



Equity Market Structure Update: The Search for Liquidity and Potential for Unbundling

Greenwich Associates Webinar

August 12, 2015

Speakers



Dan Connell, Managing Director, Market Structure and Technology, Greenwich Associates

Dan Connell oversees the development strategy of the Firm's Market Structure and Technology business. Prior to Greenwich Associates he has held a number of senior positions including Executive Managing Director of Standard & Poor's, CEO, RTS at Interactive Data, COO of Xinhua Finance Ltd. and CEO at Correlix, Inc.



John Colon, Managing Director, Markets

John Colon consults with the Firm's corporate finance and institutional equity practices in the U.S., Asia and Europe and is a frequent speaker at industry and investor conferences. Before joining Greenwich Associates in 1986, John was an analyst in the corporate finance department of Lehman Brothers Kuhn Loeb in New York.



Craig Viani, Vice President, Market Structure & Technology

Craig Viani consults with the Firm's market structure and technology research team and has 20 years of equity market experience with prior roles in trading, product management and best execution. Before joining Greenwich Associates in 2015, Craig was Head of US Electronic Trading Product Management at ConvergEx in New York.

About Greenwich Associates

Greenwich Associates is the leading provider of global market intelligence and advisory services to the financial services industry

We provide unique market information, insights and advice to help clients:

- Improve their business performance
- Drive product strategy & development
- Increase sales effectiveness
- Gain a significant competitive advantage
- Enhance operational performance
- Optimize development initiatives
- Transform their business to improve every aspect of customer experience

Firm Facts:

- Founded in 1972
- Privately held
- Headquartered in Stamford, CT, with regional offices in Pleasanton, CA, Toronto, London, Singapore, and Tokyo

By the numbers:

260+ Sell-Side Clients
in the financial services industry

350 Employees
throughout the United States, Canada, Europe, Asia, and Japan

60,000 Annual Interviews
with buyers of financial services

1,250,000 Annual Interviews
in our Customer Experience business

150 Executive Interviewers
gather data in 70 countries in 14 languages

310,000 Universe of Experts
unique buy side contacts

Agenda



Study Overview



Study Findings



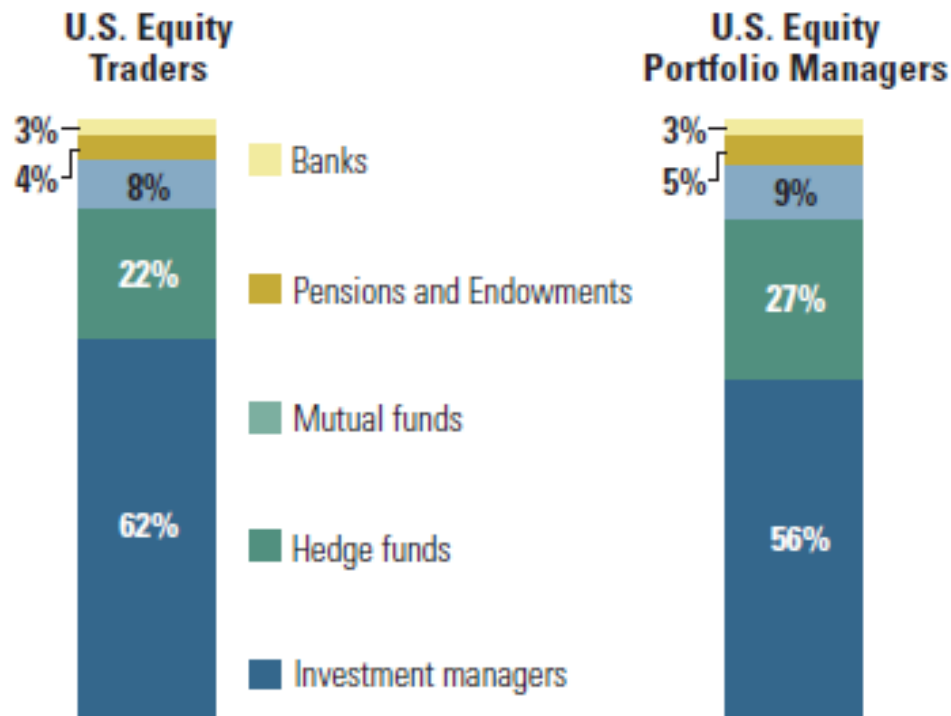
Questions



Study Overview

Study Overview

Greenwich Associates conducted in-person and telephone interviews regarding U.S. equity investing with 243 U.S. equity portfolio managers and 321 U.S. equity traders between November 2014 and February 2015. Respondents answered a series of qualitative and quantitative questions about the brokers they use and their businesses in the U.S. cash equity space.





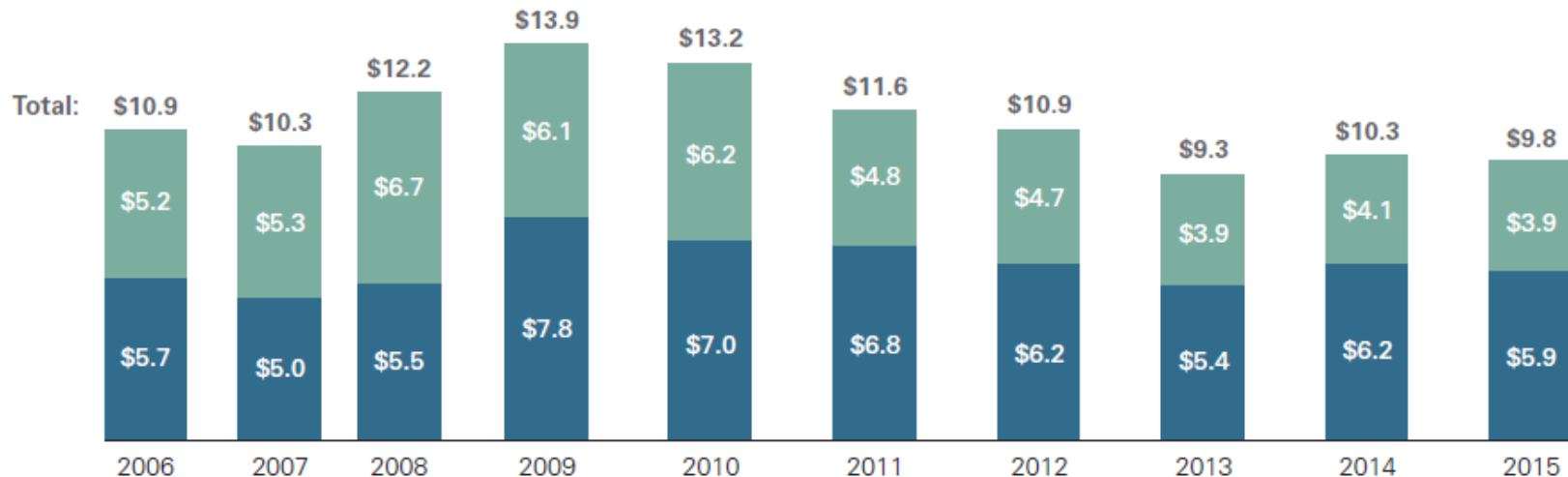
Study Findings

U.S. Cash Commission Pool Stagnant

Sixty percent of cash commissions are allocated as compensation for research

Longer-Term U.S. Equities Commission Trend

(in billions)



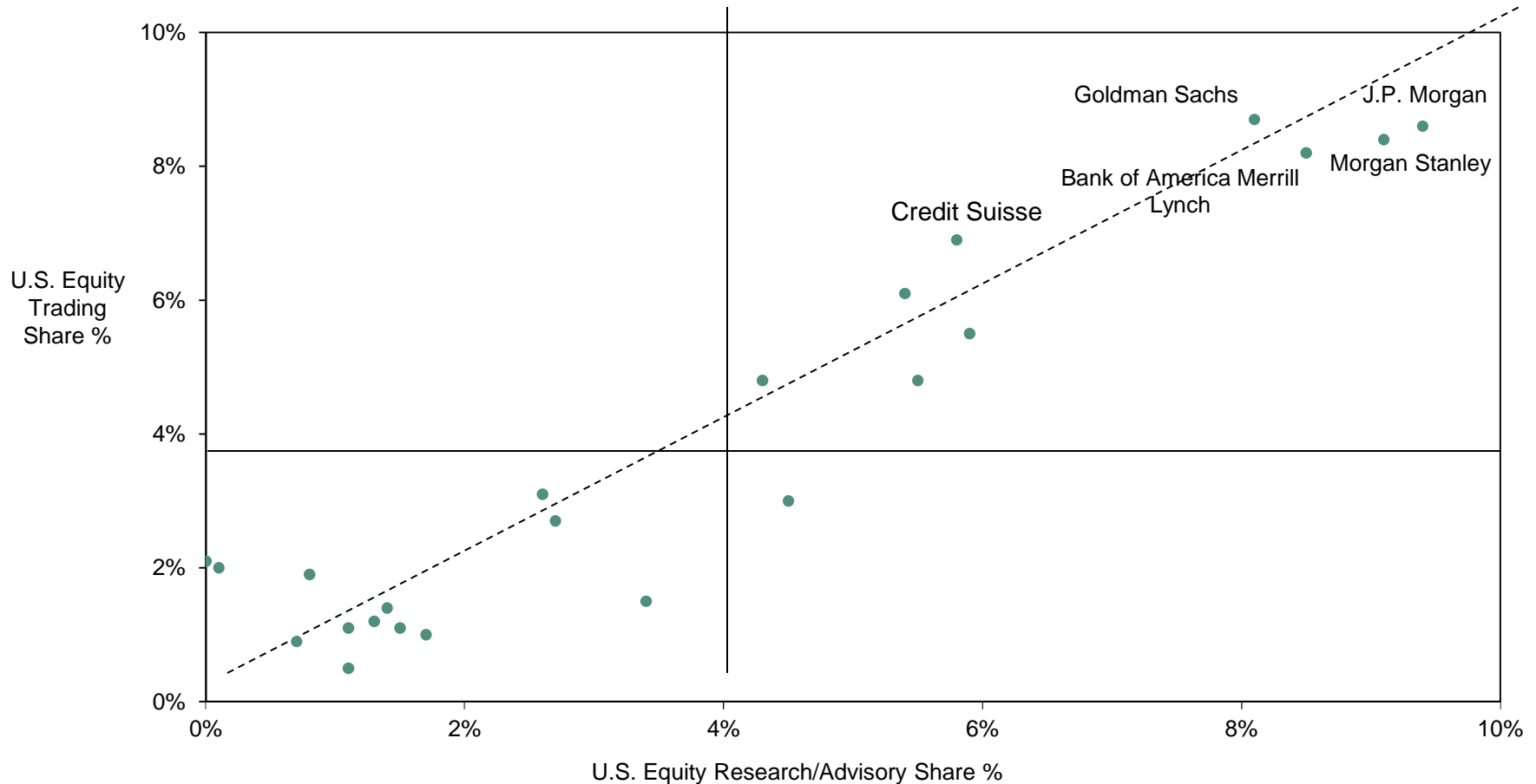
■ Sales trading and agency execution, capital commitment
■ Research/Advisory, sales and corporate access

Note: Based on the average reported spend of \$16.6 million per account, the total estimated commissions for the Greenwich Associates universe is \$9.8 billion for the 12 months ended Q1 2015, when projected to trading universe of 585 accounts in the 2015 study.

Source: Greenwich Associates 2015 U.S. Equity Investors Research Study

Research Anchors Trading

Particularly among bulge bracket, trading share diverges only modestly from research share

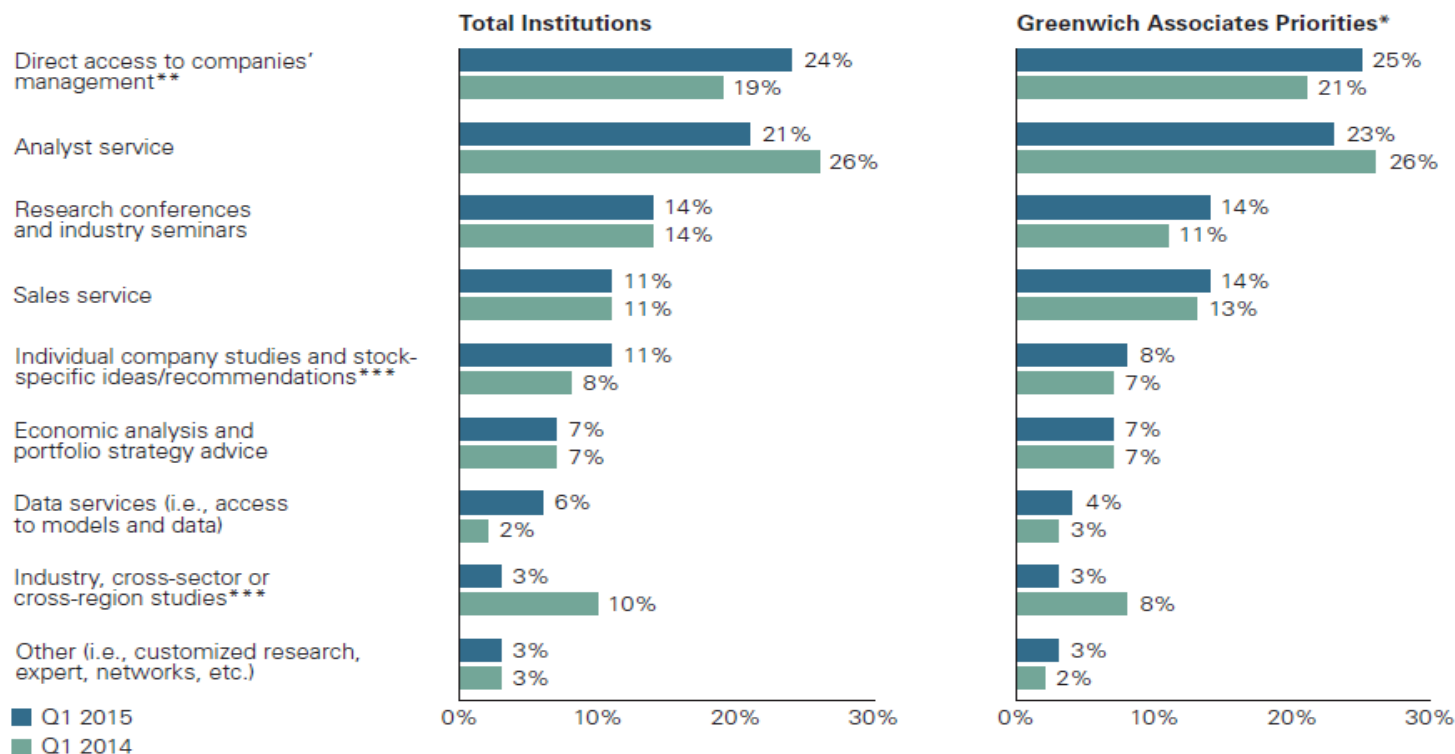


Note: Source: Greenwich Associates 2015 North American Equity Investors' Study. Broker share is weighted by commission size of institution. Trading share and Research/Advisory share show each broker's share of total commissions including commissions and is based on buy-side traders' allocation of spend. See Research Background for explanation of weighting methodology.

Service Outweighs Product

Research allocations are driven largely by “access”

Proportion of Research/Advisory Allocation for Research, Sales and Corporate Access

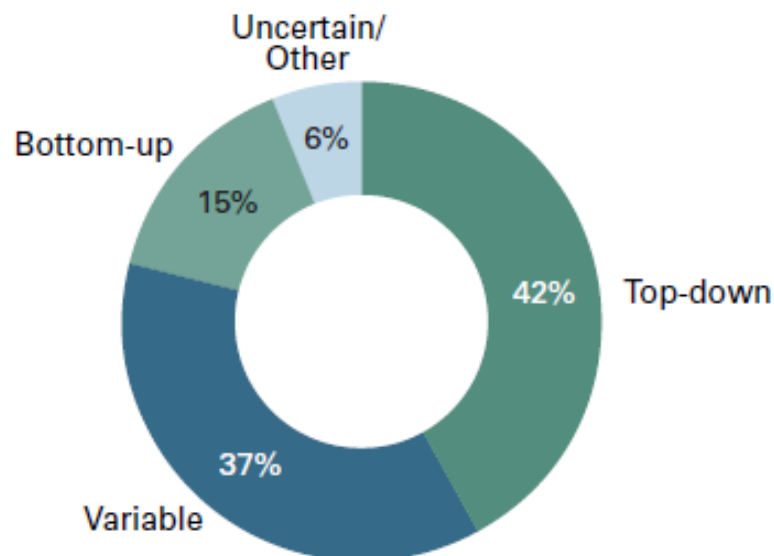


Note: Based on 148 respondents in 2014 and 169 in 2015. *Greenwich Associates Priorities are defined as institutions in Tiers 1–4 of seven. Tiers are determined by institutional commission volume, with Tier 1 containing the largest and Tier 7 the smallest commission payers. **Direct corporate access includes non-deal roadshows, one-on-one company meetings and conference calls need. *** In 2015, combined company studies and stock-specific ideas and created a new industry/cross-sector/cross-region category. Source: Greenwich Associates 2015 U.S. Equity Investors Study

“Top-down” far Exceeds “Bottom-up”

Research budgets principally set with reference to prior period spend

Method of Determining Overall Research Budget



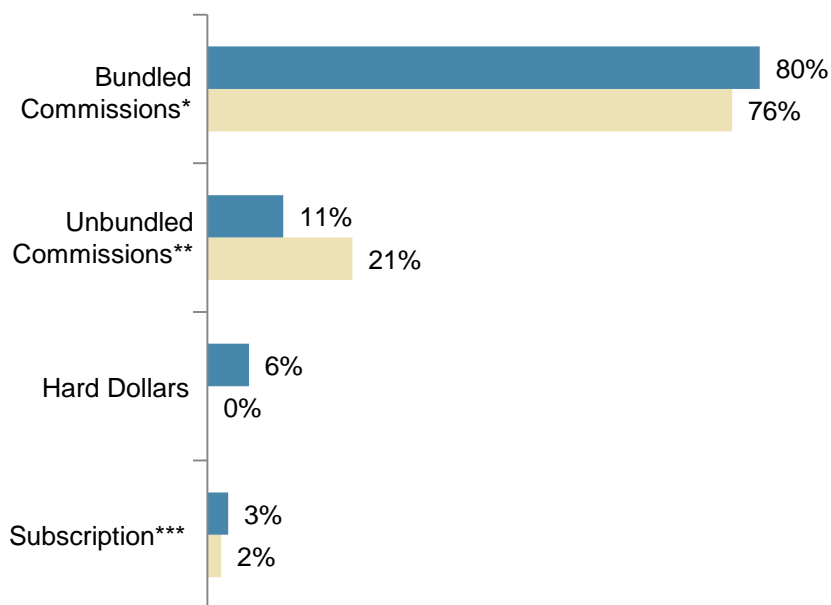
Note: Based on 84 respondents.

Source: Greenwich Associates 2015 Research Budgeting and Broker Vote Study

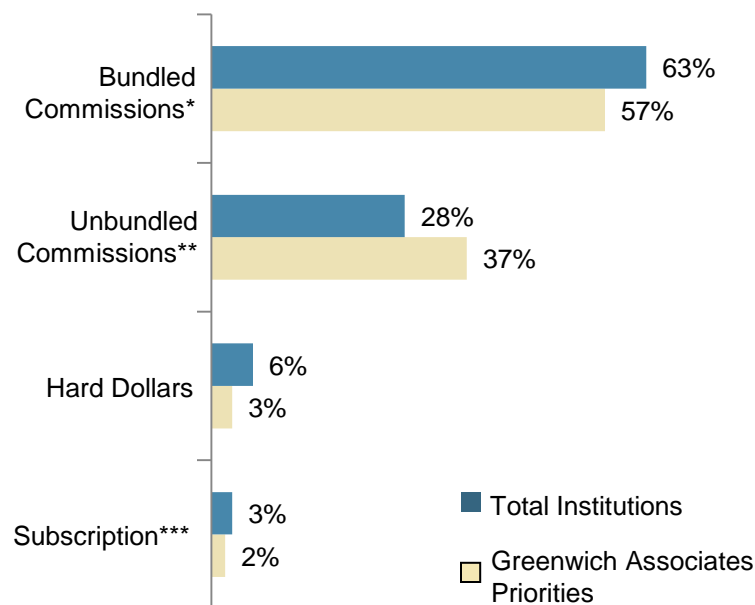
It's a Bundled World, But for How Long?

Research payments, particularly to bulge bracket firms, are primarily via “bundled” commissions

Method of Research Payment to Bulge-Bracket Broker-Dealers



Method of Research Payment to Mid-Sized/Smaller, Regional and Sector Specialist Broker-Dealers



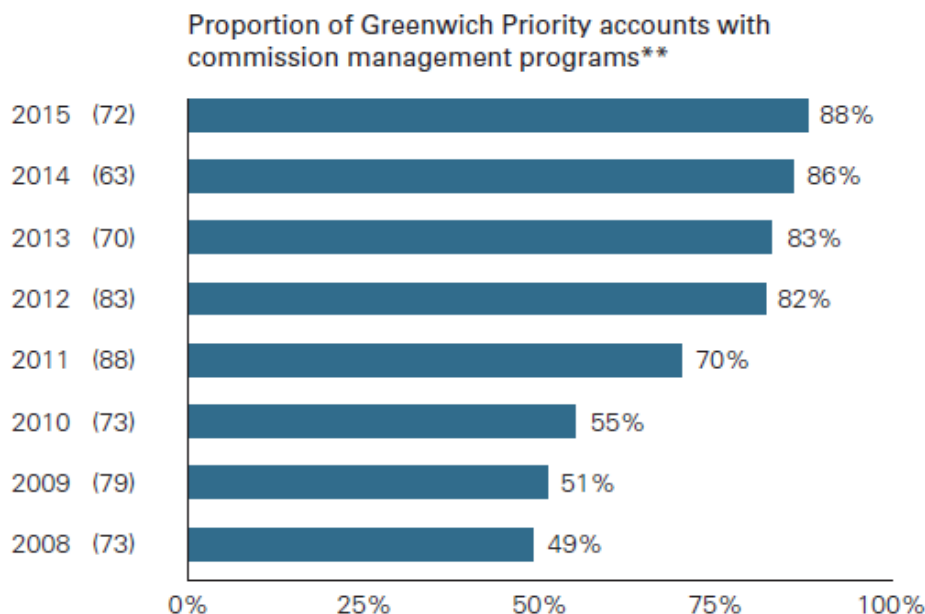
Source: Research Budgeting and Broker Vote Study 2015. Based on 83 respondents, including 27 Greenwich Associates Priorities, defined as institutions in Tiers 1-4 of seven. Tiers are determined by institutional commission volume, with Tier 1 containing the largest and Tier 7 the smallest commission payers. *Votes are generated and the results are provided to the trading desk to implement as an explicit commission. **Votes are generated and the results are not provided to the trading desk; payments are made from CSA/CCAs. ***Pre-contracted arrangement whereby the costs for research are paid via commissions, but are pre-determined, i.e., are not variable with “votes.”

Commission Management Programs Ubiquitous

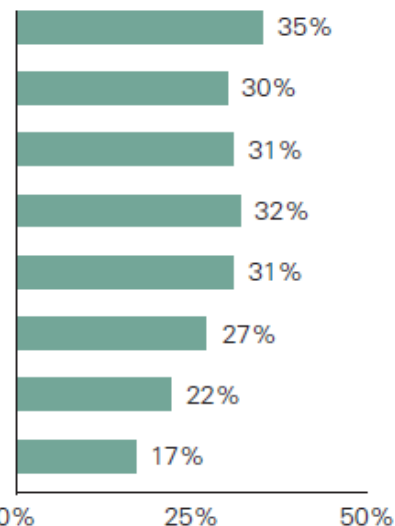
Larger institutions use commission Management programs to reconcile best execution and rewarding brokers for research

Commission Management Use

Greenwich Associates Priorities*



Among current commission management program users, U.S. equity commissions paid via commission management programs

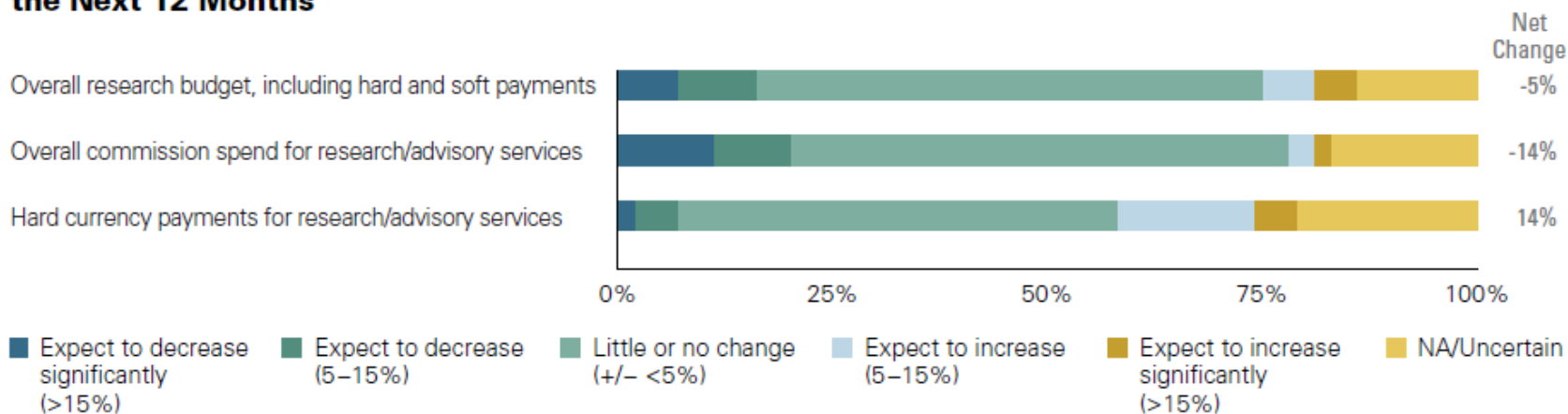


Note: Numbers in parentheses represent total respondents. *Greenwich Associates Priorities are defined as institutions in Tiers 1-4 of seven. Tiers are determined by institutional commission volume, with Tier 1 containing the largest and Tier 7 the smallest commission payers. **Commission Management Programs provide commission management capabilities under terms of Section 28(e). Source: Greenwich Associates 2015 U.S. Equity Investors Research Study

Calm Before the Storm?

U.S. institutions expect little change in research budgets, but with a tilt more towards hard payments and in-house research

Influence of Current European Regulatory Proposals on Research Budgets and Payment Method Over the Next 12 Months



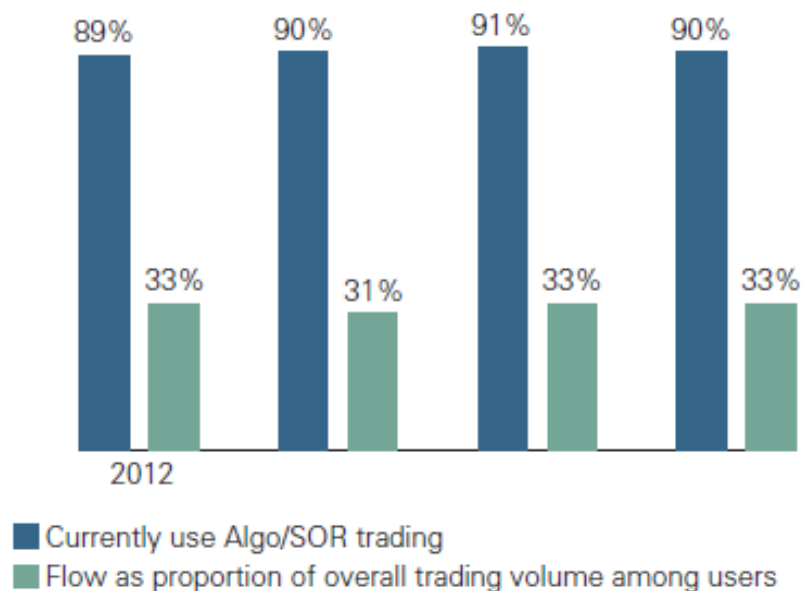
Note: Based on 85 respondents. Net change represents the proportion expecting an increase or significant increase less those expecting a decrease or significant decrease.
Source: Greenwich Associates 2015 Research Budgeting and Broker Vote Study

E-Trading Flat Lined

E-Trading adaptation is pervasive, but usage has stagnated

Use of U.S. Equity Algorithmic/Smart-Order Routing Trading

Total Institutions



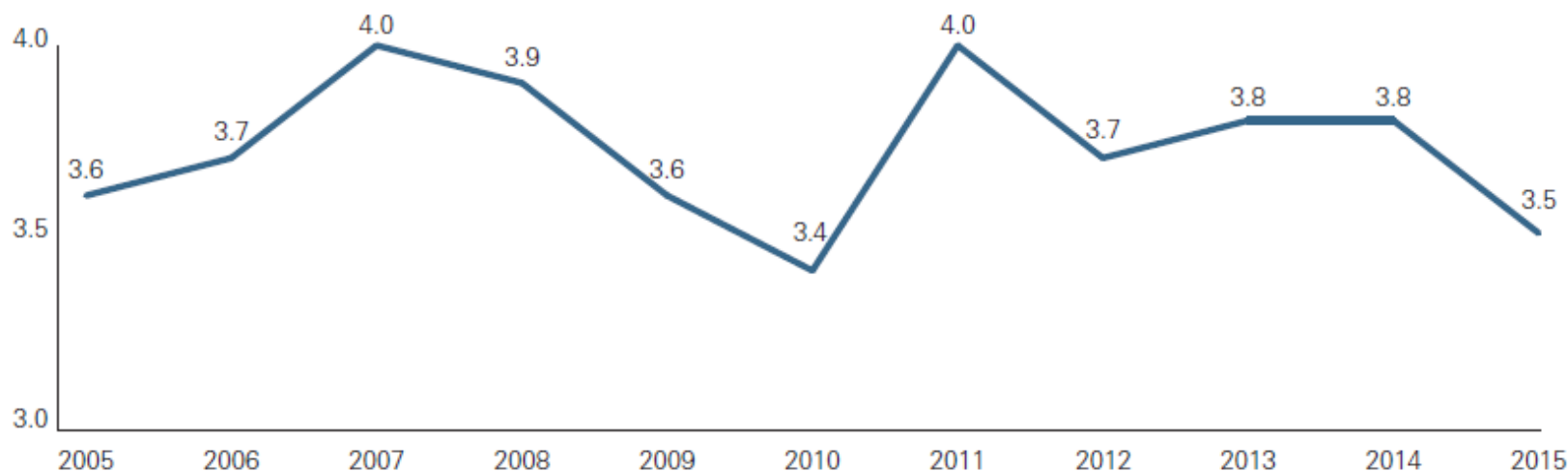
Note: Includes dark pool sourcing algos and smart-order routing. Based on 291 institutions in 2012, 284 in 2013, 303 in 2014, and 292 in 2015.

Source: Greenwich Associates 2015 U.S. Equity Investors Study

“Stationary” Desks

Number of traders per buy-side desk has been flat since 2005

Average Buy-Side Staffing Levels—Traders per Desk



Note: Based on 252 institutions in 2005, 267 in 2006, 263 in 2007, 248 in 2008, 270 in 2009, 273 in 2010, 293 in 2011, 286 in 2012, 231 in 2013, 107 in 2014, and 113 in 2015. This question was asked of a select population in 2014 and 2015.

Source: Greenwich Associates 2015 U.S. Equity Investors Study

Dizzying Change

Even experienced traders are disoriented by velocity of market transformation

Reg NMS as Catalyst
for Electronic
Marketplace

Exchange/ECN
Consolidation &
Demutualization

Technology Issues & HFT
Capture Headlines

Regulations

Year	Event
2005	Reg NMS
2008	Sept 19th Short Sell Ban
2010	Uptick Rule
2010	Sponsored Access Rule
2011	Large Trader ID
2012	Limit Up Limit Down (LULD)
2012	Market Wide Circuit Breakers
2013	JOBS Act(Tick Size Trial)
2013	Consolidated Audit Trail
2013	FINRA Dark Pool Disclosures

Exchanges

Year	Event
2005	NASDAQ buys Island ECN
2005	ARCA Exchange buys PCX
2005	NYSE for profit
2005	Chicago Stock Exchange for profit
2005	NYSE merges with ARCA Exchange
2006	NYSE Group merges with Euronext
2007	Nasdaq buys BSX and PSX
2008	NYSE acquires AMEX; closes floor
2008	BATS becomes an Exchange
2010	Direct Edge becomes an Exchange
2012	ICE purchases NYSE Euronext
2014	BATS and Direct Edge exchanges merge
2014	NSX ceases operations

Market Events

Year	Event
2007	Great Quant Meltdown
2008	Credit Crisis
2010	Flash Crash
2012	BATS IPO (failed)
2012	Facebook IPO (issues)
2012	"Knight"mare
2013	Flash Freeze
2013	Hash Crash
2014	Flash Boys book released
2014	Great HFT Debate
2014	Dark Pool Investigations
2014	HFT firm Virtu files IPO
2015	NYSE 4 hour Outage
2015	Dark Pool Fines

The Paradox of Choice

More choice gives you more freedom...but only if the advantages are clear

THE JAM STUDY

A grocery store conducted 2 tasting sessions. In one session shoppers were allowed to sample 24 flavors of jams, and in the other session they were allowed to sample 6 flavors



24 Choices of Jam vs 6 Choices of Jam

Attracted **60%**
of Shoppers

Shoppers sampled **2**
flavours on average

3% of shoppers
bought jam

Attracted **40%** of
Shoppers

Shoppers sampled **2**
flavours on average

30% of shoppers
bought jam

Win, Place, or “No”

~70% of e-trading flow is concentrated at top two brokers

Concentration of Business

	Lead broker	Second broker	Other brokers
Algorithmic/Smart-order routing business ¹	46%	23%	31%
	Most important firm	2nd most important firm	Other firms
Overall equity trading business ²	17%	11%	72%

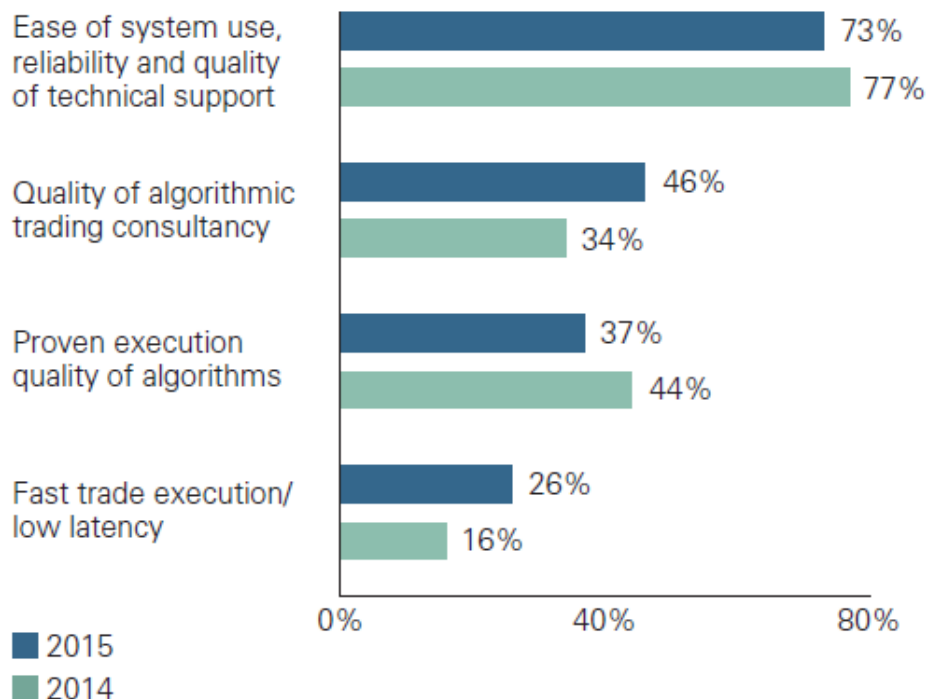
Note: ¹Based on 187 institutions in 2015. ²Based on 246 institutions in 2015.

Source: Greenwich Associates 2015 U.S. Equity Investors Study

Simple is Sticky

Buy side values simplicity, support over evidence of execution quality

Most Important Selection Criteria for Algorithmic or Smart-Order Routing Trading



Note: Based on 96 institutions in 2014 and 93 in 2015.
Source: Greenwich Associates 2015 U.S. Equity Investors Study

Additional Information or Questions?



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