



Second Quarter 2021 Earnings Presentation

Second Quarter Highlights



Adj. NTI¹

\$342M

Normalized Adj. EPS¹

\$0.63

Adj. NTI/day^{1,2}

\$5.4M

Adj. EBITDA¹

\$197M

Debt to LTM Adj. EBITDA¹

1.2x

Adj. EBITDA Margin^{1,3}

57.7%

2Q 2021 Highlights

- Quarterly results reflective of market conditions
 - *Realized volatility 9% below 2019 average*
 - *US equity share TCV 3% below 2020 average*
- Generated \$32M of Adj. NTI¹ from organic growth initiatives – 9% of total firm Adj. NTI¹
 - *Options market making +22% QoQ*
- 8.2M shares repurchased as of 7/30/21 – 4% of shares outstanding as of 9/30/20 – at an average cost of \$27.87 for total of \$229M repurchased⁴
 - *3.4M shares repurchased in 2Q 2021 for a total of \$101M⁴*

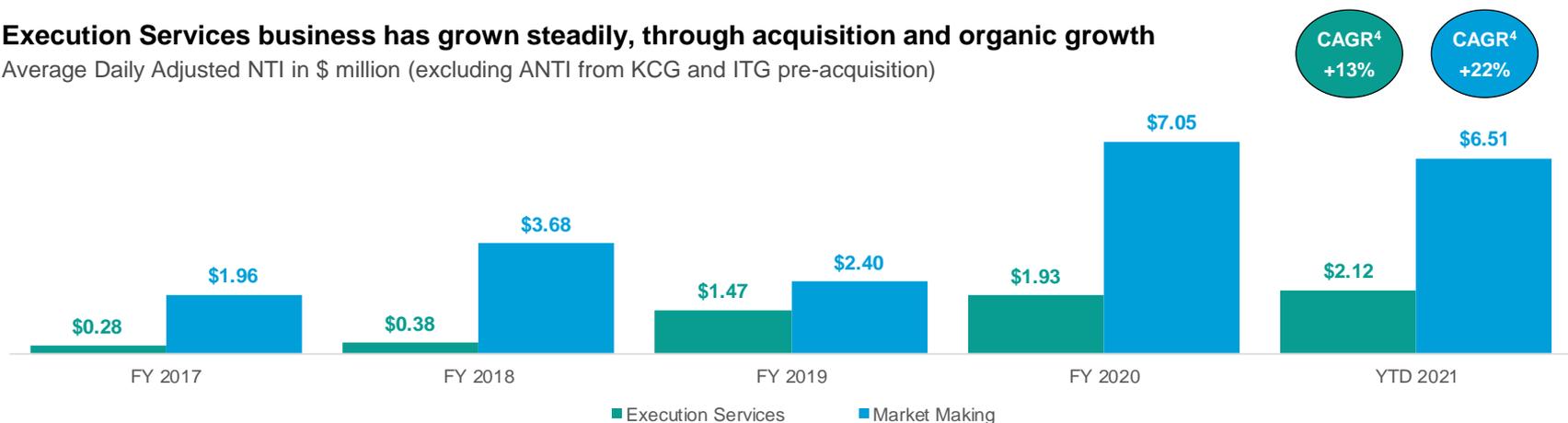
Key Financial Metrics



(\$M)	1Q 2020	2Q 2020	3Q 2020	4Q 2020	Full Year 2020	1Q 2021	2Q 2021	2Q 2021 v 1Q 2021
Total Adjusted Net Trading Income¹	\$784	\$669	\$362	\$456	\$2,271	\$728	\$342	- 55%
<i>Daily Average Adj. NTI¹</i>	<i>\$12.7</i>	<i>\$10.6</i>	<i>\$5.7</i>	<i>\$7.1</i>	<i>\$9.0</i>	<i>\$11.9</i>	<i>\$5.4</i>	
Market Making Adj. NTI	\$652	\$552	\$257	\$321	\$1,782	\$575	\$232	- 61%
<i>Market Making Daily Average Adj. NTI</i>	<i>\$10.5</i>	<i>\$8.8</i>	<i>\$4.0</i>	<i>\$5.0</i>	<i>\$7.0</i>	<i>\$9.4</i>	<i>\$3.7</i>	
Execution Services Adj. NTI ²	\$132	\$117	\$105	\$135	\$489	\$153	\$110	- 30%
<i>Execution Services Daily Average Adj. NTI</i>	<i>\$2.1</i>	<i>\$1.9</i>	<i>\$1.6</i>	<i>\$2.1</i>	<i>\$1.9</i>	<i>\$2.5</i>	<i>\$1.7</i>	
Adjusted Cash Operating Expenses ¹	\$215	\$183	\$114	\$112	\$623	\$163	\$145	- 11%
Total Adjusted Operating Expenses ¹	\$232	\$200	\$130	\$128	\$690	\$180	\$161	- 11%
Adjusted EBITDA¹	\$570	\$486	\$249	\$344	\$1,648	\$565	\$197	- 65%
<i>Adjusted EBITDA Margin³</i>	<i>72.6%</i>	<i>72.6%</i>	<i>68.7%</i>	<i>75.4%</i>	<i>72.6%</i>	<i>77.6%</i>	<i>57.7%</i>	- 19.8 pts
Long Term Debt (at end of period)	\$1,957	\$1,769	\$1,669	\$1,670	\$1,670	\$1,667	\$1,631	- 2.1%
<i>Debt / LTM Adjusted EBITDA</i>	<i>2.2x</i>	<i>1.4x</i>	<i>1.2x</i>	<i>1.0x</i>	<i>1.0x</i>	<i>1.0x</i>	<i>1.2x</i>	+ 19%
Normalized Adjusted EPS¹	\$2.05	\$1.73	\$0.81	\$1.18	\$5.76	\$2.04	\$0.63	- 69%

Execution Services business has grown steadily, through acquisition and organic growth

Average Daily Adjusted NTI in \$ million (excluding ANTI from KCG and ITG pre-acquisition)



Major Market Metrics



	1Q 2020	2Q 2020	3Q 2020	4Q 2020	Full Year 2020	1Q 2021	2Q 2021	2Q 2021 v 1Q 2021
Market Metrics (Average Daily)								
<u>Volume Metrics</u>								
US Equity Consolidated Volume (mm shares)	10,972	12,352	9,942	10,454	10,924	14,650	10,559	- 28%
U.S. OTC Equity Volume (mm \$ notional)	1,939	1,729	1,498	2,043	1,800	3,809	2,736	- 28%
IBKR Retail Equity Volume (mm shares)	966	1,045	1,378	1,899	1,216	5,019	2,721	- 46%
OCC ADV (mm contracts)	28.0	28.2	29.5	32.2	29.5	42.0	36.4	- 13%
CME FX ADV (k contracts)	1,078	725	829	818	861	850	770	- 9%
Hotspot ADV FX (mm \$ notional)	43,530	31,753	30,208	33,635	34,724	36,889	32,598	- 12%
<u>Volatility Metrics</u>								
S&P 500 Index Realized Volatility	57.3	31.9	17.0	16.4	30.4	15.8	11.2	- 29%
SX5E Realized Volatility	47.3	33.0	19.5	21.3	30.1	13.6	12.9	- 5%
NKY Realized Volatility	38.1	28.5	15.7	14.5	24.1	20.1	19.1	- 5%
CVIX Realized Volatility	146.4	46.7	74.1	36.8	75.6	32.1	25.0	- 22%
GS Comm Realized Volatility	16.3	36.1	13.1	10.8	19.0	8.4	5.4	- 35%

Virtu Has Multiple Levers to Drive Growth



Virtu
Through-
the-Cycle
Earnings



Organic
Business
Growth



Capital
Management

Normalized Historical Results

	Pro Forma ANTI per Day ¹	Adj. EPS ¹	Adj. EBITDA ¹
Median ²	\$5.5	\$2.69	\$831

Impact of Growth Initiatives

	Incremental:	
	ANTI per Day ³	Adj. EPS ⁴
High	\$1,500k	\$1.03
Low	\$500k	\$0.34



Combined Earnings Power

	Pro Forma		Median Implied Growth ⁵
	ANTI per Day ⁵	Adj. EPS ⁵	
Median	\$6.5	\$3.37	ANTI: 18% EPS: 26%

Illustrative Range of Outcomes based on 2021 Expense Guidance

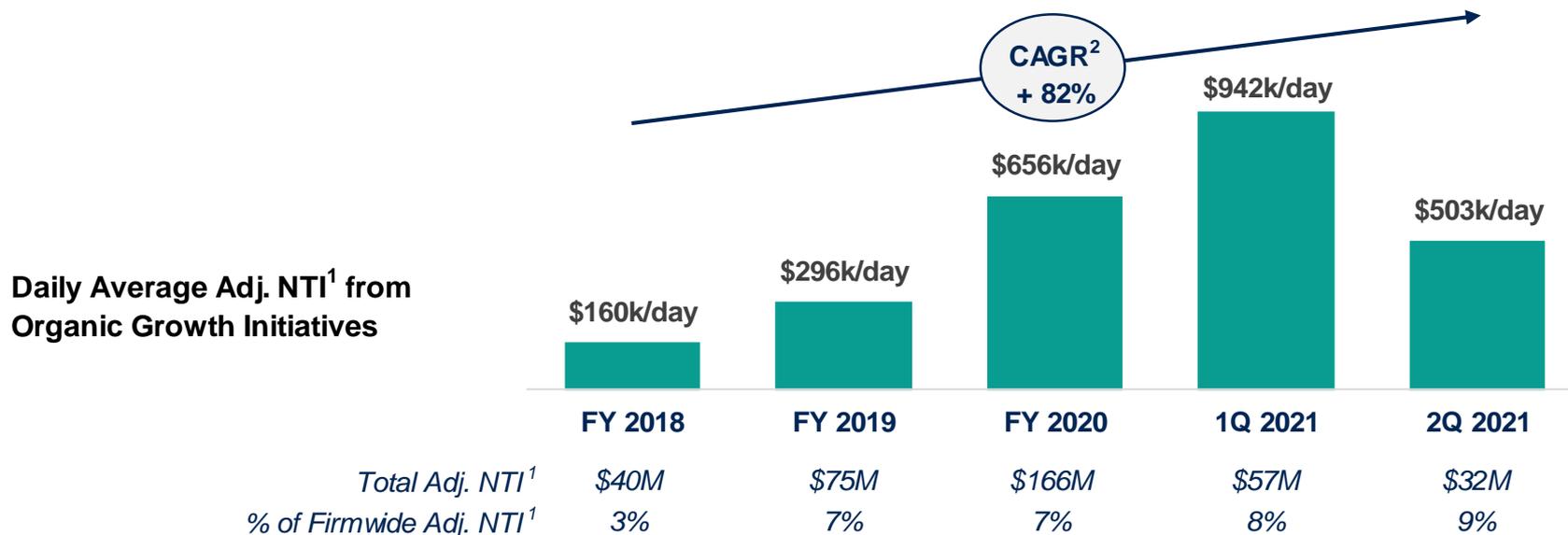
ANTI per Day ⁶	Full-Year Adj. NTI ⁶	Target Range Available for Share Repurchases	Shares (mm) Repurchased at Current Share Price ⁷	% Reduction in Current Share Count ⁸
\$6.00	\$1,512	\$120 - \$140	5.1	2.6%
\$7.00	\$1,764	\$200 - \$250	8.7	4.5%
\$8.00	\$2,016	\$300 - \$400	13.6	7.0%
\$9.00	\$2,268	\$400 - \$500	17.5	9.0%
\$10.00	\$2,520	\$500 - \$600	21.4	11.0%
\$11.00	\$2,772	\$600 - \$700	25.3	13.0%

Pro forma results for Virtu + KCG + ITG result in through-the-cycle Adj. NTI per day of ~\$5.5M annually -- **before** the benefits of growth initiatives and integration

Organic growth initiatives, together with our stable cost structure, result in an estimated \$0.34 to \$1.03 of incremental Adj. EPS annually, or ~26% **growth from median EPS** (based on midpoint of ranges)

Incremental EPS growth from annual reduction in share count

Organic Business Growth



Expansion into New Markets

- Options market making improved average daily ANTI by 22% from 1Q 2021 to 2Q 2021
- Virtu Capital Markets continues to utilize execution and distribution expertise to deliver liquidity to corporate issues and create a strong pipeline of relationships that are leveraged across the firm
- Designated Broker / Lead Market Maker in Bitcoin and Ether ETFs in Canada

Growth in Existing Markets

- Quant-style KCG strategies that have been adapted and deployed into new markets and asset classes continue to improve and remain above prior year ANTI averages
- Customer-facing ETF block franchise desk maintains steady performance

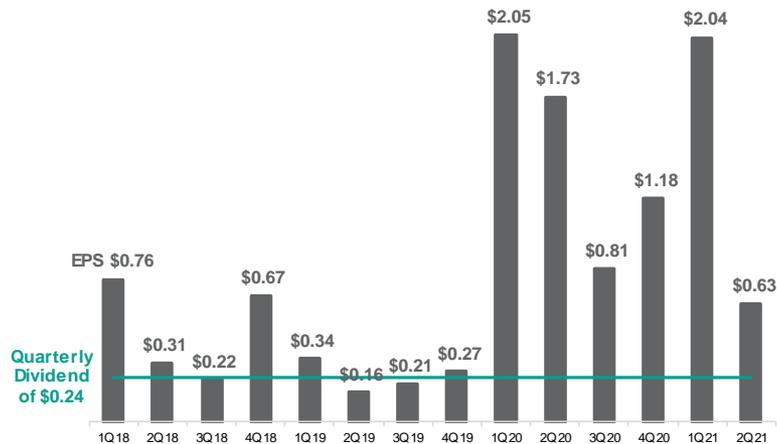
Capital Management



Scaled business model delivers superior return on capital

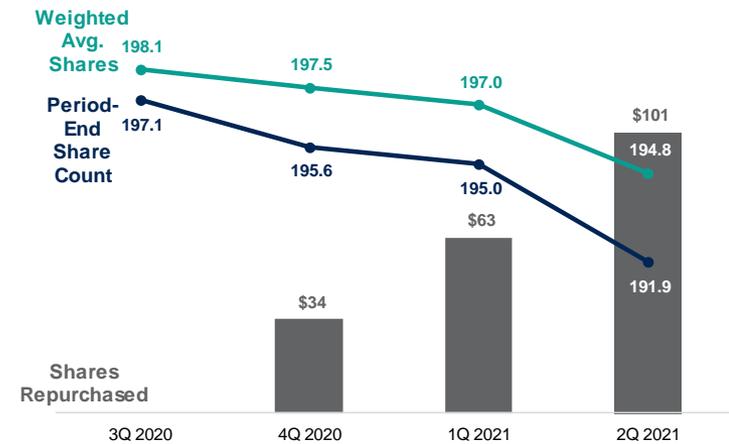
Steady Payout in All Environments

Dividends declared per share and adjusted earnings per share¹ per quarter

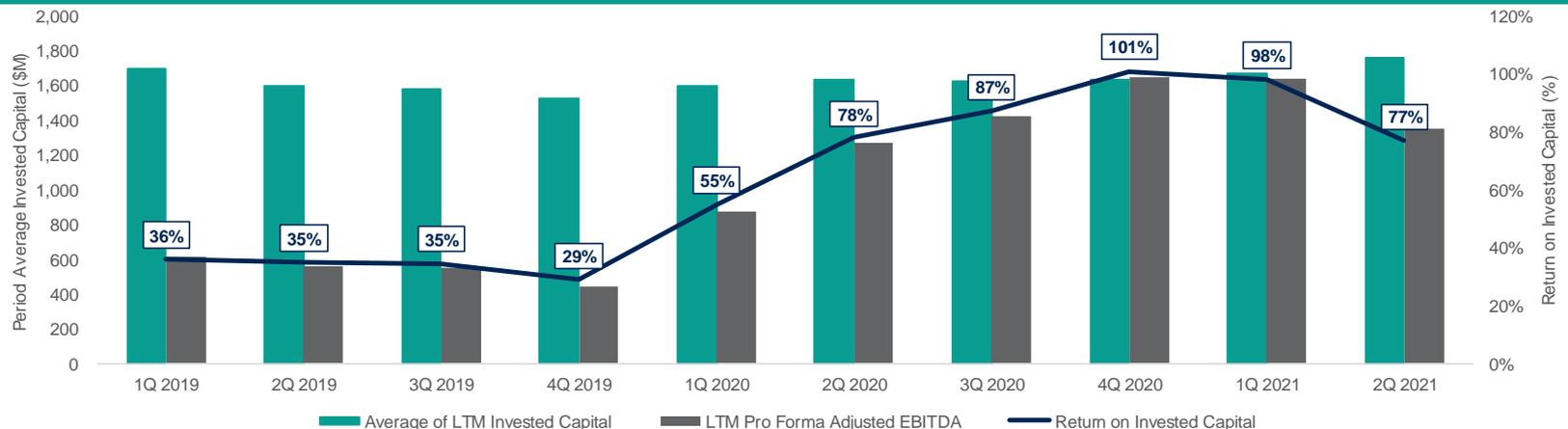


Share Buybacks^{2,3}

Shares outstanding (million shares) and share repurchases (\$ million) per quarter



Superior Return on Invested Capital⁴



See endnotes at end of this supplement

Update on Share Buybacks



Currently on pace for target repurchase range

3Q 2020 Authorization	\$100M
4Q 2020 Authorization	\$70M
1Q 2021 Authorization	\$300M
Buyback Authorization to Date	\$470M
Shares Repurchased to Date	8.2M
Average Price of Shares Repurchased	\$27.87
Total Executed to Date	\$229M
Authorization Remaining	\$241M

Illustrative Range of Outcomes Based on 2021 Expense Guidance		
Adj. NTI per Day ¹	Full-Year Adj. NTI ¹	Target Range Available for Share Repurchases
\$6.00	\$1,512	\$120 - \$140
\$7.00	\$1,764	\$200 - \$250
\$8.00	\$2,016	\$300 - \$400
\$9.00	\$2,268	\$400 - \$500
\$10.00	\$2,520	\$500 - \$600
\$11.00	\$2,772	\$600 - \$700

	Shares Repurchased	Average Price	Total Notional
4Q 2020	1.4M	\$23.61	\$34M
1Q 2021	2.3M	\$27.82	\$63M
2Q 2021	3.4M	\$30.17	\$101M
QTD 7/30/21	1.1M	\$26.54	\$30M
Grand Total	8.2M	\$27.87	\$229M

1H21 Adj. NTI = \$8.6M/day
 \$195M of repurchases YTD in calendar year 2021

The current US equities market structure provides meaningful and measurable benefits to retail investors



Significant Price and Size Improvement

- Wholesalers provided over \$3.6B in price improvement to retail investors in 2020, based on Rule 605's calculation method; however, this method greatly understates the value provided to retail investors
- Wholesalers fill marketable orders at prices typically better than the NBBO, regardless of the quantity of shares displayed at the NBBO. This improvement to both displayed price **and size** - or "Real Price Improvement" - is not captured by Rule 605 figures¹
- **Virtu alone provided over \$3B in Real Price Improvement to retail investors in 2020¹**

Order Handling and Execution

- Wholesalers commit capital to execute marketable retail orders
- The price and size of non-marketable limit orders are reflected on exchanges²
- In total, approximately 40% of retail flow handled by Virtu interacts with public and / or lit markets

Robust Broker Competition

- The wholesale service model lowers entry barriers for new retail brokers and therefore bolsters competition
- Leveraging wholesaler partnerships allows retail brokers to offer more services at lower costs

Competitive and Resilient Execution Ecosystem

- Wholesalers compete against other liquidity sources, including over 40 exchanges and ATSs
- Brokers concurrently route to many execution partners and exchanges, mitigating single-point-of-failure risk

Separating Fact From Fiction



Myth	Reality
Retail flow is not accessible	<ul style="list-style-type: none">• Approximately 40% of total retail flow handled by Virtu interacts with displayed, hidden and midpoint liquidity on public exchanges and ATSS or are displayed on lit exchanges• Most retail brokers are capable of routing directly to exchanges and many do – but retail brokers also route to wholesalers to obtain price and size improvement over what’s available elsewhere¹
Wholesalers have information advantage	<ul style="list-style-type: none">• Marketable orders are promptly executed and printed to the tape with full transparency to the marketplace, while non-marketable limit orders are reflected on lit exchanges where they are visible publicly²• Wholesalers receive retail orders without any advanced notice or information about the retail investor that placed the order
Price improvement is not real	<ul style="list-style-type: none">• Wholesalers effectively narrow the NBBO for retail investors – taken as a whole, all wholesalers provided over \$3.6B in price improvement in 2020, as measured by current Rule 605• NBBO is only the ‘top of the book’ price and size – when Virtu’s performance is compared to all displayed quotes for the quantity of shares to fill the order, Virtu alone provided over \$3B in price improvement³
Wholesaling is not competitive	<ul style="list-style-type: none">• Competition among wholesalers drove a 750% increase in net PI per share since 2013⁴• Virtu competes with at least 7 other wholesaler firms⁵ as well as the entire ecosystem of over 40 exchanges and ATSS to provide the best price improvement to retail investors; barriers to entry are minimal and there are new entrants on a regular basis
Exchanges & ATSS would provide better executions	<ul style="list-style-type: none">• Wholesalers provide execution in all market conditions; exchanges do not have best execution obligations• When Virtu seeks liquidity on exchanges and ATSS it achieves price improving fills on only ~18% of routed shares. To remain competitive, Virtu provides Supplemental Price Improvement⁶ at significant expense to itself by improving the execution prices for shares filled on exchanges and ATSS. This Supplemental PI is paid out of Virtu’s own pocket. Virtu also incurs meaningful trading fees to execute orders at exchanges and ATSS, an expense we expect would fall to retail brokers if they routed orders directly to these market centers

Operating Expenses and Long Term Debt



Disciplined focus on expense management

Operating Expense Results & Guidance

Adj. Operating Expense Forecast (\$M)	FY 2019	FY 2020	1Q 2021	2Q 2021	YTD 2021	FY 2021 Guidance
Cash Compensation	230	321	90	70	160	270 - 280
Comms & Data Processing, Ops & Admin	313	302	73	74	148	273 - 298
Adjusted Cash Operating Expenses¹	\$543	\$623	\$163	\$145	\$308	\$545 - 575
Depreciation & Amortization	66	67	17	16	33	60 - 70
Total Adjusted Operating Expenses¹	\$608	\$690	\$180	\$161	\$341	\$605 - \$645

Debt Structure at June 30, 2021

Debt Description (\$M)	Maturity	Rate	Balance	Annual Interest
First Lien Debt - Floating	Mar 2026	L + 3.00%	\$75	\$2.3
First Lien Debt - Fixed with 4.565% swap ²	Mar 2026	4.565%	\$1,000	\$45.7
First Lien Debt - Fixed with 4.465% swap ³	Mar 2026	4.465%	\$525	\$23.4
Japannext ⁴	Jan 2023	5.00%	\$32	\$1.6
Total⁵		4.47%	\$1,631	\$73.0
LTM Adjusted EBITDA¹			\$1,355	
Debt / LTM Adjusted EBITDA¹			1.2x	



GAAP Reconciliations and Other Information



GAAP Income Statement



Income Statement (\$mm)	FY 2018	FY 2019 ¹	1Q 2020	2Q 2020	3Q 2020	4Q 2020	FY 2020	1Q 2021	2Q 2021
Trading income, net	\$1,267	\$912	\$802	\$744	\$441	\$505	\$2,493	\$813	\$385
Commissions, net and technology services	184	499	171	148	134	148	601	192	143
Interest and dividends income	88	109	27	9	11	15	62	7	10
Other, net	340	(2)	1	5	70	8	83	1	11
Total Revenues	\$1,879	\$1,517	\$1,001	\$906	\$656	\$677	\$3,239	\$1,013	\$549
Brokerage, exchange, clearance fees and payments for order flow, net	376	387	174	204	196	185	759	259	171
Communications and data processing	176	209	55	56	52	51	214	52	53
Employee compensation and payroll taxes	216	384	170	121	36	66	394	105	84
Interest and dividends expense	142	158	41	29	27	28	126	24	25
Operations and administrative	67	104	27	22	25	21	95	26	22
Depreciation and amortization	61	66	17	17	17	16	67	17	16
Amortization of purchased intangibles and acquired capitalized software	26	71	19	19	18	18	74	18	18
Termination of office leases	23	66	0	0	0	9	10	1	4
Debt issue cost related to debt refinancing and prepayment	12	41	4	13	10	2	29	2	2
Transaction fees and expenses	11	26	0	0	2	0	3	(0)	(0)
Financing interest expense	72	122	26	22	20	20	88	19	20
Total Operating Expenses	\$1,182	\$1,633	\$534	\$501	\$404	\$417	\$1,856	\$523	\$414
Income (Loss) Before income taxes	\$696	(\$116)	\$466	\$405	\$253	\$260	\$1,383	\$490	\$135
Provision for income taxes (benefit)	76	(12)	78	69	53	62	262	81	26
Net Income (Loss)	\$620	(\$104)	\$388	\$335	\$200	\$198	\$1,121	\$409	\$109

GAAP Balance Sheet



Assets (\$M)	6/30/2021
Cash and cash equivalents	848
Cash and securities segregated under regulations and other	67
Securities borrowed	1,535
Securities purchased under agreements to resell	55
Receivables from broker-dealers and clearing organizations	1,609
Receivables from customers	208
Trading assets, at fair value	3,642
Property, equipment and capitalized software, net	108
Operating lease right-of-use assets	240
Goodwill	1,149
Intangibles (net of accumulated amortization)	418
Deferred taxes	180
Other assets	281
Total Assets	\$ 10,341

Liabilities and Equity (\$M)	6/30/2021
Short-term borrowings, net	214
Securities loaned	1,143
Securities sold under agreements to repurchase	491
Payables to broker-dealers and clearing organizations	777
Payables to customers	128
Trading liabilities, at fair value	3,123
Tax receivable agreement obligations	255
Accounts payable and accrued expenses and other liabilities	399
Operating lease liabilities	286
Long-term borrowings, net	1,603
Total Liabilities	\$ 8,419
Equity	1,923
Total Liabilities and Equity	\$ 10,341

Invested Capital (\$M)	As of:	3/31/19 ¹	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
Trading Capital²		1,714	1,631	1,637	1,604	1,997	2,141	1,981	2,075	2,266	2,089
(-) Cash reserved for operations, taxes payable, and other accrued and unpaid liabilities ³		(20)	(35)	(56)	(77)	(496)	(463)	(303)	(338)	(418)	(246)
Invested Capital		1,694	1,596	1,581	1,527	1,501	1,678	1,678	1,737	1,848	1,843

Share Count Roll Forward



<i>(M shares)</i>	4Q 2020	1Q 2021	2Q 2021
Beginning of Period Shares	197.1	195.6	195.0
Class A Buybacks	- 1.44	- 2.28	- 3.36
Net Shares Issued	- 0.05	+ 1.70	+ 0.19
End of Period Shares	195.6	195.0	191.9

Adjusted EBITDA & Normalized Adjusted EPS



Adj. EBITDA / Adj. EPS (\$M)	FY 2018	FY 2019 ¹	1Q 2020	2Q 2020	3Q 2020	4Q 2020	FY 2020	1Q 2021	2Q 2021
Income (Loss) Before income taxes	\$696	(\$116)	\$466	\$405	\$253	\$260	\$1,383	\$490	\$135
(+) Financing interest expense	72	122	26	22	20	20	88	19	20
(+) Debt issue cost related to debt refinancing and prepayment	12	41	4	13	10	2	29	2	2
(+) Depreciation and amortization	61	66	17	17	17	16	67	17	16
(+) Amortization of purchased intangibles and acquired capitalized software	26	71	19	19	18	18	74	18	18
EBITDA	\$867	\$183	\$532	\$475	\$318	\$315	\$1,640	\$546	\$192
<i>EBITDA Margin</i>	<i>85.0%</i>	<i>18.8%</i>	<i>67.9%</i>	<i>71.1%</i>	<i>87.7%</i>	<i>69.1%</i>	<i>72.2%</i>	<i>75.0%</i>	<i>56.0%</i>
(+) Severance	11	103	4	(0)	3	3	10	2	1
(+) Transaction fees and expenses	11	26	0	0	2	0	3	(0)	(0)
(+) Termination of office leases	23	66	0	0	0	9	10	1	4
(+) Share-based compensation	35	51	26	17	(5)	22	60	13	13
(+) Reserve for legal matters	2	1	4	(1)	(0)	0	3	4	-
(+) Coronavirus one time costs & donations	-	-	3	0	0	1	5	0	-
(-) Other	(340)	2	(1)	(5)	(70)	(8)	(83)	(1)	(11)
Adjusted EBITDA	\$620	\$432	\$570	\$486	\$249	\$344	\$1,648	\$565	\$197
<i>Adjusted EBITDA Margin</i>	<i>60.8%</i>	<i>44.3%</i>	<i>72.6%</i>	<i>72.6%</i>	<i>68.7%</i>	<i>75.4%</i>	<i>72.6%</i>	<i>77.6%</i>	<i>57.7%</i>
(-) Financing interest expense	72	122	26	22	20	20	88	19	20
(-) Depreciation and amortization	61	66	17	17	17	16	67	17	16
Normalized Adjusted Pre-Tax Income	\$487	\$244	\$527	\$447	\$212	\$308	\$1,494	\$528	\$161
(-) Normalized provision for income taxes	112	59	126	107	51	74	358	127	39
Normalized Adjusted Net Income	\$375	\$186	\$400	\$340	\$161	\$234	\$1,135	\$402	\$122
Weighted average fully diluted shares outstanding	191.3	192.6	195.0	197.1	198.1	197.5	196.9	197.0	194.8
Normalized Adjusted EPS	\$1.96	\$0.96	\$2.05	\$1.73	\$0.81	\$1.18	\$5.76	\$2.04	\$0.63

Adjusted Net Trading Income Reconciliation



Operating segments

Adjusted Net Trading Income Reconciliation (\$M)	Market Making					
	1Q 2020	2Q 2020	3Q 2020	4Q 2020	1Q 2021	2Q 2021
Trading income, net	803	745	442	466	801	381
Commissions, net and technology services	1	(1)	9	43	14	9
Brokerage, exchange, clearance fees and payment for order flow, net	(137)	(173)	(178)	(176)	(223)	(145)
Interest and dividends, net	(15)	(19)	(16)	(12)	(17)	(13)
Adjusted Net Trading Income	652	552	257	321	575	232

Adjusted Net Trading Income Reconciliation (\$M)	Execution Services					
	1Q 2020	2Q 2020	3Q 2020	4Q 2020	1Q 2021	2Q 2021
Trading income, net	(0)	(1)	(1)	39	11	4
Commissions, net and technology services	170	148	124	105	178	134
Brokerage, exchange, clearance fees and payment for order flow, net	(37)	(31)	(19)	(9)	(36)	(26)
Interest and dividends, net	(0)	(0)	(0)	(0)	0	(3)
Adjusted Net Trading Income	132	117	105	135	153	110

Adjusted Net Trading Income Reconciliation (\$M)	Total					
	1Q 2020	2Q 2020	3Q 2020	4Q 2020	1Q 2021	2Q 2021
Trading income, net	802	744	441	505	813	385
Commissions, net and technology services	171	148	134	148	192	143
Brokerage, exchange, clearance fees and payment for order flow, net	(174)	(204)	(196)	(185)	(259)	(171)
Interest and dividends, net	(15)	(20)	(16)	(13)	(17)	(15)
Adjusted Net Trading Income	784	669	362	456	728	342

Adjusted Net Trading Income Reconciliation



Organic growth initiatives

Adjusted Net Trading Income Reconciliation (\$M)	Organic Growth Initiatives				
	2018	2019	2020	1Q 2021	2Q 2021
Trading income, net	36	77	246	62	35
Commissions, net and technology services	7	11	23	13	7
Brokerage, exchange, clearance fees and payment for order flow, net	(2)	(9)	(88)	(12)	(7)
Interest and dividends, net	(1)	(4)	(15)	(6)	(4)
Adjusted Net Trading Income	40	75	166	57	32

Adjusted Operating Expense Reconciliation



Adjusted Operating Expenses Reconciliation (\$M)	1Q 2020	2Q 2020	3Q 2020	4Q 2020	1Q 2021	2Q 2021	FY 2019 ¹	FY 2020
Employee compensation and payroll taxes	\$170	\$121	\$36	\$66	\$105	\$84	\$384	\$394
Operations and administrative	\$27	\$22	\$25	\$21	\$26	\$22	\$104	\$95
Communications and data processing	\$55	\$56	\$52	\$51	\$52	\$53	\$209	\$214
Depreciation and amortization	\$17	\$17	\$17	\$16	\$17	\$16	\$66	\$67
Less:								
Severance	(\$4)	\$0	(\$3)	(\$3)	(\$2)	(\$1)	(\$103)	(\$10)
Share-based compensation	(\$26)	(\$17)	\$5	(\$22)	(\$13)	(\$13)	(\$51)	(\$60)
Other	(\$8)	\$1	(\$0)	(\$1)	(\$4)	-	(\$1)	(\$8)
Adjusted Operating Expenses	\$232	\$200	\$130	\$128	\$180	\$161	\$608	\$690

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; 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

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. 2Q 2021 Adj. Net Trading Income per day calculated using 63 trading days
3. Adj. EBITDA margin is calculated as Adjusted EBITDA / Adj. Net Trading Income
4. Shares repurchased calculated on a settlement date basis.

Slide 3

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. Adj. EBITDA margin is calculated as Adjusted EBITDA / Adj. Net Trading Income
4. CAGR measures the annually-compounded rate of return of Daily Average ANTI. Execution Services CAGR measures the 2-year period from 2Q 2019 (the first full quarter after the ITG acquisition) to 2Q 2021. Market Making CAGR measures the 3.5-year period from 4Q 2017 (the first full quarter after the KCG acquisition) to 2Q 2021.

Note: # of trading days used in Adj. Net Trading Income per day calculations: 62, 63, 64, 64, 61, 63, 251, 251, 252, 253, and 124 for 1Q20, 2Q20, 3Q20, 4Q20, 1Q21, 2Q21, FY 2017, FY 2018, FY 2019, FY 2020, and YTD 2021, respectively.

Slide 5

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. Calculated as median of observed values from FY 2015 through FY 2020
3. The range of Incremental ANTI per day due to growth initiatives reflects a Virtu management estimate of long term steady state ANTI from growth initiatives
4. Incremental Adj. EPS uses a trading day count of 252 to calculate full-year Incremental ANTI, 70% pre-tax margin, 24% tax rate, and share count of 194.8 million shares
5. Combined Pro Forma ANTI / Adj. EPS calculated as the sum of median Normalized Historical Pro Forma ANTI / Adj. EPS and median Incremental ANTI / Adj. EPS. Implied Growth compares the results from the median Incremental ANTI & Adj. EPS to the median Normalized Historical Pro Forma results.
6. Figures are shown for illustrative purposes only
7. Assumes midpoint of Target Range Available for Share Repurchases and share price of \$25.74
8. Current share count uses 2Q 2021 weighted average share count of 194.8 million shares

Note: All numbers in millions, except per share numbers or unless otherwise stated

Slide 6

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. Organic Growth Initiatives CAGR measures the annually-compounded rate of return of Organic Growth Initiatives Daily Average ANTI over the 2.5-year period from FY 2018 to YTD June 30, 2021

Note: # of trading days used in Adj. Net Trading Income per day calculations: 251, 252, 253, 61, and 63 for FY 2018, FY 2019, FY 2020, 1Q 2021 and 2Q 2021, respectively.

End Notes—continued



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

Slide 7

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 during the first and second quarters of 2021 and the years ended December 31, 2020, 2019 and 2018 as well as warrants issued in connection with the Founder Member Loan Facility (as defined in Virtu’s Annual Report on Form 10-K) during the year ended December 31, 2020.
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 8

1. Figures are shown for illustrative purposes only, assuming 252 trading days in a year.

Note: Shares repurchased calculated on a settlement date basis.

Slide 9

1. Virtu Americas 2020, see appendix for methodology and example
2. Beyond the requirements of the Limit Order Display Rule.

Slide 10

1. See brokers’ Rule 606 Reports
2. Beyond the requirements of the Limit Order Display Rule
3. See appendix for methodology and example
4. See slide 31
5. Citadel Securities, G1 Execution, Goldman Sachs, Jane Street, Two Sigma Securities, UBS Securities, Wolverine
6. Supplemental Price Improvement reflects enhancements

Slide 11

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>

End Notes—continued



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

Slide 11 (continued)

2. Virtu entered into a fixed-for-floating interest rate swap ending February 2025
3. Virtu entered into a fixed-for-floating interest rate swap ending October 2024
4. 3.5 billion JPY
5. Blended rate

Slide 13

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

Slide 14

1. ITG revenues and expenses included in financials beginning on March 1, 2019 close date.
2. 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>
3. 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 15

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, 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.

Does not include diluted shares (e.g. options, warrants), which totaled 1.5M, 1.3M and 0.7M shares at June 30, 2021, March 31, 2021 and December 31, 2020, respectively, 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.

The Weighted Average Adjusted shares outstanding are 194.8M, 197.0M and 196.9M for the three months-ended June 30, 2021, three months-ended March 31, 2021 and twelve months-ended December 31, 2020, respectively. The Weighted Average Basic shares outstanding are 119.7M, 122.1M and 121.7M for the three months-ended June 30, 2021, three months-ended March 31, 2021 and twelve months-ended December 31, 2020, respectively. The Weighted Average Diluted shares outstanding are 121.2M, 123.4M and 122.3M for the three months-ended June 30, 2021, three months-ended March 31, 2021 and twelve months-ended December 31, 2020, respectively.

Slide 16

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

Slide 19

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



Appendix: Measuring Real Execution Quality



Measuring Real Execution Quality

Benefits to Retail Are Significantly Understated

Douglas Cifu
Chief Executive Officer
Virtu Financial

U.S. Securities and Exchange Commission
Investor Advisory Committee
June 10, 2021



Benefits of Current Market Structure



The current US equities market structure provides meaningful and measurable benefits to retail investors

Significant Price and Size Improvement

- Wholesalers provided over \$3.6B in price improvement to retail investors in 2020, based on Rule 605's calculation method; however, this method greatly understates the value provided to retail investors
- Wholesalers fill marketable orders at prices typically better than the NBBO, regardless of the quantity of shares displayed at the NBBO. This improvement to both displayed price **and size** - or "Real Price Improvement" - is not captured by Rule 605 figures¹
- **Virtu alone provided over \$3B in Real Price Improvement to retail investors in 2020¹**

Order Handling and Execution

- Wholesalers commit capital to execute marketable retail orders
- The price and size of non-marketable limit orders are reflected on exchanges²
- In total, approximately 40% of total retail flow handled by Virtu interacts with public and / or lit markets

Robust Broker Competition

- The wholesale service model lowers entry barriers for new retail brokers and therefore bolsters competition
- Leveraging wholesaler partnerships allows retail brokers to offer more services at lower costs

Competitive and Resilient Execution Ecosystem

- Wholesalers compete against other liquidity sources, including over 40 exchanges and ATSS
- Brokers concurrently route to many execution partners and exchanges, mitigating single-point-of-failure risk

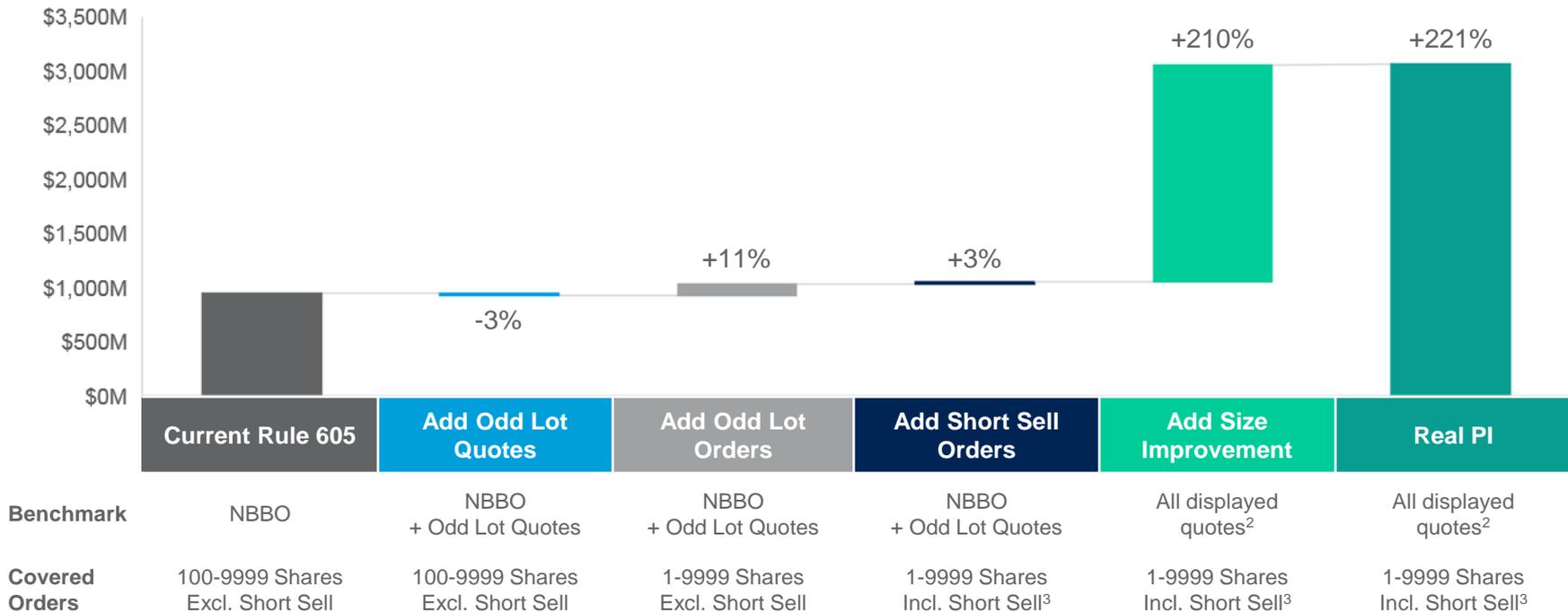
¹ Virtu Americas 2020, see appendix for methodology and example; ² Beyond the requirements of the Limit Order Display Rule;

Benefits to Retail Are Significantly Understated



A more fulsome measure of execution quality is necessary to accurately quantify the experience of retail investors

Real PI Provided by Virtu Is Over 3x Greater Than What Is Measured by Rule 605¹



Real PI improves on Rule 605 by including odd lot and short sell orders and updating the benchmark price to be the average price available for the same quantity of shares considering all displayed quotes – NBBO, depth of book and odd lots

¹ Virtu Americas 2020 activity; see appendix for methodology and example

² All displayed quotes includes odd lots, NBBO, and depth of book from all lit exchanges

³ Includes Short Sell marked orders when not 201-restricted

Rule 605 Recommended Reforms



We advocate for changes that enhance execution quality metrics and disclosures to retail investors and encourage vigorous competition

In an attempt to measure fill quality on marketable orders, Rule 605 reports compare the execution price of those orders to the NBBO price, regardless of the order size relative to the quantity of shares displayed at the NBBO

- This measurement dramatically understates actual net PI provided to retail investors when the marketable order size is larger than the number the shares displayed at the NBBO
- The current benchmark (NBBO), by definition, does not include unprotected, displayed odd lot orders

We believe reform to Rule 605 could result in more accurate measurements that reflect the price improvement and execution quality benefits received by retail investors

- Current Rule 605 price improvement reports have four major shortcomings:
 1. Unprotected odd lot quotes are not included in the benchmark reference price
 2. Marketable odd lot orders are omitted
 3. Marketable short sell orders are omitted
 4. Rule 605 assumes there is always sufficient quantity of shares to fill marketable orders at the NBBO

Addressing these shortcomings in Rule 605 reports would help the market to better understand the actual benefits received by retail investors

Separating Fact From Fiction



Myth	Reality
Retail flow is not accessible	<ul style="list-style-type: none">• Approximately 40% of total retail flow handled by Virtu interacts with displayed, hidden and midpoint liquidity on public exchanges and ATs or are displayed on lit exchanges• Most retail brokers are capable of routing directly to exchanges and many do – but retail brokers also route to wholesalers to obtain price and size improvement over what’s available elsewhere¹
Wholesalers have information advantage	<ul style="list-style-type: none">• Marketable orders are promptly executed and printed to the tape with full transparency to the marketplace, while non-marketable limit orders are reflected on lit exchanges where they are visible publicly²• Wholesalers receive retail orders without any advanced notice or information about the retail investor that placed the order
Price improvement is not real	<ul style="list-style-type: none">• Wholesalers effectively narrow the NBBO for retail investors – taken as a whole, all wholesalers provided over \$3.6B in price improvement in 2020, as measured by current Rule 605• NBBO is only the ‘top of the book’ price and size – when Virtu’s performance is compared to all displayed quotes for the quantity of shares to fill the order, Virtu alone provided over \$3B in price improvement³
Wholesaling is not competitive	<ul style="list-style-type: none">• Competition among wholesalers drove a 750% increase in net PI per share since 2013⁴• Virtu competes with at least 7 other wholesaler firms⁵ as well as the entire ecosystem of over 40 exchanges and ATs to provide the best price improvement to retail investors; barriers to entry are minimal and there are new entrants on a regular basis
Exchanges & ATs would provide better executions	<ul style="list-style-type: none">• Wholesalers provide execution in all market conditions; exchanges do not have best execution obligations• When Virtu seeks liquidity on exchanges and ATs it achieves price improving fills on only ~18% of routed shares. To remain competitive, Virtu provides Supplemental Price Improvement at significant expense to itself by improving the execution prices for shares filled on exchanges and ATs. This Supplemental PI is paid out of Virtu’s own pocket. Virtu also incurs meaningful trading fees to execute orders at exchanges and ATs, an expense we expect would fall to retail brokers if they routed orders directly to these market centers

¹ See brokers’ Rule 606 Reports; ² beyond the requirements of the Limit Order Display Rule; ³ See appendix for methodology and example; ⁴ See slide 7;

⁵ Citadel Securities, G1 Execution, Goldman Sachs, Jane Street, Two Sigma Securities, UBS Securities, Wolverine;

⁶ Supplemental Price Improvement reflects enhancements

Wholesalers Are Part of a Broad Ecosystem



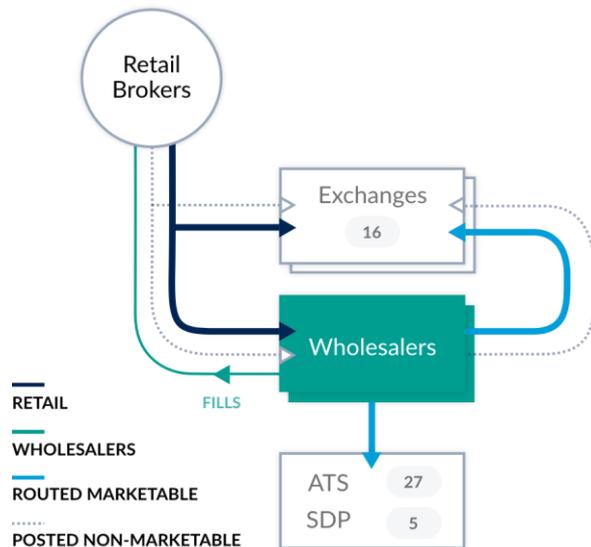
Brokers leverage wholesalers for execution and order handling

Brokers evaluate wholesalers based on overall execution quality obtained, which incentivizes wholesalers to seek price improving liquidity for the broker, including accessing better prices on exchanges and ATs where available

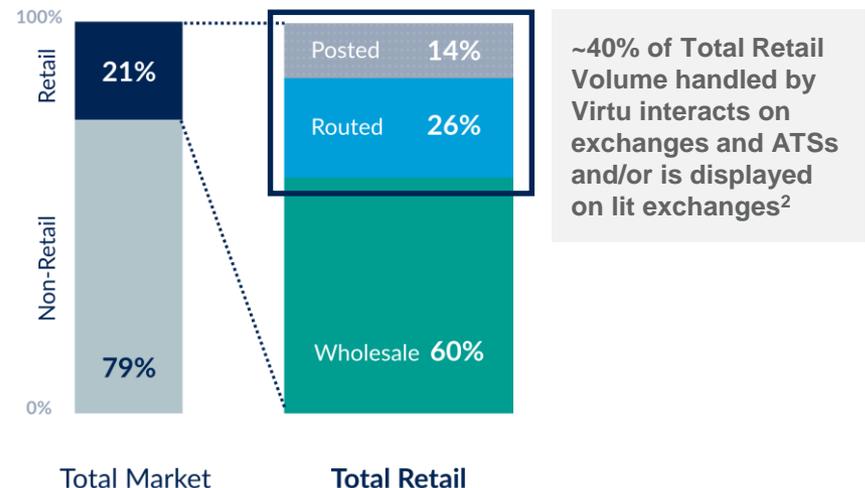
- Wholesalers typically incur and absorb trading fees on this flow when seeking liquidity; absent wholesaling arrangements, these substantial costs would ultimately be paid by retail investors

Retail is Accessible: About 40% of retail orders handled by Virtu interact with displayed, hidden and midpoint liquidity on exchanges and ATs or are displayed on lit exchanges

Retail Brokers Leverage Wholesalers for Routing and Executing Orders



Total Retail Volume Represents About 21% of Total Market Volume Traded in US Equities¹



¹ Per Rule 605 Reports from wholesalers for 2020;

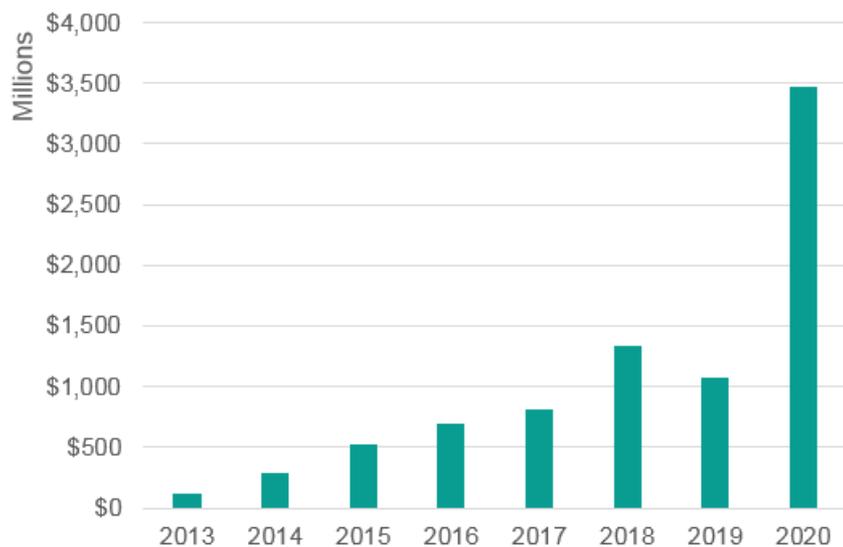
² Extrapolating from Virtu's activity, excludes marketable and non-marketable orders routed directly to exchanges by retail brokers

Strong Competition Benefits Retail

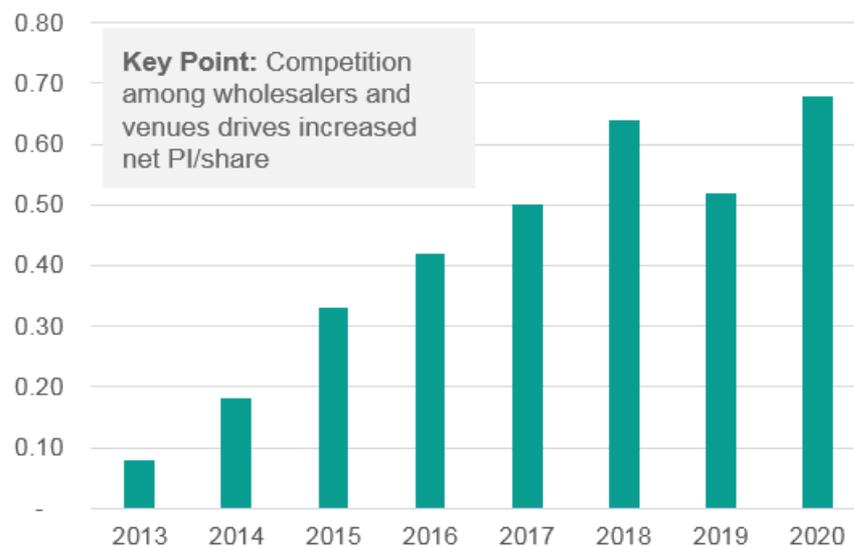


- Wholesalers compete against each other and over 40 other liquidity sources (exchanges, ATs) for the opportunity to provide execution and routing of orders for retail brokers
- Retail brokers measure liquidity sources based on the amount of price improvement provided
- This structure puts wholesalers in competition to provide the best execution for the retail broker on all orders handled, including incentivizing wholesalers to access better prices on exchanges and ATs (where available) at the wholesalers' own expense to remain competitive

Total Net Price Improvement¹ Provided to Retail Investors by All Wholesalers



Average Net Price Improvement¹ Provided by All Wholesalers (*¢ per share*)



Though significant, these figures substantially understate benefits to retail investors²

¹ Net price improvement based on Rule 605 reports; ² See appendix for methodology and example

Appendix



Benefits to Retail Are Significantly Understated (*con't*)



Current Rule 605 method ignores odd lot quotes, odd lot orders, short sell orders and the size of covered orders relative to the amount of shares available at the NBBO

#	Method	Net Price Imp. (2020) ¹	Covered Order Sizes	Benchmark	Limitations / Notes
1	Current Rule 605	\$953M	100 – 9999 Excl. Short Sell orders	The price at the NBBO, assuming infinite size at the NBBO.	<ul style="list-style-type: none"> Doesn't consider unprotected odd lots in the market data Omits marketable orders for 1-99 shares Doesn't consider the size of the incoming order Omits marketable orders marked as Short Sell
2	Add Odd Lot quotes to benchmark	\$926M -3% vs. <i>Current Rule 605</i>	100 – 9999 Excl. Short Sell orders	The volume weight average price (VWAP) for the number of shares required to fill the marketable order based on all displayed odd lots in the market data plus infinite size at the NBBO for the size not satisfied by odd lots.	<ul style="list-style-type: none"> Omits marketable orders for 1-99 shares Doesn't consider the size of the incoming order Omits marketable orders marked as Short Sell
3	Add Odd Lot orders to universe of covered orders	\$1,031M +8% vs. <i>Current Rule 605</i>	1-9999 Excl. Short Sell orders	The volume weight average price (VWAP) for the number of shares required to fill the marketable order based on: <ul style="list-style-type: none"> all displayed odd lots in the market data, plus infinite size at the NBBO for the size not satisfied by odd lots. 	<ul style="list-style-type: none"> Doesn't consider the size of the incoming order Omits marketable orders marked as Short Sell
4	Add Short Sell marked orders to universe of covered orders	\$1,055M +11% vs. <i>Current Rule 605</i>	1-9999 ³	The volume weight average price (VWAP) for the number of shares required to fill the marketable order based on: <ul style="list-style-type: none"> all displayed odd lots in the market data, plus infinite size at the NBBO for the size not satisfied by odd lots. 	<ul style="list-style-type: none"> Doesn't consider the size of the incoming order
5	"Real PI" Considers the size of the covered order vs. all displayed quotes²	\$3,062M +221% vs. <i>Current Rule 605</i>	1-9999 ³	<p>The volume weight average price (VWAP) for the size of the covered order based on all displayed quotes (NBBO, depth, and unprotected odd lots in the market data).</p> <p>Note: The VWAP price is capped at 5% from the inside price to limit for instances where the incoming marketable order (a) would have exhausted all displayed liquidity in the market and/or (b) would have traded through enough price levels to trigger an Limit-Up/Limit-Down halt.</p>	

¹ See slide 10 for example calculation

² All displayed quotes includes odd lots, NBBO, and depth of book from all lit exchanges

³ Includes Short Sell marked orders when not 201-restricted

Example: Why PI Calculation Matters



Ignoring size of orders understates the benefits retail receives

Consider the following scenario

Wholesaler receives a market order to sell long 600 shares.
 The aggregate size on the bid looks like the illustration below.
 Wholesaler fills the sell order for 600 shares at \$99.9700.

Price (\$)	Aggregate Size of Quotes on the Bid (across all exchanges)	Benchmark Calculation		
		Rule 605	605 + OL Quotes	"Real PI"
\$99.99	6		6	6
\$99.97	9		9	9
\$99.95	125 <-- NBB	600	585	125
\$99.94	27			27
\$99.92	175			175
\$99.90	100			100
\$99.85	275			158
\$99.80	325			

	Rule 605	605 + OL Quotes	"Real PI"
Avg Benchmark Price:	\$ 99.9500	\$ 99.9507	\$ 99.9068
Fill Price	\$ 99.9700	\$ 99.9700	\$ 99.9700
PI per Share	\$ 0.0200	\$ 0.0193	\$ 0.0632
Total PI Received	\$ 12.00	\$ 11.58	\$ 37.90

Price improvement calculations should reflect actual benefits received by investors

#1 Current Rule 605

Under the current Rule 605 methodology, this fill is price improved by \$0.0200 per share, or a total of \$12.00 on the trade.
 i.e., fill price of \$99.97 vs. the benchmark \$99.9500 (NBB)

This ignores odd lots and the fact the incoming order is over 4 times greater than the size of the NBB

#2 Rule 605 + Odd Lot Quotes

If displayed odd lot quotes are considered, this fill is price improved by \$0.0193 per share, or a total of \$11.58 on the trade.
 i.e., fill price of \$99.97 vs. the benchmark of \$99.9507 (volume weighted average price of odd lots + unlimited size at NBB)

This ignores the fact the incoming order is over 4 times greater than the size of the NBB

#5 "Real PI" (All displayed quotes including odd lots, NBBO, and depth of book from all lit exchanges)

If all displayed quotes are considered, this fill is price improved by \$0.0632 per share, or a total of \$37.90 on the trade.
 i.e., fill price of \$99.97 vs. the benchmark of \$99.9068 (volume weighted average price of all displayed quotes)

Size Improvement Frequency



A significant percentage of retail activity comes from orders that exceed the displayed quantity of shares at the NBBO¹

Shares traded and notional value traded by retail often outsizes the displayed quantity of shares at the NBBO¹



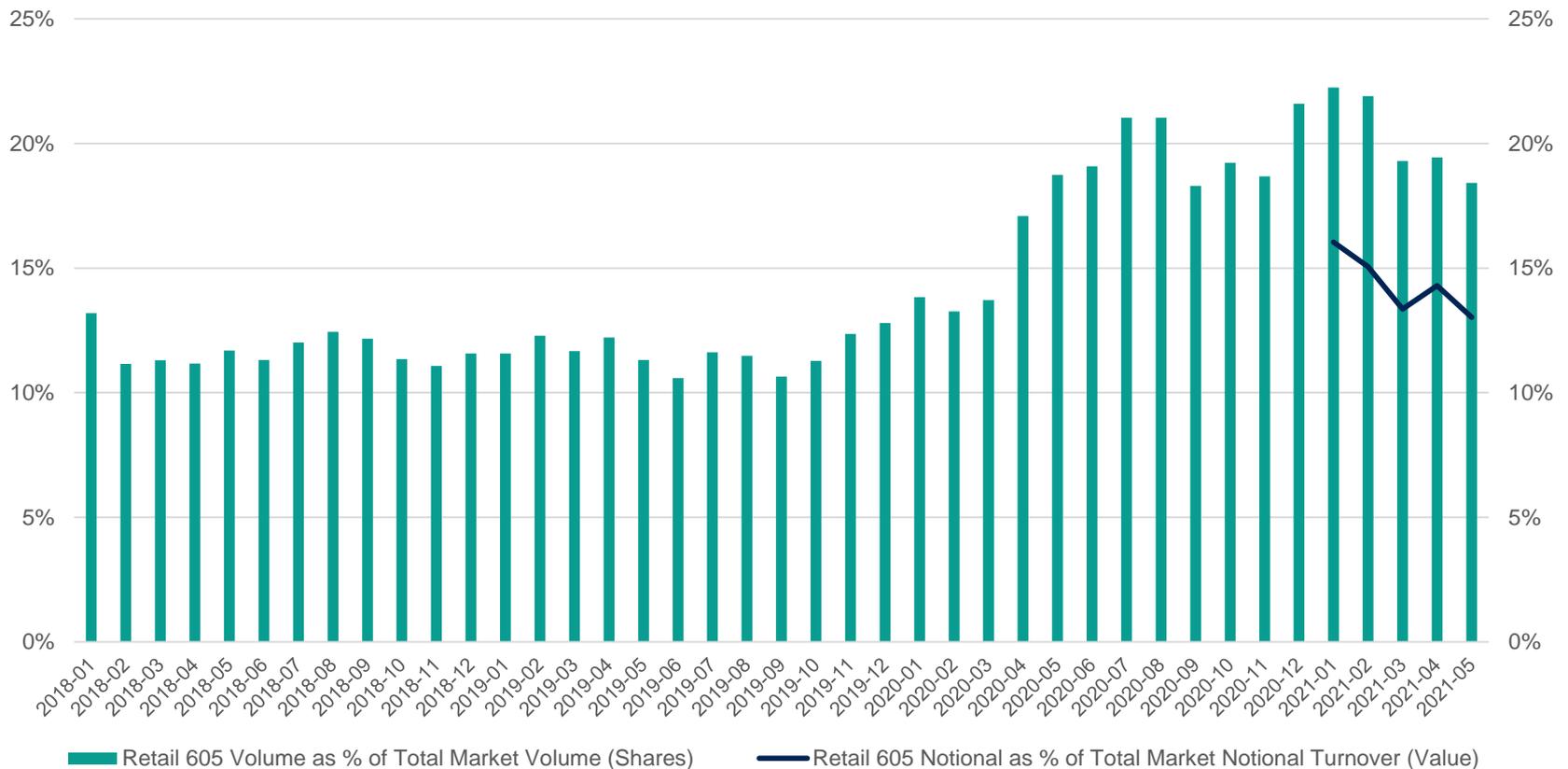
¹ Virtu Americas 2020 activity, includes orders for 1-9999 shares and orders marked as short sell

Retail 605 Volume as a % of Total Market Volume



Retail activity has grown from under 12% in 2018 and 2019 to 18% in 2020 and 20.4% for 2021 YTD

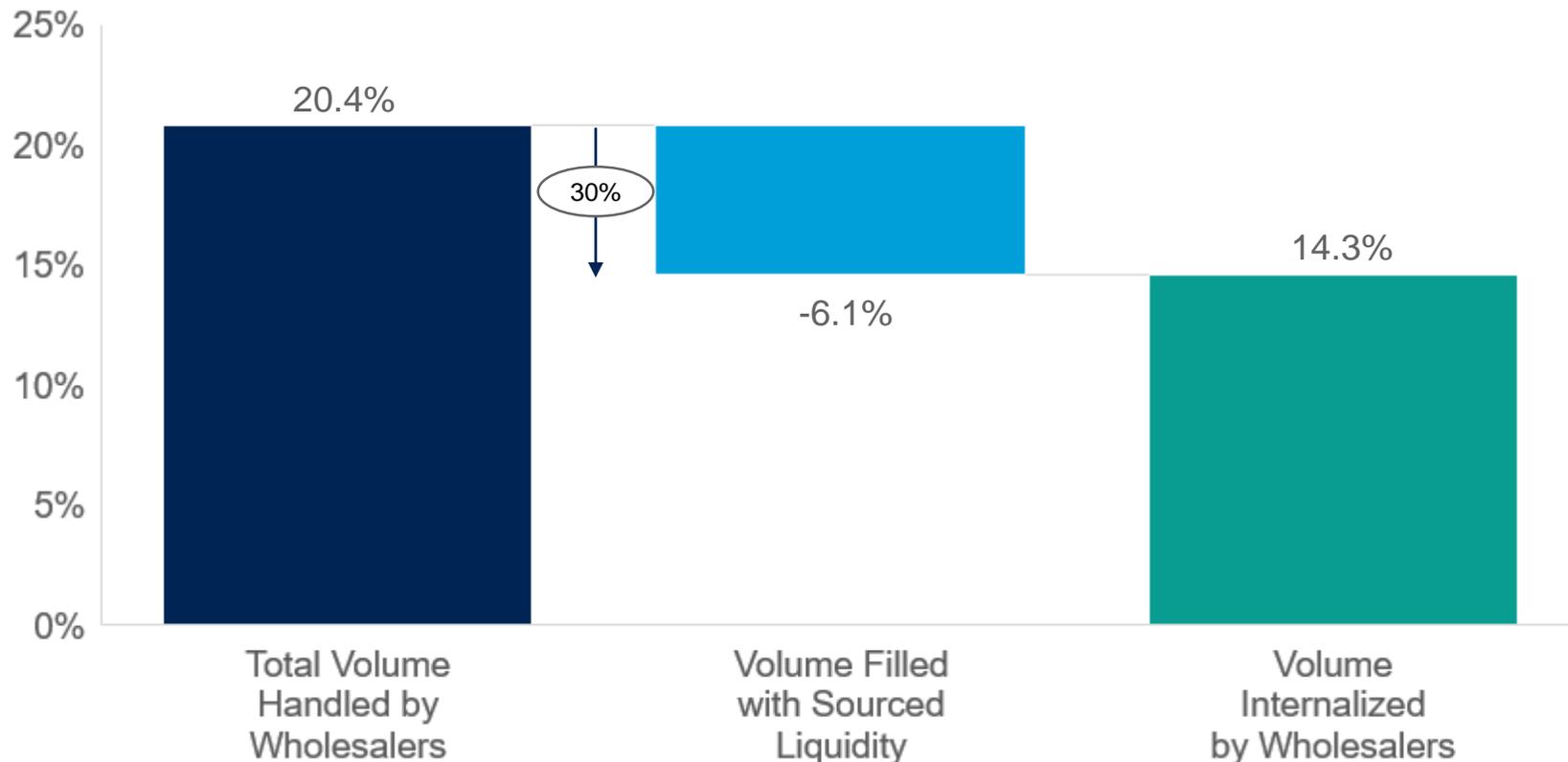
Retail Marketable 605 Activity as % of Total Market Activity (Shares and Value Traded)



Wholesalers access other liquidity sources, including exchanges and ATS, to fill about 30% of the volume



Internalized Retail 605 Marketable Volume accounts for approximately 14% of TCV¹



¹ Extrapolating from Virtu's activity, excludes marketable and non-marketable orders routed directly to exchanges by retail brokers

Source: Retail activity from Wholesalers' Rule 605 Reports; Total market share and notional volume from Cboe Global Markets