such nomination shall be disregarded pursuant to Section 5 of Article One;
  - (3) the Board of Directors, acting in good faith, determines that such Nominee's nomination or election to the Board of Directors would result in the Corporation violating or failing to be in compliance with the Corporation's By-Laws or certificate of incorporation or any applicable law, rule or regulation to which the Corporation is subject, including any rules—or regulations of any national securities exchange on which the Corporation's securities are traded;
  - (4) (A) the Nominee has been, within the past three years, an officer or director of a competitor, as defined for purposes of Section 8 of the Clayton Antitrust Act of 1914, as amended, (B) the Nominee's election as a member of the Board of Directors would cause the Corporation to seek, or assist in the seeking of, advance approval or to obtain, or assist in the obtaining of, an interlock waiver pursuant to the rules or regulations of the Board of Governors of the Federal Reserve System, the Office of the Comptroller of the Currency or the Federal Energy Regulatory Commission or (C) the Nominee is a director, trustee, officer or employee with management functions for any depository institution, depository institution holding company or entity that has been designated as a Systemically Important Financial Institution, each as defined in the Depository Institution Management Interlocks Act, provided, however, that this clause (C) shall apply only so long as the Corporation is subject to compliance with Section 164 of the Dodd-Frank Wall Street Reform and Consumer Protection Act; or
  - (5) the Corporation is notified, or the Board of Directors acting in good faith determines, that a Nominating Stockholder has failed to continue to satisfy the eligibility requirements described in Section 5(c), any of the representations and warranties made in the Nomination Notice ceases to be true and accurate in all material respects (or omits a material fact necessary to make the statements made not misleading), the Nominee becomes unwilling or unable to serve on the Board of Directors or any material violation or breach occurs of the obligations, agreements, representations or warranties of the Nominating Stockholder or the Nominee under this Section 5.
- (ii) Notwithstanding anything to the contrary contained in this Section 5, the Corporation may omit from its proxy statement, or may supplement or correct, any information, including all or any portion of the statement in support of the Nominee(s) included in the Nomination Notice, if the Board of Directors in good faith determines that:
  - (1) such information is not true in all material respects or omits a material statement necessary to make the statements made not misleading;



(2) such information directly or indirectly impugns the character, integrity or personal reputation of, or directly or indirectly makes charges concerning improper, illegal or immoral conduct or associations, without factual foundation, with respect to, any person; or

(3) the inclusion of such information in the proxy statement would otherwise violate the SEC proxy rules or any other applicable law, rule or regulation.

The Corporation may solicit against, and include in the proxy statement its own statement relating to, any Nominee.

Section 6. VACANCIES. Any vacancy on the Board of Directors resulting from death, resignation, disqualification or removal from office or other cause, as well as any vacancy resulting from an increase in the number of Directors which occurs between annual meetings of the stockholders at which Directors are elected, shall be filled only by a majority vote of the remaining Directors then in office, whether or not a quorum, except that those vacancies resulting from removal from office by a vote of the stockholders may be filled by a vote of the stockholders at the same meeting at which such removal occurs. The Directors chosen to fill vacancies shall hold office for a term expiring at the end of the next annual meeting of stockholders. No decrease in the number of Directors constituting the Board of Directors shall shorten the term of any incumbent Director.

Section 7. REMOVAL. Any Director may be removed from office at any time without assigning any cause by the holders of a majority of the shares then entitled to vote at an election of directors.

Section 8. EXCEPTIONS FOR PREFERENCE DIRECTORS. The provisions of Sections 4 through 7 of this Article Two shall not apply to any Director of the Corporation who may be elected under specified circumstances by holders of any class or series of stock having a preference over the common stock as to dividends or upon liquidation of the Corporation.

Section 9.[RESERVED.]

Section 10. REGULAR MEETINGS. Regular meetings of the Board of Directors shall be held at such times and places as the Board of Directors shall determine in accordance with the Corporate Governance Guidelines or which are otherwise furnished to the Directors at its Organization Meeting each year, and if so determined or furnished, notice of such meetings need not be given.

Section 11. SPECIAL MEETINGS. The Chief Executive Officer, the Chairman, the President or the Lead Director may call a special meeting of the Board of Directors at any time. Any such officer or the Secretary shall call a special meeting of the Board upon the written request of any three members of the Board. A special meeting shall be held at such time and place as may be designated by the person or persons calling the meeting. The person or persons calling the meeting shall cause such notice of the meeting and of its purpose to be given as hereinafter provided in this Section 11, but, except as otherwise expressly provided by law or by these By-Laws, the purposes thereof need not be stated in such notice. Except as otherwise provided by law, notice of the special meeting stating the place, date and hour of the meeting shall be given to each Director either (i) by mail or courier not less than 48 hours before the date of the meeting or (ii) by telephone, telegram or facsimile or electronic transmission, not less than 24 hours before the time of the meeting or on such shorter notice as the person or persons calling such meeting may deem necessary or appropriate in the circumstances (provided that notice of any meeting need not be given to any director who shall either submit, before or after such meeting, a waiver of notice or attend the meeting without protesting, at the beginning thereof, the lack of notice).

Section 12. QUORUM; BOARD ACTION. A majority of the Board of Directors shall constitute a quorum for the transaction of business at any meeting. Unless otherwise provided by law, by these By-Laws or in the Certificate of Incorporation of the Corporation, any action of the Board may be taken upon the affirmative vote of a majority of the Directors present at a duly convened meeting or upon the unanimous written consent of all Directors. In case at any meeting of the Board of Directors a quorum shall not be present, a majority of the members of the Board of Directors present may adjourn the meeting from time to time until a quorum shall be present.

Section 13. PARTICIPATION OTHER THAN BY ATTENDANCE. To the full extent permitted by law, any Director may participate in any regular or special meeting of the Board of Directors or of any committee of the Board of Directors of which he or she is a member by means of a conference telephone or similar communications equipment by means of which all persons participating in the meeting are able to hear each other, and participation in a meeting pursuant to this Section 13 shall constitute presence in person at such meeting.

Section 14. ACTION BY DIRECTORS WITHOUT A MEETING. Unless otherwise restricted by the Certificate of Incorporation or these By-Laws, any action required or permitted to be taken at any meeting of the Board of Directors, or of any committee thereof, may be taken without a meeting if all members of the Board of Directors or of such committee, as the case may be, consent thereto in writing, or by electronic transmission and the writing or writings or electronic transmission or transmissions are filed with the minutes of proceedings of the Board of Directors or such committee, as the case may be.

Section 15. COMPENSATION. Each Director who does not receive a salary from the Corporation or any affiliate thereof shall be entitled to such compensation as the Board shall determine for his or her service upon the Board of Directors and any of its committees, for his or her attendance at meetings of the Board and any of its committees and for his or her expenses incident thereto.



Directors shall also be entitled to such compensation as the Board shall determine for services rendered to the Corporation in any capacity other than as Directors.

Section 16. RESIGNATION. Any Director may resign by submitting his or her resignation to the Chief Executive Officer, the Chairman, the President or the Secretary of the Corporation. Such resignation shall become effective upon its submission or at any later time specified therein.

### ARTICLE THREE

### COMMITTEES OF THE BOARD OF DIRECTORS

- Section 1. APPOINTMENT; POWERS. The Board of Directors may appoint one or more standing or temporary committees consisting of two or more Directors. In the absence or disqualification of a member of a committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not such member or members constitute a quorum, may unanimously appoint another member of the Board of Directors to act at the meeting in the place of any such absent or disqualified member. The Board of Directors may invest such committees with such powers and authority, subject to such conditions, as it may see fit, but no such committee shall have the power or authority with respect to the following matters: (i) approving or adopting, or recommending to the stockholders, any action or matter (other than the election or removal of directors) expressly required by law to be submitted to stockholders for approval or (ii) adopting, amending or repealing these By-Laws.
- Section 2. AUDIT COMMITTEE. The Board of Directors shall appoint from among its members, none of whom shall be an officer of the Corporation, an Audit Committee, which, so far as may be permitted by law and except as specifically limited by the Board of Directors pursuant to Section 1 of this Article Three, shall have all the powers and responsibilities and shall perform the functions specified in the Charter of the Audit Committee, as approved by the Board of Directors, and in any supplemental statement that the Board of Directors may adopt with regards to the functions of the Audit Committee.
- Section 3. CORPORATE GOVERNANCE, NOMINATING AND SOCIAL RESPONSIBILITY COMMITTEE.

The Board of Directors shall appoint from among its members, none of whom shall be an officer of the Corporation, a Corporate Governance, Nominating and Social Responsibility Committee, which, so far as may be permitted by law and except as specifically limited by the Board of Directors pursuant to Section 1 of this Article Three, shall have all the powers and responsibilities and shall perform the functions specified in the Charter of the Corporate Governance, Nominating and Social Responsibility Committee, as approved by the Board of Directors, and in any supplemental statement that the Board of Directors may adopt with regards to the functions of the Corporate Governance, Nominating and Social Responsibility Committee.

- Section 4. HUMAN RESOURCES AND COMPENSATION COMMITTEE. The Board of Directors shall appoint from among its members, none of whom shall be an officer of the Corporation, a Human Resources and Compensation Committee, which, so far as may be permitted by law and except as specifically limited by the Board of Directors pursuant to Section 1 of this Article Three, shall have all the powers and responsibilities and shall perform the functions specified in the Charter of the Human Resources and Compensation Committee, as approved by the Board of Directors, and in any supplemental statement that the Board of Directors may adopt with regards to the functions of the Human Resources and Compensation Committee.
- Section 5. RISK COMMITTEE. The Board of Directors shall appoint from among its members, a Risk Committee, which, so far as may be permitted by law and except as specifically limited by the Board of Directors pursuant to Section 1 of this Article Three, shall have all the powers and responsibilities and shall perform the functions specified in the Charter of the Risk Committee, as approved by the Board of Directors, and in any supplemental statement that the Board of Directors may adopt with regards to the functions of the Risk Committee.
- Section 6. TECHNOLOGY COMMITTEE. The Board of Directors shall appoint from among its members, a Technology Committee, which, so far as may be permitted by law and except as specifically limited by the Board of Directors pursuant to Section 1 of this Article Three, shall have all the powers and responsibilities and shall perform the functions specified in the Charter of the Technology Committee, as approved by the Board of Directors, and in any supplemental statement that the Board of Directors may adopt with regards to the functions of the Technology Committee.
- Section 7. FINANCE COMMITTEE. The Board of Directors shall appoint from among its members, a Finance Committee, which, so far as may be permitted by law and except as specifically limited by the Board of Directors pursuant to Section 1 of this Article Three, shall have all the powers and responsibilities and shall perform the functions specified in the Charter of the Finance Committee, as approved by the Board of Directors, and in any supplemental statement that the Board of Directors may adopt with regards to the functions of the Finance Committee.
- Section 8. TERM; VACANCIES. (a) All committee members appointed by the Board of Directors shall serve at the pleasure of the Board of Directors; and (b) the Board of Directors may fill any committee vacancy.
- Section 9. ORGANIZATION. All committees shall determine their own organization, procedures and times and places of meeting, unless otherwise directed by the Board of Directors and except as otherwise provided in these By-Laws. In the absence



of a provision by the Board of Directors or a provision in the rules of such committee to the contrary, a majority of the entire authorized number of members of such committee shall constitute a quorum for the transaction of business, the vote of a majority of the members present at a meeting at the time of such vote if a quorum is then present shall be the act of such committee, and in other respects each committee shall conduct its business in the same manner as the Board of Directors conducts its business pursuant to Article Two of these By-Laws.

### ARTICLE FOUR OFFICERS

- Section 1. CHIEF EXECUTIVE OFFICER. The Board of Directors shall appoint a Chief Executive Officer. The Chief Executive Officer shall be the chief executive officer of the Corporation, shall report directly to the Board of Directors and shall be responsible for the general management of the affairs of the Corporation. The Chief Executive Officer shall see that all orders and resolutions of the Board of Directors and of any committee thereof are carried into effect. The Chief Executive Officer shall have general executive powers concerning all the operations and business of the Corporation and shall have and exercise such further powers and duties as may be conferred upon, or assigned to, him or her by the Board of Directors or as may be provided by law, and he or she may delegate to any other officer such executive and other powers and duties as he or she deems advisable.
- Section 2. CHAIRMAN. The Board of Directors shall appoint one of its members to be Chairman. The Chairman shall preside at all meetings of the stockholders and of the Board of Directors and shall have and exercise such further powers as may be conferred upon, or assigned to, him or her by the Board of Directors or as may be provided by law. In the event of the absence or temporary disability of the Chairman, the Lead Director shall preside at the applicable meetings of the stockholders and/or the Board of Directors during which such absence or disability exists and, in the event of the absence or temporary disability of the Chairman and the Lead Director, any other officer of the Corporation or Director designated by the Board of Directors shall preside at the applicable meetings of the stockholders and/or Board of Directors during which such absence or disability exists.
- Section 3. PRESIDENT. The Board of Directors shall appoint a President. The President shall have and exercise such powers and duties as may be conferred upon, or assigned to, him or her by the Board of Directors or the Chief Executive Officer or as may be provided by law.
- Section 4. SENIOR OFFICERS. The Board of Directors may appoint, or the Chief Executive Officer may appoint, subject to confirmation by the Board of Directors, one or more senior officers of the Corporation, any of whom may be designated as Vice Chairmen or as senior executive vice presidents or given any other descriptive titles, as the Board of Directors or the Human Resources and Compensation Committee of the Board of Directors shall specify from time to time. Each senior officer shall have and exercise such powers and duties as may be conferred upon, or assigned to, him or her by the Board of Directors or the Chief Executive Officer.
- Section 5. SECRETARY; ASSISTANT SECRETARIES. The Board of Directors shall appoint a Secretary. The Secretary shall act as secretary of all meetings of the stockholders and of the Board of Directors, and he or she shall keep minutes of all such meetings. The Secretary shall give such notice of the meetings as is required by law or these By-Laws. The Secretary shall be the custodian of the minute book, stock record and transfer books and all other general corporate records. The Secretary shall be the custodian of the corporate seal and shall have the power to affix and attest the same, and he or she may delegate such power to one or more officers, employees or agents of the Corporation. The Secretary shall have and exercise such further powers and duties as may be conferred upon, or assigned to, him or her by the Board of Directors or the Chief Executive Officer may appoint one or more Assistant Secretary shall assist the Secretary in the performance of his or her duties. At the direction of the Secretary or in the event of his or her absence or disability, an Assistant Secretary shall perform the duties of the Secretary. Each Assistant Secretary shall have and exercise such further powers and duties as may be conferred upon, or assigned to, him or her by the Board of Directors, the Chief Executive Officer or the Secretary.
- Section 6. TREASURER; ASSISTANT TREASURERS. The Board of Directors shall appoint a Treasurer. The Treasurer shall have and exercise such powers and duties as may be conferred upon, or assigned to, him or her by the Board of Directors or the Chief Executive Officer. The Board of Directors or the Chief Executive Officer may appoint one or more Assistant Treasurers who shall assist the Treasurer in the performance of his or her duties. At the direction of the Treasurer or in the event of his or her absence or disability, an Assistant Treasurer shall perform the duties of the Treasurer. Each Assistant Treasurer shall have and exercise such further powers and duties as may be conferred upon, or assigned to, him or her by the Board of Directors, the Chief Executive Officer or the Treasurer.
- Section 7. CHIEF AUDITOR. Subject to any requirement of law or the rules of any exchange on which shares of common stock of the Corporation are listed, the Board of Directors shall appoint a Chief Auditor who shall be the chief auditing officer of the Corporation. He or she shall report to the Audit Committee and shall continuously examine the affairs of the Corporation under the general supervision and direction of the Board of Directors. He or she shall have and exercise such further powers and duties as may be conferred upon, or assigned to, him or her by the Audit Committee or the Board of Directors. The Board of Directors may also appoint other officers who shall perform such auditing duties as may be assigned to them by the Board of Directors or the Chief Auditor of the Corporation.



Section 8. OTHER OFFICERS. The Board of Directors, the Chief Executive Officer or the delegate of either of them may appoint or hire such additional officers of the Corporation, who may be designated as executive vice presidents, managing directors, senior vice presidents, vice presidents, vice presidents, assistant vice presidents, officers, assistant officers, senior associates, associates, or given any other descriptive titles, and may hire such additional employees, as it or he or she may deem necessary or desirable to transact the business of the Corporation, and may establish the conditions of employment of any of the persons mentioned above and may fix their compensation and dismiss them. Such persons may have such descriptive titles as may be appropriate, and they shall, respectively, have and exercise such powers and duties as pertain to their several offices or as may be conferred upon, or assigned to, them by the appropriate appointing authority and as are not inconsistent with any provisions of these By-Laws.

Section 9. TENURE OF OFFICE. The Chief Executive Officer, the Chairman and the President shall each hold office for the year for which the Board of Directors was elected and until the appointment and qualification of his or her successor or until his or her earlier death, resignation, disqualification or removal. All other officers and employees shall hold office at the pleasure of the appropriate appointing authority. The Board of Directors may remove any officer with or without cause at any time.

Section 10. COMPENSATION. The Board of Directors shall fix the compensation of those officers appointed pursuant to Sections 1, 2, 3 and 7 of this Article Four and of any other officers of the Corporation or any officers of any subsidiary of the Corporation that the Board of Directors shall deem appropriate, and it may award additional compensation to any officer or employee of the Corporation or any officer of any subsidiary for any year or years based upon the performance of that person during any such period, the success of the operations of the Corporation or any subsidiary thereof during any such period or any other reason that the Board of Directors shall deem appropriate. Unless the Board of Directors shall otherwise direct, the Chief Executive Officer or his or her delegate shall fix the compensation of all other officers or employees of the Corporation or any subsidiary thereof.

### ARTICLE FIVE [RESERVED] ARTICLE SIX

### STOCK, STOCK CERTIFICATES AND HOLDERS OF RECORD

Section 1. STOCK CERTIFICATES. Shares of stock of the Corporation shall be represented by certificates or, to the extent provided in Sections 5 and 6 of this Article Six or as otherwise required by law, shall be uncertificated. Stock certificates shall be in such form as the Board of Directors may from time to time prescribe in accordance with law and the requirements of any exchange upon which such shares are listed. Such certificates shall be signed by any two officers authorized by the Board of Directors and permitted by law and may be sealed with the seal of the Corporation, and such signatures and seal may be facsimile or otherwise as permitted by law. In case any officer, registrar or transfer agent who has signed, or whose facsimile signature has been placed upon, any stock certificate shall have ceased to be such officer, registrar or transfer agent, as the case may be, before the certificate is issued, as a result of death, resignation or otherwise, the certificate may be issued by the Corporation with the same effect as if the officer, registrar or transfer agent, as the case may be, had not ceased to be such at the date of the certificate's issue.

Section 2. TRANSFER OF STOCK. Except as otherwise provided by law, transfers of shares of stock of the Corporation shall be made only upon the books of the Corporation only by the registered holder thereof, or by his or her attorney thereunto authorized by power of attorney duly executed and filed with the Secretary, or with a transfer agent duly appointed, and upon surrender of the certificate or certificates for such shares properly endorsed, if such shares are represented by a certificate, and payment of all taxes thereon.

Section 3. LOST, STOLEN OR DESTROYED CERTIFICATES. The Corporation may issue a new certificate of stock or uncertificated shares in the place of any certificate theretofore issued by it, alleged to have been lost, stolen or destroyed, and the Corporation may require the owner of the lost, stolen or destroyed certificate, or such owner's legal representative, to give the Corporation a bond sufficient to indemnify it against any claim that may be made against it on account of the alleged loss, theft or destruction of any such certificate or the issuance of such new certificate or shares.

Section 4. HOLDERS OF RECORD. The Corporation shall be entitled to treat any person in whose name shares of stock of the Corporation stand on its books as the holder and owner in fact thereof for all purposes.

Section 5. UNCERTIFICATED SECURITIES. All or part of the shares of common stock and/or preferred stock of the Corporation may be uncertificated shares to the extent determined by the Board of Directors from time to time; however, in no event shall shares of common stock and/or preferred stock represented by a certificate be deemed uncertificated until the certificate is surrendered to the Corporation.

Section 6. DETERMINATIONS AS TO ISSUANCE, TRANSFER AND REGISTRATION. The Board of

Directors (or any officer or other person as the Board of Directors may designate) from time to time may make such rules, policies and procedures as it, he or she may deem appropriate concerning the issue, transfer and registration of shares of stock of the Corporation, whether certificated or uncertificated.



### ARTICLE SEVEN

### SIGNING AUTHORITY AND CORPORATE TRANSACTIONS

Section 1. SIGNING AUTHORITY. The Chief Executive Officer, the Chairman, the President, any senior officer or any Vice President of the Corporation shall have full power and authority, in the name and on behalf of the Corporation, under seal of the Corporation or otherwise, to execute, acknowledge and deliver any and all agreements, instruments or other documents relating to property or rights of all kinds held or owned by the Corporation or to the operation of the Corporation, all as may be incidental to the operation of the Corporation and subject to such limitations as the Board of Directors or the Chief Executive Officer may impose. Any such agreement, instrument or document may also be executed, acknowledged and delivered in the name and on behalf of the Corporation, under seal of the Corporation or otherwise, by such other officers, employees or agents of the Corporation as the Board of Directors, the Chief Executive Officer or the delegate of either of them may from time to time authorize. In each such case, the authority so conferred shall be subject to such limitations as the Board of Directors, the Chief Executive Officer or the delegate may impose. Any officer, employee or agent authorized hereunder to execute, acknowledge and deliver any such agreement, instrument or document is also authorized to cause the Secretary, any Assistant Secretary or any other authorized person to affix the seal of the Corporation thereto and to attest it.

### Section 2. VOTING AND ACTING WITH RESPECT TO STOCK AND OTHER SECURITIES OWNED BY

THE CORPORATION. The Chief Executive Officer, the Chairman, the President, any senior officer or any Vice President shall have the power and authority to vote and act with respect to all stock and other securities in any other corporation owned by this Corporation, subject to such limitations as the Board of Directors or the Chief Executive Officer may impose. Such power and authority may be conferred upon any other officer, employee or agent by the Board, the Chief Executive Officer or the delegate of either of them, and such authority may be general or may be limited to specific instances. Any person so authorized shall have the power to appoint an attorney or attorneys, with general power of substitution, as proxies for the Corporation with full power to vote and act on behalf of the Corporation with respect to such stock and other securities.

### ARTICLE EIGHT GENERAL PROVISIONS

Section 1. FISCAL YEAR. The fiscal year of the Corporation shall be determined by the Board of Directors.

Section 2. RECORDS. The Certificate of Incorporation, By-Laws and the proceedings of all meetings of the stockholders, the Board of Directors and any other committee of the Board of Directors shall be recorded in appropriate minute books provided for this purpose or in any other information storage device (whether in paper or electronic form), provided that the records so kept can be converted into clearly legible form within a reasonable period of time. The Corporation shall so convert any records so kept upon—the request of any person entitled to inspect the same. The minutes of each meeting shall be signed by the Secretary or other person acting as secretary of the meeting.

Section 3. SEAL. The Board of Directors may from time to time prescribe the form of a suitable corporate seal. The corporate seal may be used by causing it or a facsimile thereof to be impressed or affixed or in any other manner reproduced.

Section 4. NUMBER. Any reference in these By-Laws to the singular includes the plural and vice versa unless the context indicates otherwise.

### Section 5. WAIVER OF NOTICE OF MEETINGS OF STOCKHOLDERS, DIRECTORS AND COMMITTEES.

Whenever notice is required to be given by law or under any provision of the certificate of incorporation or these By-laws, a written waiver thereof, signed by the person entitled to notice, or a waiver by electronic transmission by the person entitled to notice, whether before or after the time stated therein, shall be deemed equivalent to notice. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends a meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the stockholders, directors or members of a committee of directors need be specified in any written waiver of notice or any waiver by electronic transmission unless so required by the certificate of incorporation or these By-laws.

### ARTICLE NINE BY-LAWS

Section 1. AMENDMENTS. These By-Laws may be amended, altered and repealed, and new By-Laws may be adopted at any time, either by action of the stockholders or (except as otherwise provided by law or these By-Laws) by action of the Board of Directors.

Section 2. INSPECTION. A copy of the By-Laws, with all amendments thereto, shall at all times be kept in a convenient place at the principal office of the Corporation and shall be open for inspection to all stockholders during normal business hours.