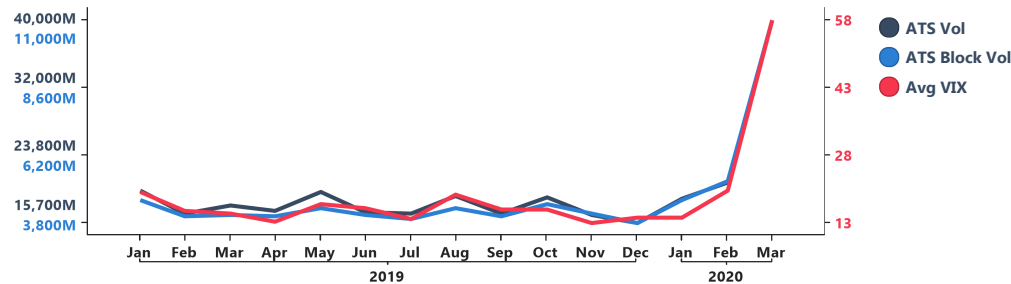
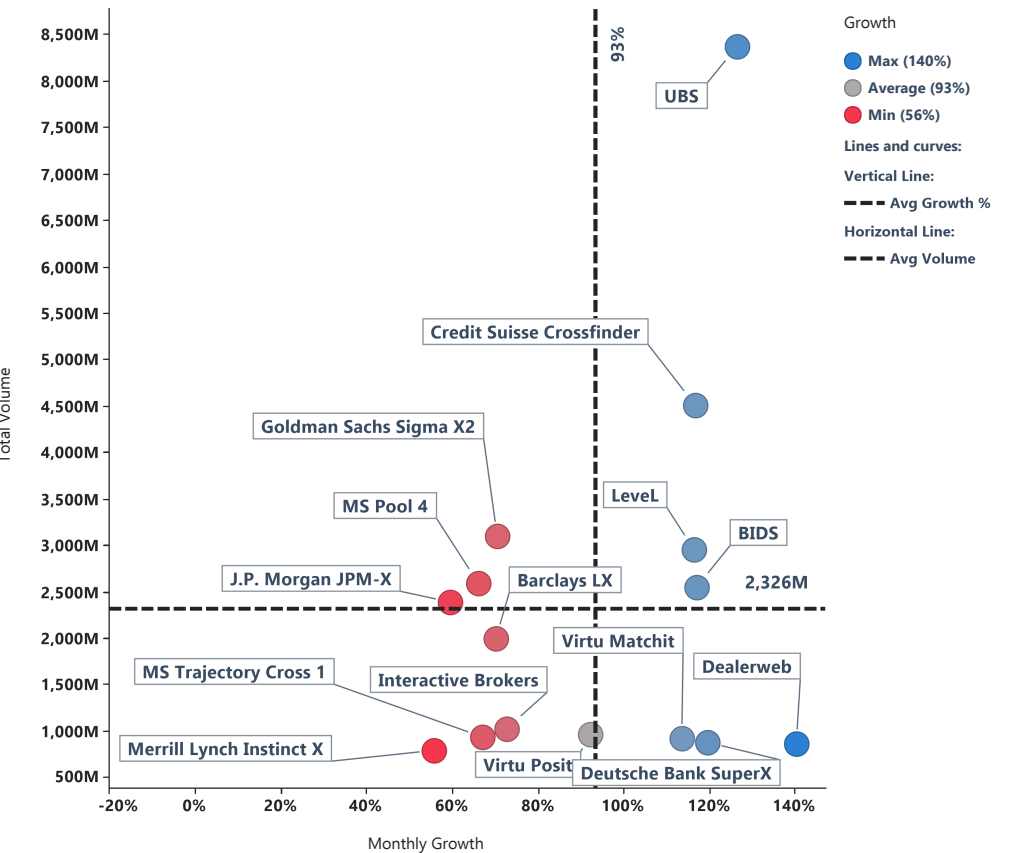


POINT FOCAL Equities LiquidityMatrix™ March 2020

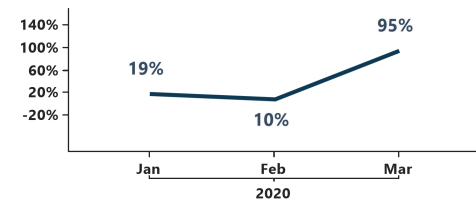
ATS Volumes & Average VIX Close



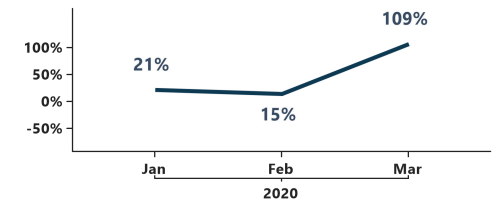
Top 15 ATS Monthly Growth



ATS Monthly Volume % Growth



ATS Monthly Block % Growth



March ATS Volume & Monthly % Chg

ATS	Volume	V % Chg
UBS	8,376M	126%
Credit Suisse Crossfinder	4,513M	116%
Goldman Sachs Sigma X2	3,102M	71%
Level	2,962M	116%
MS Pool 4	2,598M	66%
BIDS	2,550M	117%
J.P. Morgan JPM-X	2,396M	59%
Barclays LX	2,002M	70%
Interactive Brokers	1,020M	72%
Virtu Posit	972M	92%
MS Trajectory Cross 1	938M	67%
Virtu Matchit	921M	114%
Deutsche Bank SuperX	879M	119%
Dealerweb	867M	140%
Merrill Lynch Instinct X	794M	56%
Crossstream / BLOX	747M	106%
MS Retail Pool 6	721M	89%
Instinet Blockcross	678M	124%
Liquidnet H2O	641M	125%
J.P. Morgan JPB-X	609M	36%
Intelligent Cross	522M	96%
Liquidnet Negotiation	335M	101%
Instinet CBX	266M	3%
CODA	219M	76%
Luminex	211M	109%
CitiBLOC	73M	106%
Ustocktrade	29M	79%
Instinet Crossing	23M	-17%
Pro Securities	9M	209%
Aqua	6M	12%
Piper Jaffray	2M	-35%

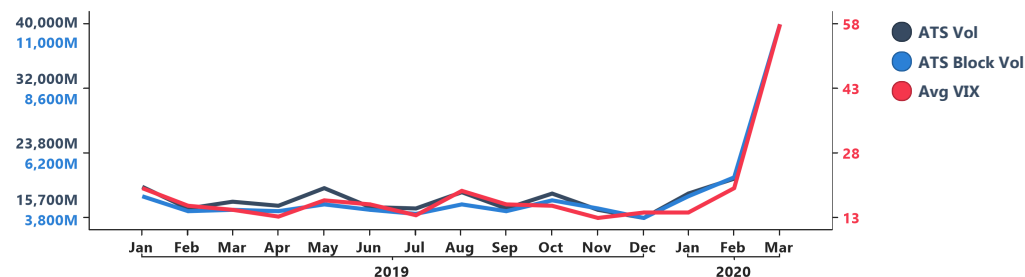
March ATS Block Vol & Monthly % Chg

ATS	Block Vol	BV % Chg
BIDS	2,096M	118%
UBS	1,008M	132%
Dealerweb	867M	140%
Credit Suisse Crossfinder	829M	116%
Instinet Blockcross	678M	124%
Liquidnet H2O	638M	125%
J.P. Morgan JPM-X	590M	79%
Level	482M	130%
Virtu Posit	481M	91%
MS Pool 4	475M	74%
Liquidnet Negotiation	334M	101%
Barclays LX	322M	88%
Interactive Brokers	305M	93%
Goldman Sachs Sigma X2	298M	87%
Crossstream / BLOX	261M	103%
Virtu Matchit	235M	149%
Luminex	211M	109%
Merrill Lynch Instinct X	193M	55%
MS Trajectory Cross 1	176M	119%
Deutsche Bank SuperX	121M	123%
J.P. Morgan JPB-X	97M	55%
CitiBLOC	73M	106%
MS Retail Pool 6	58M	73%
CODA	54M	86%
Intelligent Cross	45M	116%
Instinet CBX	39M	14%
Instinet Crossing	17M	-22%
Aqua	6M	12%
Ustocktrade	4M	159%
Pro Securities	4M	166%
Piper Jaffray	1M	-31%

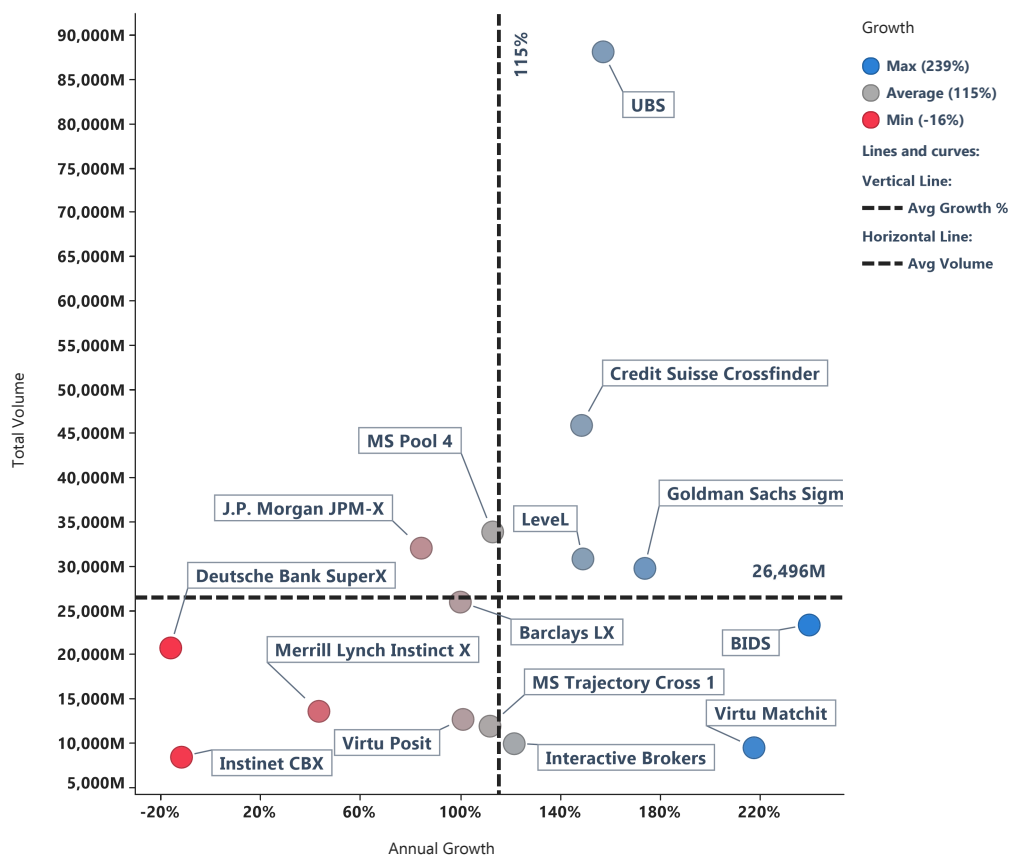
POINT FOCAL

Equities LiquidityMatrix™ March 2020

ATS Volumes



Top 15 ATS Annual Growth



12-Month ATS Volume & % Change

ATS	Volume	V % Chg
UBS	88,199M	157%
Credit Suisse Crossfinder	45,960M	148%
MS Pool 4	33,938M	113%
J.P. Morgan JPM-X	32,060M	84%
Level	30,929M	149%
Goldman Sachs Sigma X2	29,785M	173%
Barclays LX	26,033M	100%
BIDS	23,419M	239%
Deutsche Bank SuperX	20,769M	-16%
Merrill Lynch Instinct X	13,589M	43%
MS Trajectory Cross 1	12,051M	112%
Interactive Brokers	9,989M	121%
Virtu Matchit	9,532M	217%
Instinet CBX	8,469M	-12%
J.P. Morgan JPB-X	7,517M	98%
Liquidnet H2O	7,476M	122%
ITG Posit	6,982M	4%
MS Retail Pool 6	6,871M	154%
Instinet Blockcross	6,545M	185%
Crossstream / BLOX	6,304M	235%
Dealerweb	6,033M	265%
Virtu Posit	5,737M	101%
Liquidnet Negotiation	3,748M	190%
Intelligent Cross	3,466M	301%
CODA	2,959M	71%
Citi Cross	2,751M	-12%
Ustocktrade	2,374M	-80%
Luminex	2,048M	192%
Instinet Crossing	1,797M	-77%
CitiBLOC	975M	78%
Aqua	143M	57%
Citigroup CIOI	101M	0%
Weeden XE	77M	-97%
Pro Securities	36M	766%
Piper Jaffray	31M	0%
Magma	243k	0%
Barclays DirectX	32k	0%

12-Month ATS Block Vol & % Change

ATS	Block Vol	BV % Chg
BIDS	18,992M	246%
UBS	9,710M	179%
Liquidnet H2O	7,448M	122%
Credit Suisse Crossfinder	6,828M	196%
Instinet Blockcross	6,545M	185%
J.P. Morgan JPM-X	6,519M	143%
Dealerweb	6,033M	265%
MS Pool 4	5,932M	101%
Level	4,385M	160%
Liquidnet Negotiation	3,747M	190%
Barclays LX	3,413M	159%
Merrill Lynch Instinct X	2,753M	67%
Virtu Posit	2,711M	176%
ITG Posit	2,672M	21%
Deutsche Bank SuperX	2,379M	-3%
Goldman Sachs Sigma X2	2,279M	286%
Interactive Brokers	2,217M	212%
Luminex	2,048M	192%
Virtu Matchit	1,859M	289%
Crossstream / BLOX	1,842M	317%
Instinet Crossing	1,529M	-81%
Instinet CBX	1,142M	-1%
MS Trajectory Cross 1	1,118M	494%
CitiBLOC	975M	78%
J.P. Morgan JPB-X	901M	181%
Ustocktrade	829M	-91%
CODA	657M	113%
MS Retail Pool 6	501M	213%
Citi Cross	460M	3%
Intelligent Cross	321M	273%
Aqua	143M	57%
Citigroup CIOI	101M	0%
Weeden XE	46M	-99%
Piper Jaffray	19M	0%
Pro Securities	16M	501%
Magma	79k	0%
Barclays DirectX	32k	0%