Electronic Trading Systems Capture One Half of Global FX Volume

March 2007

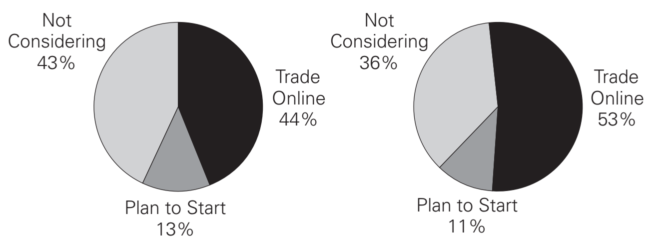
For the first time, "buy side" foreign currency traders in 2006 executed more than half of total global FX trading volume through electronic trading.

"The increase in electronic forex trading activity over the past 12 months has been nothing short of remarkable," says Greenwich Associates consultant Peter D'Amario. "In 2005, e-trading systems captured less than 30% of total reported global FX trading volumes."

Every year, Greenwich Associates interviews approximately 3,000 users of foreign exchange around the world about their trading practices; 1,600 of them are classified as "top tier" due to their size, trading volumes and overall importance in the market. Among "top tier" users, the proportion of companies and institutions using e-trading systems jumped from 44% to 53% between 2005 and 2006. At the same time, the total e-trading volume generated by research participants more than doubled from a reported level of $17 trillion to over $35 trillion in 2006.

The increasing use of electronic trading in foreign exchange is not only improving the fortunes of the many competing e-trading platforms; it is also contributing in a significant way to the meaningful growth of the global FX market (global FX trading volume increased by approximately 17% from 2005 to 2006). Electronic trading systems encourage volume growth by making currency transactions easier and cheaper, by aggregating and increasing liquidity, and by extending market access to investors that otherwise would not be able to participate — especially retail investors.

Electronic Trading Activity
Foreign Exchange Users — Globally



2005 Total Electronic Volume = $16.9 Trillion

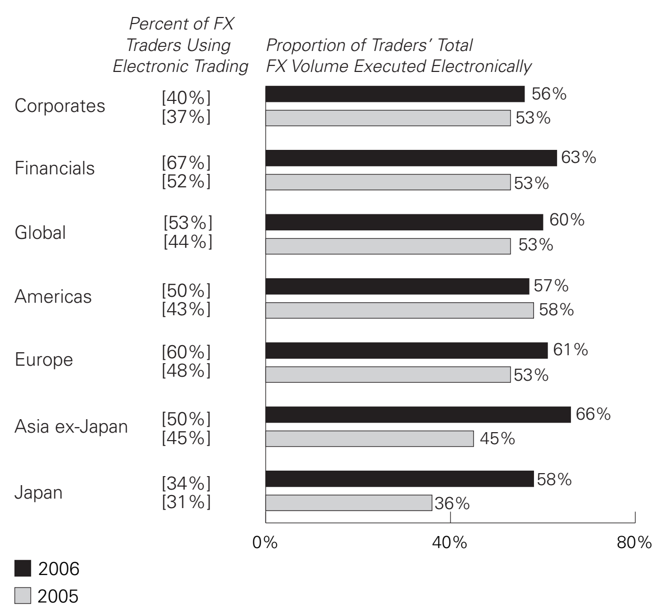
2006 Total Electronic Volume = $35.5 Trillion

Note: Based on interviews with 1,549 institutions in 2005 and 1,663 in 2006.

In last year's report on the foreign exchange market, Greenwich Associates predicted that these benefits would entice e-trading hold outs to experiment with electronic trading. The prediction held true: As a growing number of FX users moved to electronic trading, the proportion stating that they have no plans to ever trade FX electronically dropped to 36% in 2006 from 43% the prior year. "These results suggest an important shift in attitudes toward e-trading," says Greenwich Associates consultant Frank Feenstra. "For several years, the FX market was essentially evenly split between e-traders and abstainers. This year it seems the tide has turned — users that in the past have spurned e-trading systems are becoming converts."

The only group of hard-core holdouts seems to be among some of the corporates, many of which might feel they do not trade frequently enough, or in sufficient volume, to warrant the investment of money or time required to get up and running on an e-trading platform. The proportion of corporations trading FX electronically did increase on a global basis from 37% in 2005 to 40% in

Electronic Trading Activity in Foreign Exchange
By Type and Region



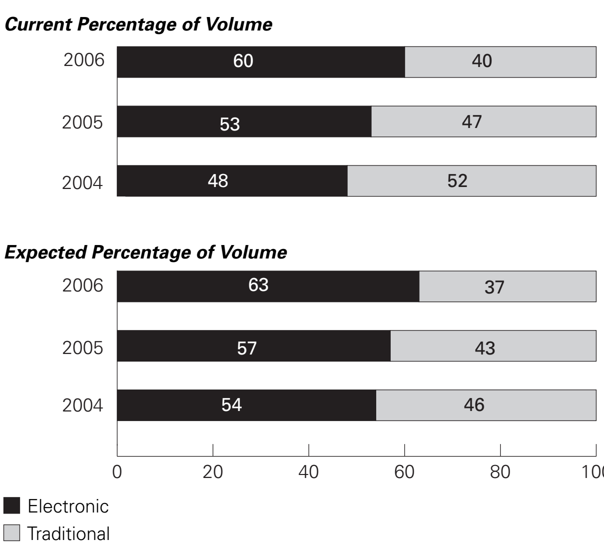
Note: Based on interviews with 1,549 institutions in 2005 and 1,663 in 2006. Numbers in brackets indicates percent of institutions trading electronically. Bar graph represents proportion of FX volume executed electronically by e-trading users.

2006, but a full 47% of corporates still say they have no intention of trading currency electronically at all, as do more than 60% of all FX users with less than $1 billion in annual trading volume. At the other end of the adoption spectrum, the proportion of banks trading FX electronically jumped to 94% in 2006 from 72% in 2005, and the share of banks saying they never intend to use e-trading systems withered to just 4%.

"These results illustrate the strong correlation between increased use of e-trading systems and increases in overall FX trading activity," says Greenwich Associates consultant Woody Canaday. "Among corporates — which experienced the slowest e-trading growth last year — total FX trading volumes were essentially flat from 2005 to 2006. Meanwhile, e-trading use among financials increased to 67% in 2006 from 52% in 2005 and total FX trading volume in this group rose more than 20%."

Even as late comers embrace electronic trading, earlier adopters are ramping up their activity significantly. In 2005, users of e-trading systems told Greenwich Associates they executed 53% of their total foreign exchange trading volume through e-trading systems. In 2006, that share jumped to 60%, and e-traders say they expect to be conducting 63% of their total FX trading business electronically in 12 months' time. "Since new e-traders generally start out by directing relatively small proportions of their total business to the systems, you would expect those proportions to fall, or at least to rise at a slower rate," says Greenwich Associates consultant Giovanni Carriere. "The increases shown in our data suggest that more experienced e-traders are executing considerably more than 60% of their total volume through electronic systems.

Current and Expected FX Electronic Trading Volume Globally



Note: Based on responses from 628 institutions trading electronically in 2004, 679 in 2005, and 877 in 2006.

Electronic Systems Bring Retail to the FX Party

Trade flows generated by retail investors are making up a growing share of the global FX market — a phenomenon made possible by the newly pervasive reach of electronic trading platforms.

Greenwich Associates research suggests that retail trade volumes appear to be growing steadily, as indicated by the growth in volumes of retail aggregators and other financial institutions. Retail trading flows to the global market through "retail aggregators" — companies that extend market access to retail traders — and bank retail networks. Both businesses reach their retail customers and transact their trades primarily through electronic systems.

As Peter D'Amario explains: "One of the reasons that FX trading volumes have grown so rapidly and so consistently over the past several years is that new technology has allowed an entirely new customer base to enter the market — for better or for worse."

Among bank users of these systems, e-trading accounts for 68% of total FX volume — up from just 46% in 2005."

E-trading systems have achieved their highest levels of penetration in Europe, where 60% of FX users now trade electronically. Half of FX users in North America trade electronically, but that average number spans a deep divide between the practices of U.S. and Canadian users. Sixty-one percent of FX users in the United States trade currency electronically, as compared with only 22% of those in Canada. Trailing North America in e-trading adoption is Asia, where only 41% of FX users trade electronically. Here too, however, the regional average encompasses wide variation. In Japan, for example, only about a third of FX users trade electronically. In the rest of Asia, that share is 50%, and the data suggest that this gap will only widen in coming years. "In Japan, 60% of FX users say they do not expect to adopt e-trading for foreign exchange — a proportion that remained essentially unchanged from 2005 to 2006," says Greenwich Associates consultant Tim Sangston. "In the rest of Asia, the proportion of FX users telling Greenwich Associates that they have no plans to trade currencies electronically declined to 41% in 2006 from 47% in 2005."

Single-Bank vs. Multi-Bank Systems

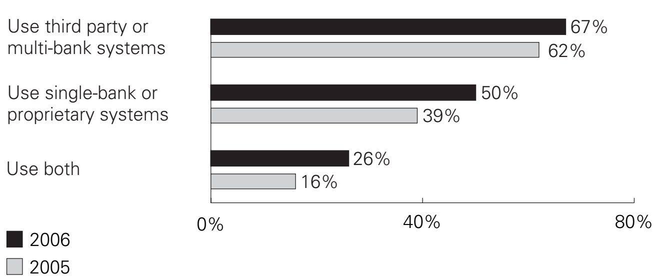
While third-party multi-bank systems continue to attract the majority of eFX customers, new e-traders are also being drawn to single-bank, proprietary platforms.

More than two-thirds of global eFX users say they trade on third-party or multi-bank forex systems, and roughly half say they trade on single-bank or proprietary systems. "In keeping with the rapid adoption of e-trading in general, the share of global eFX users saying they trade on both third-party and single-bank systems increased to more than 25% in 2006 from 16% in 2005," says Greenwich Associates consultant Andy Awad.

The Greenwich Associates data show that while customers turn to e-trading systems primarily for execution, they are also taking advantage of other useful tools provided by these platforms. Nearly 90% of study participants say they use multi-bank platforms or ECNs to execute spot, forward or FX swap transactions, as do almost 85% of single-bank system users. In addition, nearly two-thirds of respondents that use multi-dealer platforms or ECNs say they use them to assess market prices before executing a trade, 43% use them for trade confirmation, more than a third use them to gauge market liquidity, and 33% use them to prove best execution (which is reported as a valuable feature especially by fund managers).

Users of single-bank platforms indicate a distinctly different hierarchy of use: a quarter turn to these platforms for execution of vanilla options trades, 40% use the systems for trade confirmation and more than a quarter use them for trade clearance and settlement.

Electronic Trading: Type of System Used
Foreign Exchange Users



Note: Based on interviews with 877 institutions in 2006 and 679 in 2005.

"Despite the increase in the use of single-bank platforms, we believe that third-party multi-dealer systems will continue to dominate trade flows," says Woody Canaday. "When we ask FX users to identify the channels that they expect to become more important avenues for accessing liquidity, more than 20% cite multi-dealer platforms, while just over 10% mention dealer proprietary e-trading platforms."

In addition, several new liquidity channels are generating excitement in global foreign exchange markets. As Giovanni Carriere concludes: "Although options like algorithmic trading and exchange trading currently represent nascent technologies used by only the largest FX investors (currently only 4% of overall users), these and other innovations have the potential to alter the competitive landscape of FX significantly in coming years."

Greenwich Associates consultants Peter D'Amario, Woody Canaday, Frank Feenstra, Tim Sangston, Robert Statius-Muller, Giovanni Carriere, and Andy Awad specialize in foreign exchange.

Methodology

Greenwich Associates conducted in-person interviews with approximately 3,000 users of foreign exchange services at large corporations and financial institutions on market trends and their relationships with their dealers. Interviews were conducted in North America, Latin America, Europe, Asia, and Japan between September and November, 2006.

Greenwich Research on the Internet

The data and methodology related to this report are available on our exclusive Research Partner website: *www.greenwich.com*. The highlights of the market intelligence available on the site include:

- **Compensation** — tabular information and a query tool to benchmark your compensation against that of your peers.
- **Rankings** — qualitative assessments of the top providers of institutional financial services in each market.
- **White Papers** — topical content based on our comprehensive research across a range of markets
- **Market Trend Data** — extensive market trend information presented in tabular form.

To access the website, login using the username and password provided, or contact us for further information.

GREENWICH REPORT — CONFIDENTIAL

GREENWICH ASSOCIATES

8 Greenwich Office Park Greenwich CT 06831-5195 USA

Tel: 203 625 5038/800 704 1027 Fax: 203 625 5126 email: contactus@greenwich.com www.greenwich.com