

December 28 - January 1, 2016

PROGRAM TRADING PURCHASES AND SALES

Trading on NYSE
(Average Daily - Millions)

Current
Week

| | |
|---|---------|
| Total Buy Programs | 150.3 |
| Total Sell Programs | 149.8 |
| Total CS2 Programs | 12.5 |
| Total Programs | 312.6 |
| Total NYSE Volume* | 1,279.2 |
| Program Trading as % of Total NYSE Buy + Sell Volume | 24.4% |

NYSE Program Trading - 20 Most Active Member Firms

(Millions of Shares)

| | Index Arbitrag | Non- Index | Non- CS2 | Principa | Agency | Crossin Session | Grand Total |
|---|-------------------|----------------|----------------|--------------|--------------|--------------------|----------------|
| MORGAN STANLEY & CO. LLC | - | 204.1 | 204.1 | 57.0 | 147.1 | 17.5 | 221.6 |
| GOLDMAN, SACHS & COMPANY | - | 145.6 | 145.6 | 126.4 | 19.2 | 13.8 | 159.4 |
| BARCLAYS CAPITAL INC. | - | 117.7 | 117.7 | 5.5 | 112.3 | - | 117.7 |
| MERRILL LYNCH, PIERCE, FENNER & SMITH, INC. | - | 98.5 | 98.5 | 31.2 | 67.3 | 13.0 | 111.5 |
| LATOUR TRADING LLC | - | 83.3 | 83.3 | 83.3 | - | - | 83.3 |
| SG AMERICAS SECURITIES, LLC | - | 68.1 | 68.1 | 38.1 | 29.9 | - | 68.1 |
| UBS SECURITIES LLC | - | 63.3 | 63.3 | 0.8 | 62.5 | - | 63.3 |
| INSTINET, LLC | 1.6 | 61.3 | 62.9 | 6.0 | 56.9 | - | 62.9 |
| J.P. MORGAN SECURITIES LLC | - | 59.3 | 59.3 | 24.4 | 34.9 | 3.1 | 62.4 |
| CREDIT SUISSE SECURITIES (USA) LLC | 0.2 | 56.7 | 56.9 | 38.7 | 18.2 | - | 56.9 |
| DEUTSCHE BANK SECURITIES INC. | - | 51.8 | 51.8 | 35.3 | 16.5 | - | 51.8 |
| SIG BROKERAGE L.P. | - | 46.5 | 46.5 | - | 46.5 | - | 46.5 |
| CITIGROUP GLOBAL MARKETS INC. | - | 39.1 | 39.1 | 15.5 | 23.6 | 2.7 | 41.8 |
| IMC CHICAGO, LLC, DBA IMC FINANCIAL | - | 37.1 | 37.1 | 37.1 | - | - | 37.1 |
| ITG INC. | - | 13.6 | 13.6 | - | 13.6 | - | 13.6 |
| BNP PARIBAS SECURITIES CORP | - | 11.1 | 11.1 | - | 11.1 | - | 11.1 |
| SANFORD C. BERNSTEIN & CO., LLC | - | 9.5 | 9.5 | - | 9.5 | - | 9.5 |
| RBC CAPITAL MARKETS LLC | 5.9 | 0.2 | 6.1 | - | 6.1 | - | 6.1 |
| INTERACTIVE BROKERS LLC | 0.3 | 4.8 | 5.1 | - | 5.1 | - | 5.1 |
| GOLDMAN SACHS EXECUTION & CLEARING, LP | - | 4.0 | 4.0 | - | 4.0 | - | 4.0 |
| Total for 20 Member Firms | 8.0 | 1,175.6 | 1,183.6 | 499.3 | 684.3 | 50.1 | 1,233.7 |
| Total for All Firms Reporting | 8.0 | 1,192.2 | 1,200.2 | 505.8 | 694.4 | 50.1 | 1,250.3 |
| % of Total | 0.6% | 95.4% | 96.0% | 40.5% | 55.5% | 4.0% | 100.0% |

+ Total NYSE volume is the sum of shares bought, sold and sold short on the NYSE, during regular NYSE trading hours, plus crossing session 2.

Totals may not sum exactly due to rounding.

(** See Appendix)

Note 1: NYSE program trading totals include purchases and sales during regular trading hours, plus crossing session 2.

Note 2: Program Trading Totals in this report were compiled from member firms executed volume from NYSE's orders database.

NYSE Strategic Analysis

January 2016