

Nomura Corporate Research and Asset Management Inc.
Top Five Execution Venues for Classes of Financial Instruments
For the 12 Months Ended December 31, 2019

Class of Instrument	Equities – Shares and Depository Receipts (Liquidity Bands 1 and 2)				
Notification if <1 average trade per business day in the previous year	Not Applicable				
Top five execution venues ranked in terms of trading volumes	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as a percentage of total in that class	Percentage of Passive Orders	Percentage of Aggressive Orders	Percentage of directed orders
Penserra Securities LLC (LEI - 549300WY8ZBI168Y6Z05)	46.94%	63.21%	0.00%	0.00%	0.00%
Stifel Nicolaus & Company Incorporated (LEI - 5WUVMA08EYG4KEUPW589)	9.13%	2.47%	0.00%	0.00%	0.00%
Citigroup Global Markets Inc. (LEI - MBNUM2BPBDO7JBLYG310)	5.88%	22.74%	0.00%	0.00%	0.00%
Cowen and Company LLC (LEI - 549300WR155U7DVMIW58)	1.18%	2.68%	0.00%	0.00%	0.00%
Deutsche Bank Securities Inc. (LEI - 9J6MBOOO7BECTDTUZW19)	0.77%	0.07%	0.00%	0.00%	0.00%

Class of Instrument	Equities – Other (Private)				
Notification if <1 average trade per business day in the previous year	Not Applicable				
Top five execution venues ranked in terms of trading volumes	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as a percentage of total in that class	Percentage of Passive Orders	Percentage of Aggressive Orders	Percentage of directed orders
Merrill Lynch, Pierce, Fenner & Smith Incorporated (LEI - 8NAV47T0Y26Q87Y0QP81)	27.70%	2.74%	0.00%	0.00%	0.00%

Imperial Capital LLC (LEI - 549300I8X15KSI64Y307)	3.87%	0.20%	0.00%	0.00%	0.00%
Citigroup Global Markets Inc. (LEI - MBNUM2BPBDO7JBLYG310)	2.03%	4.55%	0.00%	0.00%	0.00%
Jefferies Leveraged Credit Products, LLC (LEI - SD2WHB6KCKNBO8F61R35)	1.12%	0.07%	0.00%	0.00%	0.00%
Seaport Global Securities LLC (LEI - 54930028D6D0G5RZJ888)	0.61%	0.40%	0.00%	0.00%	0.00%

Class of Instrument	Debt Instruments - Bonds		
Notification if <1 average trade per business day in the previous year	Not Applicable		
Top five execution venues ranked in terms of trading volumes	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as a percentage of total in that class	Percentage of directed orders
J.P. Morgan Securities LLC (LEI: ZBUT11V806EZRVWT807)	10.97%	9.70%	0.00%
Merrill Lynch, Pierce, Fenner & Smith Inc. (LEI: 8NAV47T0Y26Q87Y0QP81))	10.28%	10.84%	0.00%
Citigroup Global Markets Inc. (LEI - MBNUM2BPBDO7JBLYG310)	10.23%	10.98%	0.00%
Morgan Stanley & Co. LLC (LEI - 9R7GPTSO7KV3UQJZQ078)	9.59%	10.95%	0.00%
Goldman Sachs & Co. LLC (LEI - FOR8UP27PHTHYVLBNG30)	7.63%	8.77%	0.00%

Class of Instrument	Currency Derivatives – Swaps, Forwards, and Other Currency Derivatives		
Notification if <1 average trade per business day in the previous year	Not Applicable		
Top five execution venues ranked in terms of trading volumes	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as a percentage of total in that class	Percentage of directed orders
State Street Bank and Trust Company (LEI - 571474TGEMMWANRLN572)	51.16%	55.35%	0.00%
The Bank of New York Mellon (LEI - HPFHU00Q28E4N0NFVK49)	44.52%	15.83%	0.00%

UBS AG (LEI - L5B73Z7Y846FLWTQMU88)	3.86%	20.43%	0.00%
Cooperatieve Rabobank U.A. (LEI - DG3RU1DBUFHT4ZF9WN62)	0.46%	8.39%	0.00%

Class of Instrument	Other Instruments (Loans)		
Notification if <1 average trade per business day in the previous year	Not Applicable		
Top five execution venues ranked in terms of trading volumes	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as a percentage of total in that class	Percentage of directed orders
Bank of America, National Association (LEI - B4TYDEB6GKMZO031MB27)	16.78%	17.05%	0.00%
JPMorgan Chase Bank, National Association (LEI - 7H6GLXDRUGQFU57RNE97)	13.57%	12.38%	0.00%
Credit Suisse Loan Funding LLC (LEI - 549300G6V8TX6EL60Y57)	10.62%	11.86%	0.00%
Goldman Sachs Bank USA (LEI - KD3XUN7C6T14HNAYLU02)	10.31%	9.48%	0.00%
Citibank N.A. (LEI - E57ODZWZ7FF32TWEFA76)	9.60%	12.09%	0.00%