



Third Quarter & YTD Highlights



Year-to-Date

Adj. NTI¹

\$1,194M

Adj. NTI/day^{1,2}

\$6.3

Normalized Adj. EPS¹

\$2.61

Adj. EBITDA¹

\$734M

Adj. EBITDA Margin^{1,3}

61%

Debt to LTM Adj. EBITDA¹

1.7x

3Q 2022

Adj. NTI¹

\$331M

Adj. NTI/day^{1,2}

\$5.2

Normalized Adj. EPS¹

\$0.61

Adj. EBITDA¹

\$181M

Adj. EBITDA Margin^{1,3}

55%

Debt to LTM Adj. EBITDA¹

1.7x

Notable Accomplishments

- Repurchased 3.4M shares in 3Q 2022 at an average price of \$23.43
 - Cumulative repurchases of 31.1M shares (represents 12.2% of shares outstanding, net of issuances)^{4,5}
- Generated \$501K per day of Adj. NTI¹ from organic growth initiatives in 3Q 2022 (10% of firmwide Adj. NTI)
 - YTD Adj. NTI¹ per day of \$626K from organic growth initiatives
 - +14% vs FY 2021 daily average

Key Financial Metrics



	<u>Annual</u>					
	FY	FY	YTD			
(\$M)	2020	2021	2022			
Total Adjusted Net Trading Income 1,2	\$2,271	\$1,910	\$1,194			
Daily Average Adj. NTI 1,2	\$9.0	\$7.6	\$6.3			
Market Making Adj. NTI ¹	\$1,782	\$1,428	\$874			
Market Making Daily Average Adj. NTI 1	\$7.0	\$5.7	\$4.6			
Execution Services Adj. NTI ^{1,2}	\$489	\$482	\$320			
Execution Services Daily Average Adj. NTI 1,2	\$1.9	\$1.9	\$1.7			
Adjusted Cash Operating Expenses ¹	\$623	\$609	\$460			
Total Adjusted Operating Expenses ¹	\$690	\$677	\$511			
Adjusted EBITDA ¹	\$1,648	\$1,301	\$734			
Adjusted EBITDA Margin 1,3	73%	68%	61%			
Long-Term Debt (at end of period)	\$1,670	\$1,630	\$1,824			
Debt / LTM Adjusted EBITDA 1	1.0x	1.3x	1.7x			
Normalized Adjusted EPS ¹	\$5.76	\$4.57	\$2.61			

	<u>(</u>		<u>C</u>	ompariso	n				
	FY 20	<u>)21</u>			FY'22		<u>3Q 20</u>	22 <u>v</u>	YTD v
1Q	2Q	3Q	4Q	1Q	2Q	3Q	2Q'22	3Q'21	FY 20214
\$728	\$342	\$354	\$486	\$505	\$357	\$331	- 10%	- 7%	- 16%
\$11.9	\$5. <i>4</i>	\$5.5	\$7.6	\$8.1	\$5.8	\$5.2	- 10%	- / 70	- 10%
\$575	\$232	\$249	\$372	\$382	\$254	\$238	- 9%	- 4%	100/
\$9.4	\$3.7	\$3.9	\$5.8	\$6.2	\$4.1	\$3.7	- 9%	- 4%	- 18%
\$153	\$110	\$106	\$114	\$123	\$104	\$93	400/	400/	4407
\$2.5	\$1.7	\$1.7	\$1.8	\$2.0	\$1.7	\$1.5	- 13%	- 12%	- 11%
\$163	\$145	\$144	\$157	\$161	\$148	\$151	+ 2%	+ 5%	+ 1%
\$180	\$161	\$160	\$175	\$179	\$164	\$167	+ 2%	+ 4%	+ 1%
\$565	\$197	\$211	\$328	\$344	\$209	\$181	- 14%	- 14%	- 25%
78%	58%	59%	68%	68%	59%	55%	- 4 pts	- 5 pts	- 7 pts
\$1,667	\$1,632	\$1,633	\$1,630	\$1,829	\$1,826	\$1,824	- 0%	+ 12%	+ 12%
1.0x	1.2x	1.2x	1.3x	1.7x	1.7x	1.7x	+ 3%	+ 38%	+ 33%
\$2.04	\$0.63	\$0.70	\$1.19	\$1.27	\$0.73	\$0.61	- 16%	- 13%	- 24%

Daily Average Adj. NTI¹ Trend



■ Execution Services ■ Market Making

Major Market Metrics



		Annual				C	Quarterly				Compariso		n
	FY	FY FY YTD		FY 2021 FY'22					<u>3Q 2</u>	YTD v			
	2020	2021	2022	1Q	2Q	3Q	4Q	1Q	2Q	3Q	2Q'22	3Q'21	FY 2021
Market Metrics (Average Daily)													
Volume Metrics													
US Equity Consolidated Volume (M shares)	10,924	11,404	12,108	14,650	10,559	9,763	10,782	12,880	12,585	10,899	- 13%	+ 12%	+ 6%
US Equity Consolidated Notional Volume (\$B)	\$479	\$565	\$602	\$627	\$533	\$512	\$590	\$718	\$612	\$478	- 22%	- 7%	+ 7%
IBKR Retail Equity Share Volume (M)	1,326	3,041	1,335	5,019	2,721	2,689	1,821	1,548	1,292	1,171	- 9%	- 56%	- 56%
OCC ADV (M contracts)	30	39	41	42	36	38	41	42	39	40	+ 1%	+ 6%	+ 4%
CME FX ADV (K contracts)	861	798	985	850	770	776	800	905	950	1,096	+ 15%	+ 41%	+ 23%
Hotspot ADV FX (\$B)	\$35	\$34	\$40	\$37	\$33	\$32	\$33	\$42	\$39	\$40	+ 5%	+ 26%	+ 20%
Volatility Metrics													
S&P 500 Average Implied Volatility (VIX)	29.3	19.7	25.8	23.2	18.0	18.3	19.3	25.4	27.4	24.8	- 10%	+ 36%	+ 31%
S&P 500 Average Realized Volatility	30.4	13.0	23.7	15.8	11.2	11.1	14.0	21.4	28.6	21.3	- 25%	+ 92%	+ 82%
Ratio: Realized Volatility / VIX	104%	66%	92%	68%	62%	61%	73%	84%	104%	86%	- 18%	+ 42%	+ 39%
S&P 500 Intraday Volatility	1.68%	0.96%	1.83%	1.26%	0.76%	0.80%	1.02%	1.83%	2.06%	1.63%	- 21%	+ 104%	+ 92%
SX5E Realized Volatility	30.1	14.8	24.2	13.6	12.9	14.6	17.9	30.8	23.0	19.1	- 17%	+ 30%	+ 64%
NKY Realized Volatility	24.1	18.5	21.0	20.1	19.1	16.2	18.8	25.0	19.7	18.6	- 6%	+ 14%	+ 14%
CVIX Realized Volatility	66.7	29.3	58.4	32.1	25.0	30.3	29.8	61.9	55.0	58.3	+ 6%	+ 92%	+ 99%
GS Comm Realized Volatility	18.9	11.7	10.7	8.4	5.4	8.0	24.9	13.0	8.5	10.5	+ 24%	+ 32%	- 9%

Organic Business Growth CAGR² + 44% \$806K/day \$626K/day \$548K/day \$656K/day \$576K/day \$501K/day Daily Average Adj. NTI¹ from \$296K/day **Organic Growth Initiatives** \$160K/day YTD 2022 1Q 2022 FY 2021 **FY 2018** FY 2019 FY 2020 2Q 2022 3Q 2022 Total Adj. NTI¹ \$40M \$75M \$166M \$138M \$118M \$50M \$36M \$32M % of Firmwide Adj. NTI¹ 3% 7% 7% 7% 10% 10% 10% 10%

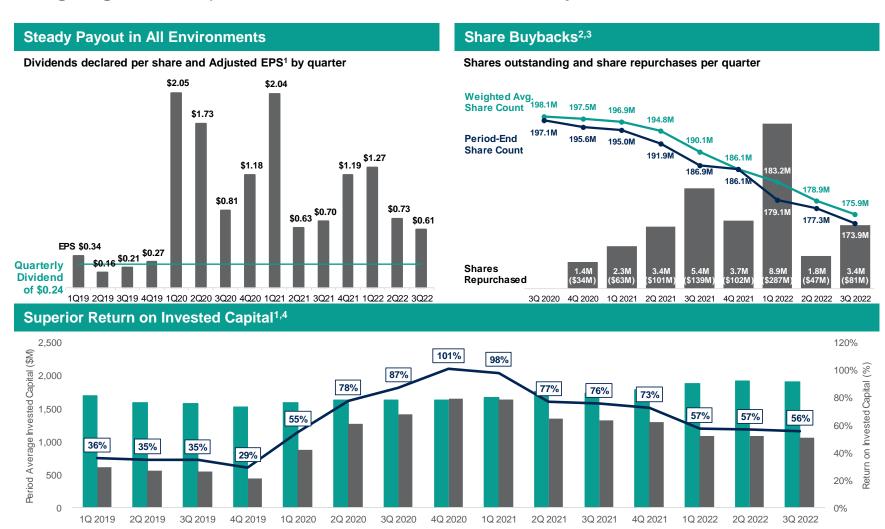
- **Options Market Making:** We continue to expand our global options footprint; our investment in our options business remains a key long-term engine of growth.
- **Crypto Market Making:** Our growing crypto desk remains focused on developing connectivity and technology to a growing number of the top crypto venues as we work to expand the opportunity that we can address in Bitcoin, Ethereum and other top crypto currencies across various forms, including spot as well as ETFs and Futures.
 - EDX Markets: Our venture with Citadel Securities, Fidelity Digital and Charles Schwab to develop a crypto ecosystem to serve the interests of global investors is proceeding nicely. We believe EDX will accelerate the institutional adoption of crypto assets by providing a stable and resilient medium for investing in crypto across established global brokerage platforms.
- ETF Block: Contributes to our results as we focus on growing our footprint in the fixed income ETF universe in conjunction with key investments we are making to become a dealer in the market for corporate bonds.

See endnotes at end of this supplement 5

Capital Management



Ongoing share repurchases reduced share count by 3.4M to 173.9M



LTM Pro Forma Adjusted EBITDA

Return on Invested Capital

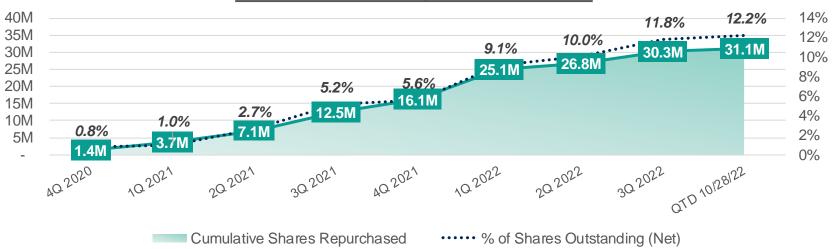
See endnotes at end of this supplement

Average of LTM Invested Capital

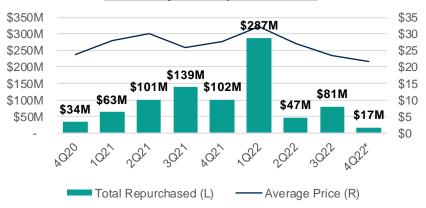
Update on Share Buybacks



Cumulative Shares Repurchased to Date 1,2



Total Buybacks per Quarter¹



Buyback Authorization ¹	
Total Buyback Authorization	\$1,220M
Total Amount Repurchased	\$872M
Shares Repurchased	31.1M
Average Price of Shares Repurchased	\$28.06
Buyback Authorization Remaining	\$348M

Operating Expenses and Long-Term Debt



Disciplined focus on expense management

Operating Expense Results

		Ann	ual			
Adjusted Operating Expenses (\$M)	FY 2019 ²	FY 2020	FY 2021	YTD 2022	2021 1Q	202 ² 2Q
Cash Compensation	\$230	\$321	\$314	\$250	\$90	\$
Communications & Data Processing	209	214	212	164	52	
Operations & Administrative	103	88	83	45	22	
Adjusted Cash Operating Expenses ¹	\$543	\$623	\$609	\$460	\$163	\$1
Depreciation & Amortization	66	67	68	50	17	
Total Adjusted Operating Expenses ¹	\$608	\$690	\$677	\$511	\$180	\$1
Cash Compensation Ratio	23.6%	14.2%	16.5%	21.0%	12.4%	20.
Total Compensation Ratio	28.8%	16.8%	19.4%	25.2%	14.1%	24.

		<u>(</u>	Quarterly			
2021 1Q	2021 2Q	2021 3Q	2021 4Q	2022 1Q	2022 2Q	2022 3Q
\$90	\$70	\$70	\$84	\$88	\$79	\$84
52	53	56	52	56	56	53
22	22	18	21	18	14	14
\$163	\$145	\$144	\$157	\$161	\$148	\$151
17	16	17	18	17	16	17
\$180	\$161	\$160	\$175	\$179	\$164	\$167
12.4%	20.6%	19.8%	17.3%	17.4%	22.1%	25.3%
14.1%	24.2%	23.4%	20.9%	20.1%	27.4%	30.8%

Debt Structure at September 30, 2022

Debt Description (\$M)	Maturity	Effective Rate	Balance	Annual Interest
First Lien Debt - Floating ³	Jan 2029	S + 3.00%	\$275	\$16
First Lien Debt - Fixed with 4.560% swap ^{3,4}	Jan 2029	4.560%	\$1,000	\$46
First Lien Debt - Fixed with 4.460% swap ^{3,5}	Jan 2029	4.460%	\$525	\$23
Japannext ⁶	Jan 2023	5.00%	\$24	\$1
Total ⁷		4.75%	\$1,824	\$87
LTM Adjusted EBITDA ¹			\$1,062	
Debt / LTM Adjusted EBITDA 1			1.7x	





GAAP Balance Sheet



Assets (\$M)	9/30/2022
Cash and cash equivalents	\$836
Cash and securities segregated under regulations and other	54
Securities borrowed	1,265
Securities purchased under agreements to resell	47
Receivables from broker-dealers and clearing organizations	1,515
Trading assets, at fair value	4,803
Receivables from customers	247
Property, equipment and capitalized software, net	82
Operating lease right-of-use assets	200
Goodwill	1,149
Intangibles (net of accumulated amortization)	338
Deferred taxes	134
Other assets	302
Total Assets	\$10,972

Liabilities and Equity (\$M)	9/30/2022
Short-term borrowings, net	\$167
Securities loaned	989
Securities sold under agreements to repurchase	446
Payables to broker-dealers and clearing organizations	681
Payables to customers	97
Trading liabilities, at fair value	4,200
Tax receivable agreement obligations	238
Accounts payable and accrued expenses and other liabilities	441
Operating lease liabilities	249
Long-term borrowings, net	1,792
Total Liabilities	\$9,299
Equity	1,673
Total Liabilities and Equity	\$10,972

Invested Capital	As of:														
(\$M)	3/31/19	6/30/19	9/30/19	12/31/19	3/31/20	6/30/20	9/30/20	12/31/20	3/31/21	6/30/21	9/30/21	12/31/21	3/31/22	6/30/22	9/30/22
Trading Capital ¹	\$1,714	\$1,631	\$1,637	\$1,604	\$1,997	\$2,141	\$1,981	\$2,075	\$2,266	\$2,089	\$1,984	\$2,165	\$2,116	\$2,178	\$2,188
(-) Cash reserved for operations, taxes payable, and other accrued and unpaid liabilities ²	(20)	(35)	(56)	(77)	(496)	(463)	(303)	(338)	(418)	(246)	(180)	(319)	(206)	(173)	(171)
Invested Capital	\$1,694	\$1,596	\$1,581	\$1,527	\$1,501	\$1,678	\$1,678	\$1,737	\$1,848	\$1,843	\$1,804	\$1,846	\$1,910	\$2,005	\$2,017

GAAP Income Statement



			<u>Annual</u>		
Income Statement	FY	FY	FY	FY	YTD
(\$mm)	2018	2019 ¹	2020	2021	2022
Trading income, net	\$1,267	\$912	\$2,493	\$2,105	\$1,316
Commissions, net and technology services	184	499	601	614	412
Interest and dividends income	88	109	62	75	95
Other, net	340	(2)	83	16	44
Total Revenues	\$1,879	\$1,517	\$3,239	\$2,811	\$1,867
Brokerage, exchange, clearance fees and payments for order flow, net	376	387	759	745	476
Communications and data processing	176	209	214	212	164
Employee compensation and payroll taxes	216	384	394	376	305
Interest and dividends expense	142	158	126	140	153
Operations and administrative	67	104	95	88	53
Depreciation and amortization	61	66	67	68	50
Amortization of purchased intangibles and acquired capitalized software	26	71	74	70	49
Termination of office leases	23	66	10	28	2
Debt issue cost related to debt refinancing and prepayment	12	41	29	7	29
Transaction fees and expenses	11	26	3	1	1
Financing interest expense	72	122	88	80	67
Total Operating Expenses	\$1,182	\$1,633	\$1,856	\$1,815	\$1,350
Income (Loss) Before income taxes	\$696	\$(116)	\$1,383	\$997	\$517
Provision for income taxes (benefit)	76	(12)	262	170	88
Net Income (Loss)	\$620	\$(104)	\$1,121	\$827	\$429

	<u>Quarterly</u>											
	FY 20		<u>uur terry</u>		FY 2022							
1Q	2Q	3Q	4Q	1Q	2Q	3Q						
\$813	\$385	\$394	\$513	\$522	\$396	\$397						
192	143	136	144	155	136	121						
7	10	10	49	21	31	44						
1	11	4	(1)	3	42	(1)						
\$1,013	\$549	\$544	\$706	\$701	\$605	\$561						
259	171	159	157	150	157	169						
52	53	56	52	56	56	53						
105	84	85	103	103	99	103						
24	25	27	64	43	49	62						
26	22	18	22	25	14	14						
17	16	17	18	17	16	17						
18	18	17	17	16	16	16						
1	4	0	23	1	1	0						
2	2	1	2	26	1	1						
(0)	(0)	0	1	0	1	0						
19	20	20	20	21	22	23						
\$523	\$414	\$399	\$479	\$460	\$431	\$459						
\$490	\$135	\$145	\$227	\$242	\$174	\$102						
81	26	22	41	42	25	22						
\$409	\$109	\$123	\$186	\$200	\$149	\$80						

Share Count Roll Forward



(M shares)	4Q 2020	1Q 2021	2Q 2021	3Q 2021	4Q 2021	2021 Total	1Q 2022	2Q 2022	3Q 2022	2022 Total	Grand Total
Beginning of Period Shares	197.1	195.6	195.0	191.9	186.9	195.6	186.1	179.1	177.3	186.1	197.1
Shares Repurchased	- 1.44	- 2.28	- 3.36	- 5.40	- 3.67	- 14.71	- 8.90	- 1.76	- 3.44	- 14.10	- 30.25
Net Shares Issued	- 0.05	+ 1.70	+ 0.19	+ 0.43	+ 2.84	+ 5.16	+ 1.90	- 0.00	+ 0.00	+ 1.90	+ 7.01
End of Period Shares	195.6	195.0	191.9	186.9	186.1	186.1	179.1	177.3	173.9	173.9	173.9
Cumulative Repurchases as % of Shares Outstanding	0.8%	1.0%	2.7%	5.2%	5.6%	5.6%	9.1%	10.0%	11.8%	11.8%	11.8%
Weighted Avg. Adj. Shares	197.5	196.9	194.8	190.1	186.1	192.0	183.2	178.9	175.9	179.3	
Weighted Avg. Basic Shares	122.8	122.1	119.7	115.8	112.0	117.3	109.3	105.0	102.3	105.5	į į
Weighted Avg. Diluted Shares	123.5	123.4	121.2	116.6	112.6	118.4	110.1	105.5	102.6	106.0	i i

Adjusted EBITDA & Normalized Adjusted EPS



Adj. EBITDA / Adj. EPS	FY	FY	FY	FY	YTD
(\$M)	2018	2019 ¹	2020	2021	2022
Income (Loss) Before income taxes	\$696	\$(116)	\$1,383	\$997	\$517
(+) Financing interest expense	72	122	88	80	67
(+) Debt issue cost related to debt refinancing and prepayment	12	41	29	7	29
(+) Depreciation and amortization	61	66	67	68	5
(+) Amortization of purchased intangibles and acquired capitalized software	26	71	74	70	4
EBITDA	\$867	\$183	\$1,640	\$1,221	\$71:
EBITDA Margin ²	85%	19%	72%	64%	609
(+) Severance	11	103	10	6	
(+) Transaction fees and expenses	11	26	3	1	
(+) Termination of office leases	23	66	10	28	
(+) Share-based compensation	35	51	60	56	5
(+) Other	(328)	3	(75)	(11)	(3
Adjusted EBITDA	\$620	\$432	\$1,648	\$1,301	\$73
Adjusted EBITDA Margin ³	61%	44%	73%	68%	61
(-) Financing interest expense	72	122	88	80	6
(-) Depreciation and amortization	61	66	67	68	5
Normalized Adjusted Pre-Tax Income	\$487	\$244	\$1,494	\$1,153	\$61
(-) Normalized provision for income taxes	112	59	358	277	14
Normalized Adjusted Net Income	\$375	\$186	\$1,135	\$876	\$46
Weighted average fully diluted shares outstanding	191	193	197	192	17
Normalized Adjusted EPS	\$1.96	\$0.96	\$5.76	\$4.57	\$2.6

	FY 20	21			FY 2022	
1Q	2Q	3Q	4Q	1Q	2Q	3Q
\$490	\$135	\$145	\$227	\$242	\$174	\$102
19	20	20	20	21	22	23
2	2	1	2	26	1	1
17	16	17	18	17	16	17
18	18	17	17	16	16	16
\$546	\$192	\$200	\$283	\$323	\$230	\$159
75%	56%	56%	58%	64%	64%	48%
2	1	2	2	2	1	1
0	(0)	0	1	0	1	0
1	4	0	23	1	1	0
13	13	13	17	14	19	18
3	(12)	(4)	2	4	(42)	2
\$565	\$197	\$211	\$328	\$344	\$209	\$181
78%	58%	59%	68%	68%	59%	55%
19	20	20	20	21	22	23
17	16	17	18	17	16	17
\$528	\$161	\$174	\$290	\$305	\$171	\$141
127	39	42	70	73	41	34
\$402	\$122	\$132	\$221	\$232	\$130	\$107
197	195	190	186	183	179	176
\$2.04	\$0.63	\$0.70	\$1.19	\$1.27	\$0.73	\$0.61

Adjusted Net Trading Income Reconciliation



Operating Segments

Adjusted Net Trading Income Reconciliation	Total											
(\$M)	1Q 2020	2Q 2020	3Q 2020	4Q 2020	1Q 2021	2Q 2021	3Q 2021	4Q 2021	1Q 2022	2Q 2022	3Q 2022	
Trading income, net	\$802	\$744	\$441	\$505	\$813	\$385	\$394	\$513	\$522	\$396	\$397	
Commissions, net and technology services	171	148	134	148	192	143	136	144	155	136	121	
Brokerage, exchange, clearance fees and payment for order flow, net	(174)	(204)	(196)	(185)	(259)	(171)	(159)	(157)	(150)	(157)	(169)	
Interest and dividends, net	(15)	(20)	(16)	(13)	(17)	(15)	(17)	(15)	(22)	(18)	(18)	
Adjusted Net Trading Income	\$784	\$669	\$362	\$456	\$728	\$342	\$354	\$486	\$505	\$357	\$331	

Adjusted Net Trading Income Reconciliation	Market Making											
(\$M)	1Q 2020	2Q 2020	3Q 2020	4Q 2020	1Q 2021	2Q 2021	3Q 2021	4Q 2021	1Q 2022	2Q 2022	3Q 2022	
Trading income, net	\$803	\$745	\$442	\$466	\$801	\$381	\$389	\$508	\$516	\$390	\$392	
Commissions, net and technology services	1	(1)	9	43	14	9	9	9	9	11	11	
Brokerage, exchange, clearance fees and payment for order flow, net	(137)	(173)	(178)	(176)	(223)	(145)	(135)	(132)	(124)	(131)	(147)	
Interest and dividends, net	(15)	(19)	(16)	(12)	(17)	(13)	(15)	(13)	(20)	(17)	(18)	
Adjusted Net Trading Income	\$652	\$552	\$257	\$321	\$575	\$232	\$249	\$372	\$382	\$254	\$238	

Adjusted Net Trading Income Reconciliation	Execution Services											
(\$M)	1Q 2020	2Q 2020	3Q 2020	4Q 2020	1Q 2021	2Q 2021	3Q 2021	4Q 2021	1Q 2022	2Q 2022	3Q 2022	
Trading income, net	\$(0)	\$(1)	\$(1)	\$39	\$11	\$4	\$5	\$5	\$6	\$6	\$5	
Commissions, net and technology services	170	148	124	105	178	134	127	135	146	125	110	
Brokerage, exchange, clearance fees and payment for order flow, net	(37)	(31)	(19)	(9)	(36)	(26)	(24)	(25)	(27)	(26)	(22)	
Interest and dividends, net	(0)	(0)	(0)	(0)	0	(3)	(2)	(1)	(1)	(1)	(1)	
Adjusted Net Trading Income	\$132	\$117	\$105	\$135	\$153	\$110	\$106	\$114	\$123	\$104	\$93	

Adjusted Net Trading Income Reconciliation



Organic Growth Initiatives

Adjusted Not Tradius Issues Decompilistics	Organic Growth Initiatives											
Adjusted Net Trading Income Reconciliation		<u>Annual</u>		<u>Quarterly</u>								
(\$M)	2018	2019	2020	1Q 2021	2Q 2021	3Q 2021	4Q 2021	1Q 2022	2Q 2022	3Q 2022		
Trading income, net	\$36	\$77	\$246	\$62	\$35	\$28	\$23	\$53	\$41	\$43		
Commissions, net and technology services	7	11	23	13	7	7	10	11	6	6		
Brokerage, exchange, clearance fees and payment for order flow, net	(2)	(9)	(88)	(12)	(7)	(7)	(6)	(5)	(5)	(9)		
Interest and dividends, net	(1)	(4)	(15)	(6)	(4)	(5)	(1)	(9)	(7)	(8)		
Adjusted Net Trading Income	\$40	\$75	\$166	\$57	\$32	\$23	\$26	\$50	\$36	\$32		

Adjusted Operating Expense Reconciliation



		Annual		<u>Quarterly</u>						
Adjusted Operating Expenses Reconciliation	FY	FY	YTD	FY 2021				<u>FY'22</u>		
(\$M)	2020	2021	2022	1Q	2Q	3Q	4Q	1Q	2Q	3Q
Employee compensation and payroll taxes	\$394	\$376	\$305	\$105	\$84	\$85	\$103	\$103	\$99	\$103
Operations and administrative	95	88	53	26	22	18	22	25	14	14
Communications and data processing	214	212	164	52	53	56	52	56	56	53
Depreciation and amortization	67	68	50	17	16	17	18	17	16	17
Less:										
Severance	(10)	(6)	(4)	(2)	(1)	(2)	(2)	(2)	(1)	(1)
Share-based compensation	(60)	(56)	(51)	(13)	(13)	(13)	(17)	(14)	(19)	(18)
Other	(8)	(6)	(8)	(4)	0	(0)	(2)	(8)	(0)	(0)
Adjusted Operating Expenses	\$690	\$677	\$511	\$180	\$161	\$160	\$175	\$179	\$164	\$167

Disclaimer



Cautionary Statement Regarding Forward Looking Statements

This presentation may contain "forward-looking statements" made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Statements regarding Virtu Financial, Inc.'s ("Virtu's", the "Company's" or "our") business that are not historical facts are forward-looking statements. Forward-looking statements should not be read as a guarantee of future performance or results, and will not necessarily be accurate indications of the times at, or by which, such performance or results will be achieved. The Company assumes no obligation to update forward-looking statements to reflect actual results, changes in assumptions or changes in other factors affecting forward-looking information, and if the Company does update one or more forward-looking statements, no inference should be drawn that the Company will make additional updates with respect thereto or with respect to other forward-looking statements. Forward-looking statements are based on information available at the time and/or management's good faith belief with respect to future events, and is subject to risks and uncertainties, some or all of which are not predictable or within Virtu's control, that could cause actual performance or results to differ materially from those expressed in the statements. Those risks and uncertainties include, without limitation: risks relating to the COVID-19 pandemic, including the possible effects of the economic conditions worldwide resulting from the COVID-19 pandemic and governmental and other responses thereto; fluctuations in trading volume and volatilities in the markets in which we operate; the ability of our trading counterparties and various clearing houses to perform their obligations to us; the performance and reliability of our customized trading platform; the risk of material trading losses from our market making activities; swings in valuations in securities or other instruments in which we hold positions; increasing competition and consolidation in our industry; the risk that cash flow from our operations and other available sources of liquidity will not be sufficient to fund our various ongoing obligations, including operating expenses, short term funding requirements, margin requirements, capital expenditures, debt service and dividend payments; regulatory and legal uncertainties and potential changes associated with our industry, particularly in light of increased attention from media. regulators and lawmakers to market structure and related issues including but not limited to the retail trading environment, wholesale market making and off exchange trading more generally and payment for order flow arrangements; potential adverse results from legal or regulatory proceedings; our ability to remain technologically competitive and to ensure that the technology we utilize is not vulnerable to security risks, hacking and cyber-attacks; risks associated with third party software and technology infrastructure. For a discussion of the risks and uncertainties which could cause actual results to differ from those contained in forward-looking statements, see Virtu's Securities and Exchange Commission filings, including but not limited to Virtu's Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K filed with the SEC.

GAAP and Non-GAAP Results

This presentation includes or may include certain non-GAAP financial measures, including Adjusted EPS, Normalized Adjusted EPS, Adjusted Net Trading Income, Normalized Adjusted Net Income, Normalized Adjusted Pre-Tax Income, EBITDA, Adjusted EBITDA, EBITDA Margin, Adjusted EBITDA Margin, Trading Capital, Invested Capital, Adjusted Operating Expense and Adjusted Compensation Expense. Non-GAAP financial measures should be considered only as supplemental to, and not as superior to, financial measures prepared in accordance with GAAP. Other companies may use similarly titled non-GAAP financial measures that are calculated differently from the way we calculate such measures. Accordingly, our non-GAAP financial measures may not be comparable to similar measures used by other companies. We caution investors not to place undue reliance on such non-GAAP measures, but instead to consider them with the most directly comparable GAAP measure. Non-GAAP financial measures have limitations as analytical tools, and should not be considered in isolation, or as a substitute for our results as reported under GAAP. A reconciliation of non-GAAP measures to the most directly comparable financial measure prepared in accordance with GAAP is included at the end of this presentation.

End Notes



These notes refer to metrics and/or defined terms presented on:

Slide 2 Third Quarter & YTD Highlights

- 1. This reflects a non-GAAP measure. Please refer to slides at the end of this presentation for reconciliation to the equivalent GAAP measure. Prior period reconciliations available https://ir.virtu.com/financials-and-filings/quarterly-results/default.aspx.
- 2. Year-to-Date and 3Q 2022 Adj. Net Trading Income per day calculated using 188 and 64 trading days, respectively.
- 3. Adj. EBITDA Margin is calculated as Adjusted EBITDA divided by Adjusted Net Trading Income.
- 4. Shares repurchased calculated on a settlement date basis as of 10/28/2022.
- Percentage of shares repurchased, net of issuances, is calculated compared to shares outstanding on 9/30/2020 (Share Repurchase Program was incepted in November 2020).

Slide 3 Key Financial Metrics

- 1. This reflects a non-GAAP measure. Please refer to slides at the end of this presentation for reconciliation to the equivalent GAAP measure. Prior period reconciliations available https://ir.virtu.com/financials-and-filings/quarterly-results/default.aspx.
- 2. Includes MatchNow revenues prior to sale in July 2020.
- 3. Adi. EBITDA Margin is calculated as Adjusted EBITDA divided by Adjusted Net Trading Income.
- 4. YTD v FY 2021 comparison for Adjusted Cash Operating Expenses, Total Adjusted Operating Expenses, Adjusted EBITDA, and Normalized Adjusted EPS calculated using quarterly averages.

Note: # of trading days used in per day calculations: 253, 252, 188, 61, 63, 64, 62, 62, and 64 for FY 2020, FY 2021, YTD 2022, 1Q21, 2Q21, 3Q21, 4Q21, 1Q22, 2Q22, and 3Q22, respectively.

Slide 4 Major Market Metrics

Note: # of trading days used in per day calculations: 253, 252, 188, 61, 63, 64, 62, 62, and 64 for FY 2020, FY 2021, YTD 2022, 1Q21, 2Q21, 3Q21, 4Q21, 1Q22, 2Q22, and 3Q22, respectively.

Slide 5 Organic Business Growth

- 1. This reflects a non-GAAP measure. Please refer to slides at the end of this presentation for reconciliation to the equivalent GAAP measure. Prior period reconciliations available https://ir.virtu.com/financials-and-filings/quarterly-results/default.aspx.
- Organic Growth Initiatives CAGR measures the annually-compounded rate of return of Organic Growth Initiatives Daily Average Adjusted Net Trading Income over the 3.75-year period from FY 2018 to YTD 3Q 2022.

Note: # of trading days used in per day calculations: 251, 252, 253, 252, 188, 62, 62, and 64 for FY 2018, FY 2019, FY 2020, FY 2021, YTD 2022, 1Q 2022, 2Q 2022, and 3Q 2022, respectively.

End Notes—continued



These notes refer to metrics and/or defined terms presented on:

Slide 6 Capital Management

- 1. This reflects a non-GAAP measure. Please refer to slides at the end of this presentation for reconciliation to the equivalent GAAP measure. Prior period reconciliations available https://ir.virtu.com/financials-and-filings/quarterly-results/default.aspx.
- 2. Weighted average fully diluted shares assumes that (1) holders of all vested and unvested non-voting common interest units in Virtu Financial ("Virtu Financial Units") (together with corresponding shares of the Company's Class C common stock, par value \$0.00001 per share (the "Class C Common Stock")) have exercised their right to exchange such Virtu Financial Units for shares of Class A Common Stock on a one-for-one basis, (2) holders of all non-voting Virtu Financial Units (together with corresponding shares of the Company's Class D common stock, par value \$0.00001 per share (the "Class D Common Stock")) have exercised their right to exchange such Virtu Financial Units for shares of the Company's Class B common stock, par value \$0.00001 per share (the "Class B Common Stock") on a one-for-one basis, and subsequently exercised their right to convert the shares of Class B Common Stock into shares of Class A Common Stock on a one-for-one basis. Includes additional shares from dilutive impact of options, restricted stock units and restricted stock awards outstanding under the Amended and Restated 2015 Management Incentive Plan and the Amended and Restated ITG 2007 Equity Plan as well as warrants issued in connection with the Founder Member Loan Facility (as defined in Virtu's Annual Report on Form 10-K).
- 3. Shares repurchased calculated on a settlement date basis.
- 4. Return on Invested Capital is calculated as LTM Pro Forma Adjusted EBITDA divided by LTM Invested Capital. For periods post-ITG acquisition, LTM Invested Capital is calculated as the average of beginning-of-period and end-of-period Invested Capital. For periods pre-ITG acquisition, LTM Invested Capital is calculated as end-of-period Invested Capital. Pro Forma Adjusted EBITDA and Invested Capital are non-GAAP measures. Please refer to slides at the end of this presentation for reconciliation to the equivalent GAAP measures. Prior period reconciliations available https://ir.virtu.com/financials-and-filings/quarterly-results/default.aspx.

Slide 7 Update on Share Buybacks

- 1. Shares repurchased calculated on a settlement date basis as of 10/28/2022.
- Percentage of Shares Outstanding is calculated net of share issuances, and is calculated compared to shares outstanding on 9/30/2020 (Share Repurchase Program was incepted in November 2020).
 - * 4Q22 represents QTD 10/28/2022

Slide 8 Operating Expenses and Long-Term Debt

- 1. This reflects a non-GAAP measure. Please refer to slides at the end of this presentation for reconciliation to the equivalent GAAP measure. Prior period reconciliations available https://ir.virtu.com/financials-and-filings/quarterly-results/default.aspx.
- 2. ITG revenues and expenses included in financials beginning on March 1, 2019 close date.
- Interest Expense includes a floor on SOFR of 0.5%.
- 4. Virtu entered into a fixed-for-floating interest rate swap ending February 2025.
- 5. Virtu entered into a fixed-for-floating interest rate swap ending October 2024.
- 3.5 billion JPY.
- 7. Blended rate.

End Notes—continued



These notes refer to metrics and/or defined terms presented on:

Slide 10 GAAP Balance Sheet

- 1. This reflects a non-GAAP measure, and it reflects the assets bracketed above less the liabilities bracketed above. Prior period reconciliations available at https://ir.virtu.com/financials-and-filings/quarterly-results/default.aspx.
- 2. Comprises cash anticipated to be used in the operations of the business, including cash anticipated to be paid to satisfy tax and compensation liabilities, payments of debt pursuant to debt covenants, as well as dividends and other distributions to equity owners.

Slide 11 GAAP Income Statement

1. ITG revenues and expenses included in financials beginning on March 1, 2019 close date.

Slide 12 Share Count Roll Forward

Note: Assumes that (1) holders of all vested and unvested non-voting Virtu Financial Units (together with corresponding shares of the Company's Class C Common Stock) have exercised their right to exchange such Virtu Financial Units for shares of Class A Common Stock on a one-for-one basis, (2) holders of all non-voting Virtu Financial Units (together with corresponding shares of the Company's Class D Common Stock) have exercised their right to exchange such Virtu Financial Units for shares of the Company's Class B Common Stock on a one-for-one basis, and subsequently exercised their right to convert the shares of Class B Common Stock into shares of Class A Common Stock on a one-for-one basis. Does not include diluted shares (e.g. options, warrants), and reflects shares outstanding at a prior point in time or projected to be outstanding as of a future point in time, as opposed to a weighted average over a period.

Slide 13 Adjusted EBITDA & Normalized Adjusted EPS

- 1. ITG revenues and expenses included in financials beginning on March 1, 2019 close date.
- 2. EBITDA Margin is calculated as EBITDA divided by Adjusted Net Trading Income.
- 3. Adj. EBITDA Margin is calculated as Adjusted EBITDA divided by Adjusted Net Trading Income.