FOREIGN EXCHANGE

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Innovation drives trading surge

The rising importance of technology favours the big banks, says **Jennifer Hughes**

Among the 225,000-plus iPhone applications in the Apple store sits one called Merlin, an app named after Credit Suisse's online trading platform. Clients armed with a password can see, and deal, the bank's live options prices from their iPhone.

"Its simple to use," says Martin Wiedmann, head of global foreign exchange sales and distribution at Credit Suisse.

Foreign exchange, or FX, came out of the credit crisis well, but the point to take from Credit Suisse's iPhone app and rival bank offerings is that the market is not resting on its laurels and instead is developing new technology and ways of trading.

The market's momentum was also captured in a report from the Bank for International Settlements this month. The triennial market survey is the industry benchmark and showed average daily trading volumes in FX have reached $4,000bn a day – a new record and up 20 per cent on the last survey in 2007. Market insiders say the BIS numbers probably do not reflect the actual market peak. The BIS collects data in April and volumes spiked higher in early May as the eurozone sovereign debt crisis reached its height. With short-term interest rates around the world held at extremely low levels, many investors have turned to FX.

"It used to be that FX was relatively stable and the volatility took place in [interest] rates. Now with quantitative easing, rates are basically zero, and when you take out that volatility, it goes elsewhere – and one of those places is FX," says Alan Bozian, chief executive of CLS Bank, the FX settlement system.

Other themes were evident in the BIS survey.

In spite of the borderless trading that characterises the FX world, London, the traditional centre of the market, actually increased its dominance,

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taking 37 per cent and seeing off threats from New York (17.9 per cent) and a resurgent Tokyo, which pipped Switzerland to third place with 6.2 per cent.

A lot of the rise in trading came in the spot market, where a near 50 per cent rise took volumes to $1,500bn a day. While some of the biggest emerging-market economies raised market share, the bulk of the rise came in the so-called majors – trading in dollar, euro and yen and to some degree, sterling and the Swiss franc.

This probably means the rise is in no small part the result of algorithmic, or "algo," trading – the use of fast-moving computer models. These hit the headlines in the equity markets following their suspected involvement in the May 6 "flash crash" in the US markets.

Could a similar event disrupt FX? That could be more serious because of the market's role as part of the global payments system, giving it a day-to-day systemic importance no other asset class has.

Market observers think a "flash crash" unlikely. They point out that FX trading is concentrated in far fewer currency pairs than there are stocks in any major market and, as a result, each pair is watched by more people than virtually any single stock.

"FX is emerging as an asset class where people can and do speculate, but mostly people are still trading because they need to buy or sell that particular currency," says Giles Nelson, deputy chief technology officer of Progress Software, which develops algo-related products.

"The FX marketplace still has banks at its centre. I don't believe there is the same potential for high-frequency traders to influence prices as there might be elsewhere."

The vast sums traded in FX have indeed given the banks a central role they long ago gave up in some other asset classes. Currently it is one they welcome as FX has become increasingly popular with senior bank executives keen to develop revenues that do not rely on increasingly expensive bank capital.

This does not, however, preclude technological investment. The top FX banks have warned their would-be rivals to be ready for a long, expensive, IT-driven slog if they want to compete.

Kevin Rodgers, global head of FX derivatives at Deutsche Bank, the biggest FX bank by trading volumes, says: "The question is, do they have the strategic patience to grind out what they need to build in the face of the incumbents who are continuing to forge ahead?"

For Mr Rodgers, this is work on developing electronic options trading.

"The options market is light years behind spot in terms of e-trading since anything to do with derivatives is several orders of magnitude more complicated," he says. "But that's where the market is going and as more and more volume gets transacted then that prompts banks, and the algo shops, to work on the challenges."

Mr Rodgers reckons about 30 per cent of the bank's FX derivatives volumes comes from the bank's Autobahn platform – and that has tripled as a percentage in the past three years.

"More and more of our volume is electronic," he adds. "Where I'm spending resources and IT is on our e-commerce platform."

That goes for all the big banks.

"Star traders are great but they aren't scaleable," says Frederic Boillereau, global head of FX and metals at HSBC. "FX today is mainly about e-distribution, e-risk, and managing the flows. We're always thinking about how to do that business better."

Just down the road from HSBC in Canary Wharf sits Barclays Capital, which has invested over a number of years to build itself into a top-three force.

> 'The challenge is we have to think a little like a content provider online – it's not just about trading'

"What I work on and worry about is making sure that I'm getting the electronic platform married up with high-quality content and other value-adds," says Ivan Ritossa, who oversees FX and e-commerce at the bank. "Now the challenge is we have to think a little like a content provider online – it's not just about trading but what else you can offer, too."

The process has been helped by the increased importance of FX to bank profits and also by other, longer-term trends, such as the increasing correlations between asset classes.

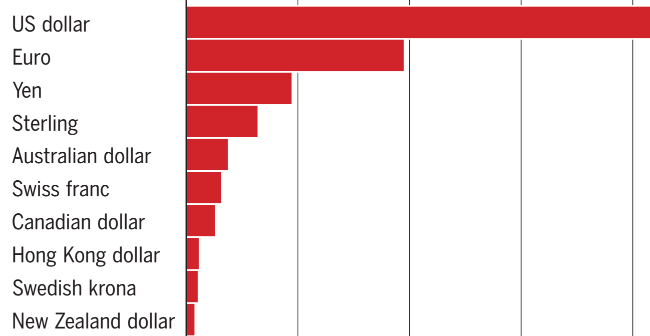
Jeff Feig, global head of G10 FX at Citigroup, says that has meant growing links between the asset classes within the bank.

"When we first merged with Travellers [in 1998], the equity traders and the fixed-income guys had no interest in sitting down and talking to us. Today there's interest from every market and trading desk. The correlations and interactions have increased massively," he says.

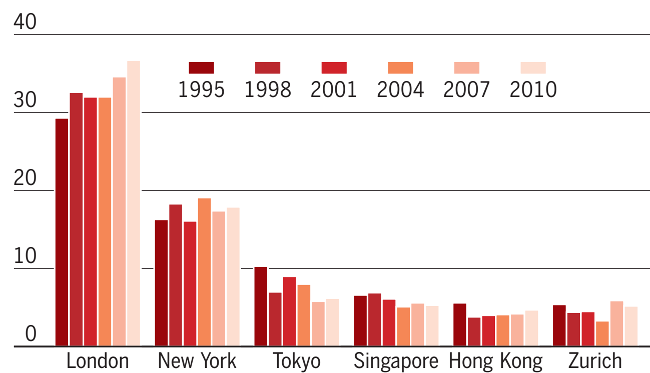
Combine greater interest from other asset classes with the development of new technology, such as Credit Suisse's iPhone app, and you have a market very confident about its future.

FX trading

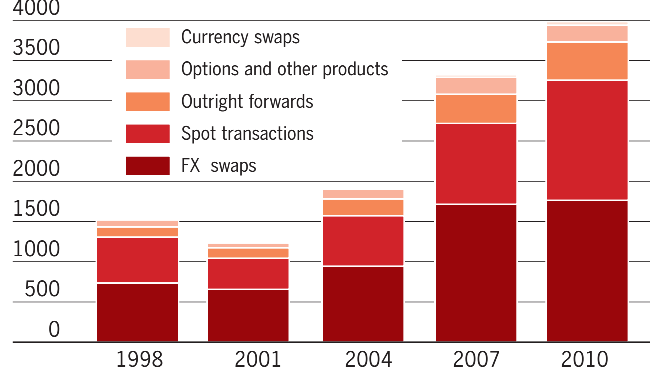
Most traded currencies
% of trades in which each currency represented one side of the deal



London grows as leading currency trading centre
% of average daily trading



FX turnover jumps 20% over last three years
Foreign exchange instruments, average daily turnover ($bn)



Source: BIS

Emerging markets are the future

Liquidity

Jennifer Hughes unravels the growth of a trend in currency trading

Toeing the line: euro/dollar deals are still the most popular but some emerging market currencies have had greater trading volumes Dreamstime

The Zambian kwacha is not a currency with which many people, even foreign exchange experts, are familiar.

Barclays Capital, however, is doing its best to change this; the bank now offers the currency through its electronic trading platform with continuous prices available for trades up to $1m. Above that, clients can request a price and the bank responds.

"That's a quantum leap in accessibility," says Michael Bagguley, head of FX trading at the bank.

Emerging-market currencies are always the next big thing in FX, in spite of their rollercoaster reputation – where "hot money" investors pile in then scramble for the exits in a mass panic when the going gets tough. The more famous examples include the Asian currency crises of 1997 and 1998, and Brazil in 2002, when investor concerns over the incoming government of Luiz Inácio Lula da Silva pushed the currency from R2.283 to the dollar to R3.987.

But the argument goes that since then, given increasing trade globalisation and gradual economic liberalisation, emerging-market FX must be the next growth area.

Yet so far, the data show little of the so-called "EM" currencies making great strides.

In September the Bank for International Settlements' triennial survey of the FX market did show a slight increase in trading volumes. But, for the top 23 EM currencies combined, that amounted to them collectively being involved in 14 per cent of currency trades, from 12.3 per cent in 2007. By contrast, the US dollar is involved in 85 per cent of all currency trades and the euro is in nearly 40 per cent – up from 37 per cent when the BIS last surveyed the market.

There were successes for individual currencies within that, however. Trading in the South Korean won, one of the biggest EM currencies, rose by 25 per cent and activity in the Brazilian real jumped 75 per cent in three years. Dealing in the Philippine and Chilean pesos, and the Malaysian ringgit, all doubled.

Bankers say liquidity is definitely improving. "There are differences in liquidity at different times for sure, but you get that with every currency pair, including euro/dollar," says Vincent Craignou, global head of FX options at HSBC. "What you have now, that didn't exist even two or three years ago, is that I can get good prices in the [Brazilian] real in Hong Kong or London – I don't have to wait for São Paulo to get in."

Mr Craignou differentiates between the bigger EM currencies, such as the won and the real, and the smaller, such as the kwacha.

Liquidity is also subject to the current markets theme. Recently, the larger emerging markets have benefited from the widespread bet that economic growth will be far better almost anywhere outside the developed, western nations. Asian currencies have also gained from gambles on the eventual revaluation of the renminbi and the expectation that they will virtually match any rise in China's currency.

"In EM, it tends to be on a story-by-story basis so it also depends on whether there is a good story in that currency as to how liquid it is," says Kevin Rodgers, global head of FX derivatives at Deutsche Bank.

April and May this year are an example of this. The eurozone soverign debt crisis was reaching its peak, sending trading in the euro soaring and overall currency trading to peaks that, by early May, outstripped those in the data collected by the BIS in April.

Yet according to CLS Bank, the FX settlement system, there was no corresponding spike in the volumes in the few emerging currencies it deals with, such as the Mexican peso and the South African rand.

For the banks and for EBS, the interdealer platform that trades the bulk of euro/dollar, the most popular currency pair, the general EM "story" is worth backing.

"We're seeing significant growth and we're spending a lot of money and resources pursuing these," says David Rutter, chief executive of Icap Electronic Broking, which runs EBS.

The underlying theory is a virtuous circle where rising global trade and increased investment interest in emerging markets will benefit the local economies. As these grow, their markets will liberalise – including their exchange controls, of which China's tight grip on the renminbi is only one of the more extreme examples.

This in turn will boost trading volumes, which will increase liquidity, attracting players such as high-frequency, algorithmic traders (algos), adding liquidity.

"Once currencies freely float, you'll see a lot of increase in volume," says Mr Rutter. "Algos play in the deepest, most liquid pools and that's not EM yet – but that will change."

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The genie has escaped from the bottle

The right number: equities rose and the yen fell against the dollar after the Ministry of Finance intervened AFP

Intervention

Japan's move to stem a rise in the yen could be the start of a trend, says **Peter Garnham**

The spectre of intervention is hanging over the world's currency markets after Japan ended weeks of speculation and stepped to stem yen strength for the first time since 2004.

The yen tumbled more than 3 per cent against the dollar on September 15 after hitting a high of Y82.88 as Japan's Ministry of Finance confirmed that it had intervened in the market, saying the yen's gains were "a problem that could not be overlooked".

Traders estimated that the Bank of Japan sold about Y2,000bn in an effort to rein in gains in its currency, which has been boosted by haven demand amid worries over the health of the global economy. Tokyo said it tried and failed to get the US and the eurozone on its side so was forced to intervene unilaterally.

Geoffrey Yu, currency strategist at UBS, says many central bankers across the globe must now be thinking that if Japan can do it without the US commenting, why should their economies bear the brunt of global rebalancing?

"We have argued that increased intervention will be one of the major trends over the coming decade, given increased currency volatility since 2007," says Mr Yu.

"As Japan moves to stem yen gains, the beggar-thy-neighbour policies which many have feared since the great recession began are a step closer to the norm."

Signs of concern over bearing the brunt of dollar weakness have not been confined to Japan, as speculation mounts that the US Federal Reserve will announce an extension to its quantitative easing programme – an event that is likely to trigger further losses in the US currency.

Officials in Singapore, Brazil, New Zealand, Taiwan and Colombia have all warned about the strength of their currencies in recent weeks.

Meanwhile China still manages the level of the renminbi despite criticism from the US and the eurozone that it is keeping its currency at artificially low levels, while other Asian central banks have been suspected of intervening in the market to stem gains in their currencies.

But the move from Tokyo has attracted particular attention as, apart from the Swiss National Bank, which intervened to stem appreciation as part of its quantitative easing programme from March 2009 to June 2010, it is the only leading central bank to target the exchange rate explicitly in the wake of the financial crisis.

Steve Barrow, strategist at Standard Bank, warns of tensions between members of the Group of Seven industrialised nations. "Japan has probably stirred a bit of a hornets' nest with go-it-alone intervention," he says.

Jean-Claude Juncker, head of the 16-member eurozone finance ministers group, expressed displeasure about Japan's decision, saying: "Unilateral actions are not an appropriate way to deal with global imbalances."

Mr Barrow says Mr Juncker wants a fight against the common enemy: China. Tim Geithner, US Treasury Secretary, also wanted to avoid currency intervention to persuade China that floating currencies are the best option.

"This message has rather been undermined by Japan's intervention," says Mr Barrow.

"But the irony is that if G7 policymakers raise currency tensions too much with Asia, the yen could come under even greater pressure to appreciate."

Philip Poole, global head of macro and investment strategy at HSBC, says the Bank of Japan is trying to break an appreciation trend in the yen that was threatening to push it to an all-time high of about Y80 to the dollar. But he doubts whether unilateral intervention can be successful. He says investors' appetite for risk is likely to shape the path of the yen. In an environment of global risk aversion, Japanese investors tend to sell higher-yielding foreign financial assets and remit the funds back to Japan and so into the yen.

The unwinding of such carry trades has been a factor behind the recent strength of the yen, with momentum investors exacerbating those trends. When risk appetite increases, the opposite should happen, with investors selling the yen and buying higher-yielding currencies.

"While the BoJ's intervention has hurt momentum investors that had positioned for yen strength, much of the answer regarding the ultimate success or failure of this policy is likely to relate to whether risk appetite improves," says Mr Poole.

"If it does, it should help take the upward pressure off the yen."

All eyes turn to China's foreign money mountain

Reserves

Beijing's policies could spark a new dollar dive, says **Peter Garnham**

Central banks' actions on the world's currency markets have been one of the main driving forces behind exchange rate movements in recent years. And there are signs that China may be about to prompt a renewed bout of dollar weakness.

Asian countries, most notably China, built up massive reserves as they intervened in the market to keep a lid on their currencies' strength against the dollar in a bid to support their export sectors.

Indeed, global foreign exchange reserves have more than quadrupled since the start of 2002, from just under $2,000bn to $8,400bn.

China is by far the largest holder, with stockpiles of $2,454bn at the end of June – almost 30 per cent of the global total. So what China does with its reserve matters for the wider currency market.

Simon Derrick, global head of foreign exchange strategy at Bank of New York Mellon, points out that Chinese currency and reserve management policies have helped determine the direction of many other currencies over the past decade.

"We suspect it will be this topic that will really determine how the mainstream currency markets perform throughout the remainder of the year," he says.

In particular, it is the extent to which China diversifies its vast holdings away from the dollar that will have a large bearing on the fate of the US currency.

Although, the exact composition of its currency reserves is a state secret, China is thought to hold about 65 per cent of its stockpiles in dollars, and 25 per cent in euros.

There has been speculation that China is also accumulating the currencies of other emerging markets in Asia, although the amounts of its purchases so far are thought to be relatively small.

Ahead of the financial crisis, it was the diversification of Asian central banks away from the dollar that was a major contributor to downward pressure on the US currency, helping to push it towards a record low of about $1.60 to the euro in July 2008.

Fears over the global economy in the wake of the financial crisis have, however, driven demand for the dollar as a safe haven.

But there are signs that the pattern of dollar weakness seen ahead of the collapse of Lehman Brothers has started to re-emerge in recent months.

Amid heightened trade friction between the US and China over the level of the renminbi, there have been increasing signs that China is concerned over its exposure to the dollar.

Decision can be seen as a loud warning shot to Beijing: Ashraf Laidi

In August, Fan Gang, head of China's National Economic Research Institute, said: "The dollar will basically in the long run depreciate against major currencies – not only Asian currencies."

Meanwhile, Hu Xiaolian, vice-governor of the People's Bank of China, said: "Once a reserve currency's value becomes unstable, there will be quite large depreciation risk for assets."

There is certainly evidence that China is trimming its exposure to US assets. According to the US Treasury, China cut its holding of US government debt by $24bn to $843.7bn in June.

In contrast, China has been acquiring record amounts of Japanese government debt, buying more than Y1,700bn of short- and long-term paper so far this year. The previous annual record was Y255.7bn in 2005.

Ashraf Laidi, chief market strategist at CMC Markets, says while many interpreted Japan's recent decision to intervene and sell Y20,00bn to stem gains in the yen as a reaction to dollar weakness, it can be seen as a loud warning shot to Beijing given its record purchases of Japanese government paper.

"Cynics – possibly realists – could reason that China seeks to hamper Japan's recovery by keeping the yen excessively strong while profiting along the way via accumulating appreciating yen and gradually reducing exposure to depreciating dollars," he says.

South Korean and European government debt have also been targeted.

Mr Derrick says China's actions could prompt a renewed wave of dollar weakness, especially against the euro.

"With the current evidence pointing to a fresh hardening of attitudes in China towards the US, and with the dollar still standing at relatively high levels against the euro, we wonder whether we have a very familiar pattern is about to re-emerge," he says.

How to share in forecast renminbi rises

China

Volatility rather than appreciation could be a ploy, says **Josh Noble**

The long march towards a truly international Chinese currency has recently taken some small but highly significant steps. In August, hamburger chain McDonald's became a trailblazer in the renminbi-denominated bond market, as it issued $29m of debt in Hong Kong – a first by a western company.

In Malaysia the ringgit hit a 13-year high after China opened up currency trading channels between the two countries over the summer.

Another precedent was set in early August, when Industrial and Commercial Bank of China (ICBC) allowed an Indonesian client of Chinese technology company Huawei access to a $50m credit line in renminbi, a first for a non-Chinese company.

Nicholas Kwan, chief Asia economist at Standard Chartered in Hong Kong, says the renminbi will be the biggest global currency story of the next 10 years.

> 'In the coming decade we will see the birth of a new international currency'

"In the coming decade we will see the birth of a new international currency. It may not quite rival the euro or the US dollar, but certainly it will be on a par with the smaller currencies like sterling, the Swiss franc and even, in some respects, the Japanese yen."

However, Mr Kwan says the renminbi is still a long way off becoming a true reserve currency, principally due to its lack of convertibility. Central banks cannot include renminbi holdings as official reserves under International Monetary Fund guidelines.

The internationalisation of the currency has been progressing steadily in recent months, but currency flexibility has been much slower in coming. In June the Chinese authorities loosened the renminbi's dollar peg, reopening the trading band back to its pre-crisis levels of plus or minus 0.5 per cent a day from a reference point set daily by the state. The Chinese currency had been firmly pegged to the US dollar since the onset of the credit crisis in 2008.

The results of this renewed flexibility were initially rather muted, with the Chinese currency experiencing increased volatility during August rather than appreciation. GaveKal-Dragonomics, a Hong Kong-based research house, wrote in a note that this was an intentional policy.

"China has allowed for more 'volatility' since it began appreciating midsummer. We expect more of the same – perhaps as a tactic to throw off traders and minimise 'hot money' inflows."

Despite the added risk of depreciating, the renminbi has, since the start of September, recorded a series of highs against the dollar. Analysts are expecting further appreciation in the coming months. Qing Wang, chief China economist at Morgan Stanley, sees the renminbi hitting 6.60 by the end of the year, and 6.20 by year end 2011.

"We believe the renminbi is substantially undervalued and that its appreciation will be a multi-year phenomenon," wrote Mr Wang in a client note.

Both the rate and level of appreciation are still dictated more by politics than by economics. Mr Kwan says that while the economic fundamentals might support a 20 per cent rise, politics will probably push Chinese policymakers towards a 5-10 per cent appreciation over a number of years. Richard Yetsenga, head of FX strategy at HSBC in Hong Kong, points to an annual 2 per cent rise.

But the question for investors is how to get exposure.

Rule changes over the summer mean banks in Hong Kong can now open up renminbi bank accounts. Companies and financial groups can also buy deliverable renminbi in the Hong Kong market, helping to create a $100bn offshore market for China's currency. Now the channels exist, Mr Yetsenga expects the supply of renminbi to go up dramatically. "More renminbi-denominated assets should follow," he said.

For individual investors, the options are limited. Those with Hong Kong residency permits can buy up to HK$20,000 a day of renminbi. But for now, global investors will have to invest via a fund.

Non-deliverable forwards – essentially a futures derivative on the Chinese currency – do offer investors a chance to buy the renminbi's rise. However, Mr Yetsenga points out that the market is already pricing in a 1.2 per cent rise over the next year.

Mr Yetsenga sees the potential for other regional currencies to appreciate more than the renminbi in coming months and years.

But, despite the renminbi's new-found volatility, its lack of dramatic price fluctuations still makes it attractive for the more cautious investor.

"While a currency like the South Korean won may be a very attractive long-term investment, it could leave you with some sleepless nights," he says.

"By comparison, the renminbi looks like a reasonably stable investment."

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FINANCIAL TIMES TUESDAY SEPTEMBER 28 2010 7
Foreign Exchange

Market keeps machines in their place

Algorithmic trading

A 'flash crash' in FX is less likely than in the equities markets, says **Jeremy Grant**

Ever since the "flash crash" of May 6 in the US, when the Dow Jones index plunged by an eye-watering 1,000 points in about 20 minutes, the machines that increasingly move markets have come under the spotlight.

Specifically, regulators question what role algorithmic trading had in exacerbating the huge price dislocations of that day, when the market also bounced back up not long after it had fallen.

Yet computer algorithms – or "algos" – are by no means used solely in equities markets, They are just as pervasive in options, futures and foreign exchange. In FX, about half of market activity is driven by some kind of algorithmic trading.

Specialist technology providers are scrambling to roll out the latest sophisticated systems designed to help FX traders use algos more efficiently.

In September StreamBase, a US-based company, teamed up with MarketFactory, a technology company providing algorithmic FX trading applications, to give hedge funds, banks and proprietary trading firms access to market data more easily.

Companies such as this know FX is growing faster than cash equities markets as a trading opportunity for algorithmically inclined traders. Indeed the Bank for International Settlements says the FX market grew by 20 per cent globally in the three years to April this year. Some exchanges that offer FX are doing even better: CME Group's FX volumes grew 94 per cent in that period.

So could a "flash crash" happen in FX – and does the rapid growth of FX provide extra cause for concern?

Most industry experts start with the "never say never" caveat. But they all point out that the FX market structure has unique characteristics that mean it is less likely than some people fear.

One is that it is less fragmented across trading venues and pools of liquidity than equities markets.

In the US equities markets, one of the issues that regulators are focusing on is the fact that trading was spread across 14 exchanges, and the numerous different types of trading platform may have exacerbated price movements as traders switched back and forth from various venues trying to get out of their trades.

Dave Rutter, chief executive of Icap electronic broking, says: "In the equities markets there are thousand of securities that are traded thinly. If you take a look at our top [currency] pairs like the euro/dollar or euro/yen, these are very deep liquidity pools with thousands of participants."

He says algorithmic trading has been "an important part of our market for the last five years.

"We've seen that the algorithmic firms have added liquidity and added to the depth of the market."

> 'We've seen that the algorithmic firms have added liquidity and added to the depth of the market'

James Dalton, head of FX algorithms at Citi, says the FX market is nonetheless becoming more complex. There is no single source of real-time market data or volume "so you have to model it yourself".

Moreover, algorithmic trading is a generic term that refers to electronic market-making (done by a handful of top-tier banks that dominate the business); "automatic technical trading" (often done by hedge funds); statistical arbitrage players such as high-frequency traders, who are simply, seeking to take advantage of speed; and the emergence of "execution algorithms" used by traders to get large volumes done but parcelled out into smaller trades.

Mr Dalton says "stat arb" players make money when markets are volatile but this can bring "a mix of benefits and dangers", he says.

"That's why more banks are starting to invest in building [execution systems] for their customers to use, so they can navigate those waters a little more effectively."

However he also believes a "flash crash" in FX is unlikely.

"One that would bring the market to its knees? No," he says. "The market's just way too wired. A lot of the algo business doesn't sit on particular position for very long."

In the meantime, progress is being made in automating many mundane post-trade processes that are designed to give traders a better sense of who they are trading with, and the risks of default – known as "counterparty risk".

Portware, an algorithmic trading technology company, said in May it had integrated one of its trading products with post-trade systems operated by Traiana, a company that specialises in middle- and back-office processing of over-the-counter derivatives.

This would allow Portware's clients to "streamline post-trade processing and settlements with counterparties, resulting in lower operational risk and reduced trading costs", the companies said.

Man and machinery in perfect harmony

Automated trades

Systematic algo trading in FX is widespread, says **Izabella Kaminska**

Eye of the storm: Icap experienced an increase in demand for voice broking services Getty

The jump in FX daily turnover seen by the Bank for International Settlements in its recent survey was largely attributed to increased activity by "other financial institutions".

The category includes hedge funds, pension funds, some banks, mutual funds, insurance companies and central banks. But it also includes algorithmic and high-frequency trading firms.

"Any market that is highly liquid, offers continuous trading and has tight bid-ask spreads suits electronic trading," says Frits Vogel, head of swaps at interdealer broker Icap.

Whereas broker-dealers might on average deal thousands of FX transactions a day, even a very liquid interest rate swap – another market monitored by the BIS – will at best see 100 transactions in the whole day.

According to the BIS survey, for example, turnover in over-the-counter interest rate swaps stayed broadly unchanged.

According to Mr Vogel that has much to do with the interest rate market's much more bespoke nature.

"FX is fairly one-dimensional, while in the interest rate swap market there are price points on the curve from one to 50 years, with all sorts of spreads or combination of spreads," he says.

Simon Jones, Citi's head of G10 FX spot trading, says the reality is that machines are very good at handling direct instructions, making them ideal for trading large volumes of simple foreign exchange orders.

But the human touch remains preferable sometimes.

"All the big banks provide liquidity, but in many cases clients' desire for discretion is still very big," says Mr Jones.

"The machines just churn out data and there will always be a need to interpret the information from that pool."

At no time, for example, was the desire for human involvement in the dealing room more apparent than during the financial crisis.

As markets deteriorated, brokers at Icap experienced a massive increase in demand for voice broking services because clients wanted market insight alongside more personally tuned execution services, says Mr Vogel.

It is not unusual to hear human traders increasingly blaming badly programmed algos for unexpected moves in market exchange rates.

Even so, when the flash crash struck equity markets on May 6, the FX market – despite its growing dependence on algorithmic trading – coped extremely well with the turmoil.

"In terms of liquidity, FX markets performed beautifully," says Harpal Sandhu, chief executive of Integral Development, a technology company that provides FX trading platforms and services. "Numerous order books did fail... but as a market, liquidity remained resilient because of its inter-connectivity."

> 'In terms of liquidity, FX markets performed beautifully'

Part of the reason, he says, is because within the FX market, man and machine actually co-exist much more happily due to the way algo trading itself evolved.

The practice of systematic algo trading, for example, is far more widespread in FX than in other markets, and encompasses a much wider variety of participants, all the way from hedge funds to retail clients. Furthermore, it has always been high-frequency focused.

Stuart Siddall, chief executive of the Association of Corporate Treasurers, says that on a day-to-day basis, even companies will manage most of their currency affairs directly via automated systems.

"When it comes to trading spot dollar or other very plain vanilla instruments that the corporate understands, they will look for electronic systems to get the best prices," he says. "Where corporates value the bespoke approach is in something that's not a pure vanilla commodity – say a hedge that needs to meet very specific criteria for accounting treatment."

That is not to say, though, that more predatory algo players do not exist in the market. All market participants agree they are there, and they are there in size.

The point though is that real-money investors are probably less affected by them in FX than in other markets. First, because FX was already a fragmented and opaque market, says Mr Sandhu. And second, because the algos, if anything, are competing with incumbent liquidity providers, thus breaking open what was previously privileged access to the market's best liquidity and spreads to a much greater client pool.

Sandhu also begs to differ on the idea that machines do not give information. "The information still exists, it's just in machine form rather than human form," he says. "Everyone has access to it, it's just a question of being able to read it."

Growth is driven by investors' need for clarity

The CME

Izabella Kaminska explains the role of the exchange

Open book: the Chicago exchange has gained from a demand for transparency and for avoiding counterparty risk Bloomberg

Back in May, at the peak of the European sovereign crisis, news that currency futures traders were collectively betting on a decline in the euro for the first time since December 2005 made headlines.

Since then, some would say, weekly data from the Commodity Futures Trading Commission (CFTC) has been pored over as never before to understand the significance of large position shifts, especially to the short side, in foreign exchange futures traded on the Chicago Mercantile Exchange (CME).

There is more reason than ever to seek understanding. In July, the CFTC began providing additional detail on the type of traders active in the market, including for the first time a breakdown of sell-side dealers, buy-side asset managers and institutional investors, leveraged funds, and other traders.

More importantly, the currency futures market has been growing faster than the cash market for some time – making the data a useful proxy for overall positioning.

Data from the Bank of International Settlements' latest triennial survey of the foreign exchange market showed the cash market grew 20 per cent in the past three years. In contrast, according to the CME, the currency futures business grew 94 per cent in the same period.

The financial crisis, of course, has had much to do with that growth.

Derek Sammann, the CME's global head of FX, attributes much of the boom to investor demand for transparency as well as credit risk mitigation.

"There is so little transparency in the market, so the market can only really look to the CFTC and exchange data," he says.

"The market is now realising that this, alongside central counterparty clearing, is tremendously important."

In the opinion of Adrian Schmidt, currency strategist at Lloyds TSB, the push towards exchange traded currency futures is more about avoiding counterparty risk.

"In the US in particular, this is seen as an issue, following [the collapse of] Lehman [the bank]," he says.

The CFTC data can be a good indication of momentum and unwinding, according to Mr Schmidt, but is less useful for forming a view in the first place.

"Central bank activity in the FX market is now more important than it was in, say, the 1990s, so the significance of speculator positions has been reduced," he argues.

Three to five years ago the exchange's small volumes made it more of a niche market, but volume today gives it greater significance.

"We've become the second largest of all foreign exchange venues, and that's a pool of sufficient size to make it 'must have' liquidity," Mr Sammann says. "In 2001, we were averaging $10bn in average daily volume, in 2010 we're averaging $120bn a day."

> 'Best price wins, it's as simple as that – that's not always the case in a fragmented spot market'

But futures, it turns out, are not even the exchange's fastest growing foreign exchange market. That accolade goes to exchange-listed options.

While the BIS data showed global FX option volumes fell by 2 per cent in the past three years, the CME's average daily volumes in options grew by a comparative 250 per cent in the same period.

The statistics, of course, could be partially explained by costs associated with trading futures which, unlike the spot FX market, apply a standard initial and variation margin to all clients. A similar position, though, can often be executed using options more cheaply, while still providing the benefits that come with exchange listing – such as transparency, central counterparty clearing and liquidity.

On the flipside though, the CME's margining rules do at least ensure all investors have equal footing in the market, argues Mr Sammann – another aspect that appeals to the exchange's broad and geographically widespread client base.

Further, it is a footing that applies to execution too, he says. This is important in a market where institutional clients sit side-by-side with speculators, broker-dealers and retail investors.

"Everyone has the same priority on a price," Mr Sammann says. "Best price wins, it's as simple as that – that's not always the case in a fragmented spot market."

Cash market specialists, however, contend it is no coincidence that exchange-listed foreign exchange has grown side-by-side with high frequency trading (HFT), a technique some say has created the opposite of a level playing field.

"Futures have grown quickly, but it does come at a cost," says one global head of spot trading at a foreign exchange bank. "The HFT guys grew up on exchanges, so the natural move for them was to futures."

But Mr Sammann insists there is no one active in futures who is not already active in cash. "I would challenge anyone to show the participation levels are any different from any other venues," he says.

The Power Behind FX

10 of the 10 Top US Banks and Brokers
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Dipping a toe in the market: Peter Garnham's foot injury unexpectedly gave him a more realistic day-trader experience – complete with interruptions, backgammon and Twitter Shaun Curry

A trading hero – for the day

Retail FX

Active day-trading, long a feature in Japan and the US, is growing rapidly in Europe. **Peter Garnham** tries his hand

I planned my foray into the forex markets to coincide with the US Federal Reserve's September interest rate decision. Unfortunately, what I did not plan on was the recurrence of an old foot injury – gardening-related, not serious – which meant I was forced to conduct my experiment at home.

But this is a good thing, I think. Not the painful foot of course, but the fact that I get more of the experience of the internet day trader, family intrusions and all.

I had planned to use the trading platform of a large German bank, which promised to talk me through the workings of its system and various trading strategies I might employ.

This offer was hastily and rather mysteriously withdrawn, however. Presumably, somebody higher up in the chain of command realised my trading could turn into a complete nightmare – not the best advert.

Indeed, one contact, who runs a well-known London spread betting company, says he always starts seminars to potential clients by saying that 80 per cent of them are going to lose money.

"The problem is," he says, "Everybody thinks they are in the other 20 per cent."

So, convinced that I am indeed one of the chosen few, I set up a trading account with a more enthusiastic retail foreign exchange broker, FxPro.

This gives me access to the MetaTrader4 trading platform and more than 20 currencies to play with. So with $50,000 (pretend) dollars of margin, I begin.

Well actually, the first thing I do is wait, which turns out to be a bit of recurring theme.

My plan for the day is to get short of dollars ahead of the Fed's decision on the basis that hints of further quantitative easing from the Fed will further devalue the currency.

I scour e-mails on my Blackberry furiously to find out what analysts are thinking about the Fed decision. This makes the (lengthy) wait in the doctor's surgery fly by, but I also wonder whether I am cheating. Would the average day trader have access to the research that I have as Currencies Correspondent at the Financial Times?

I let myself off when I realise that half – okay, maybe a third – of the research I receive nowadays is from broking houses aimed at retail clients.

My research makes me more confident about selling the dollar, with most predicting that the Fed will hang back from announcing a start of quantitative easing. I reason the risk is that the Fed sounds more dovish than expected and the dollar falls.

The two currencies I want to buy are the euro, for its anti-dollar qualities, and the Australian dollar, for its turbo-charged-by-China properties.

Also, I want cheekily to buy the dollar against the yen, albeit in a smaller size than my other two trades, on the basis that the start of quantitative easing from the Fed – or the threat of it – could force the Bank of Japan back into the market to stop its currency appreciating.

But timing is everything. I hang back from buying the euro against the dollar until after an Irish bond auction, which has the potential to damage the single currency.

This gives me time to get the hang of the trading platform, which turns out to be easy to use and has news alerts to read and all manner of addictive graphs to play with.

In the event, the Irish bond auction goes relatively well. The euro has in fact rallied, which means I could have bought the currency cheaper. But I plough on.

> The urge to tinker with my orders is overwhelming. E-mails make me unsure about my trading plans

At least I try to, as at this point my father arrives. He wants to go online to track down a certain champagne, which, presumably due to the recession, he can no longer buy in Essex as his usual supplier has relocated to Newcastle to save money. I point out that this is not the best timing as I am about to trade foreign exchange. This does not go down well.

So 10 minutes later, and thanks to my father at a less favourable rate, I put my plans into action.

The German bank need not have worried. I worked in the currencies market for six years on several trading desks and once spent a happy three weeks in Zurich at FX trading school. This means I should at least know what I am doing.

I buy €500,000 against the dollar at $1.3137, and put in stop-loss and take-profit orders so that if activated I make three times more than I lose. Similarly, I buy A$500,000 against the US dollar at $0.9472 and protect them with limit orders. I also buy my cheeky $100,000 against the yen at Y85.42 and protect my downside.

And then I wait.

I spend a lot of time looking at the profit and loss account on my trading platform. The urge to tinker with my orders is overwhelming. I read about 20 e-mails, most of which make me unsure about my trading plans.

I then go on Twitter, where I follow various FX players. The 140 character format is not that edifying. Messages saying: "Buy the dollar – cautiously" and "Trade idea: dollar/yen stand aside" do little to help.

At one point the numbers on my trading screen stop moving for 20 seconds, at which I get nervous that my computer is not connected to the internet. Then I get nervous that the prices that I am seeing are not live.

I ring up a friend in the City of London and confirm that the prices are live.

He laughs at me: "You're just like everybody else sitting on a position hoping the world doesn't explode and hoping you can get out of it if it does."

This is true. FX trading for the most part hangs on a series of expected events with unsure outcomes – like the Fed decision – for which you can position yourself, but any number of unexpected events can disrupt those plans along the way.

And so more waiting.

Finally, after a few hours and after getting better than I probably should be at internet backgammon, the Fed decision arrives. I actually have the business news channel blaring in the background and the central bank delivers what I need: not announcing an immediate restart of quantitative easing, but sounding dovish enough to imply it might loosen monetary policy before the end of the year.

My trading blotter shows my two main bets are in the money and I raise my stop-loss and take profit orders on my Australian dollar and euro positions as they surge higher to protect my winnings.

This is starting to get exciting.

I am too conservative on my Australian dollar position and get taken out at $0.9520 against the dollar for a profit of $2,370. But my euro position runs and runs, finally hitting my target of $1.3350 for a profit of $10,635. As for my dollar/yen bet, the least said the better as I am forced to take a loss of $845 as the Bank of Japan fails to materialise to save my day.

So an (imaginary) $12,160 profit, but more importantly a nice insight into the life of a day trader, which essentially consists of (very) long periods of anxiety punctuated by short periods of frenetic, and in my case enjoyable, action.

Of course, all this does not exactly make me George Soros. But if you want to know where to buy Bernard-Massard Brut in Essex, I'm your man.

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Foreign Exchange

War waged on cowboy practices

US retail FX

Investors are less happy about being protected, says **Gregory Meyer**

The US retail foreign exchange market has long suffered a reputation as a place where unseemly operators took advantage of naive investors.

So it was a bit surprising that when a regulator proposed rules to protect small FX investors this year, they responded with a torrent of criticism.

Egged on by forex dealers, investors sent the Commodity Futures Trading Commission a record 9,100 letters. They focused on one aspect of the proposal: leverage. Borrowed money is the bread and butter of day-to-day FX trading, and the investors did not want it yanked away.

"Putting a cap [on leverage] is interference with the free-market system and capitalism," one commenter, Andres Hernandez, said in a widely shared sentiment. "You are telling the investor how to invest their money. The first steps toward communism."

The commission retreated from an initial proposal to cap leverage at 10 to one. Under a final rule to take effect on October 18, traders will be able to borrow up to 50 times collateral for the main currency pairs such as dollar/yen or euro/dollar, and 20 times collateral for others.

The proposal and subsequent pushback illustrate a conundrum for regulators. As they seek to impose oversight on spot foreign exchange transactions, they risk repelling investors from a fledging marketplace.

Aite Group, the consultancy, estimates retail forex traders fuel about $125bn in daily turnover, about 3 per cent of daily global volumes of $4,000bn. This share has grown from less than 1 per cent a decade ago, Aite says.

This growth has taken place despite the market's shady reputation. While forex brokers make up less than 1 per cent of the members of the National Futures Association, a self-regulatory body, they were the target of 43 per cent of the complaints from its business conduct committee in the year ended June 30.

The CFTC, set up to police commodity futures and options markets, has long noted the prevalence of retail forex cheats. As far back as the late 1990s it was issuing fraud advisories to the public. Gary Gensler, chairman, calls foreign exchange "the largest area of retail fraud that the CFTC oversees".

But while the commission has had the ability to go after fraud artists in FX derivatives, it had no jurisdiction in spot retail FX after losing a court case on the issue in 2004. The US Congress closed the loophole in 2008 and reaffirmed the CFTC's authority with the passage of the Dodd-Frank financial reforms in July.

The CFTC's resulting rules will do more than reduce leverage. They will require retail FX dealers to register with authorities and hold liquid assets covering their obligations to customers in bank or brokerage accounts, as well as meet the new leverage limits. They require registrants to maintain records of customer complaints and disclose the percentage of non-discretionary retail accounts that actually turned a profit.

After fighting lower leverage, FX dealers appear resigned to the new regulations. Gain Capital, which operates Forex.com, says "increased investor protection will have a long-term positive effect on the industry".

Sang Lee, an Aite Group managing director, says: "With the creation of a regulatory framework, the idea is to help the business enter the mainstream."

Some smaller operators have already been forced out of business. After the National Futures Association last year issued its own rules raising FX dealers' minimum capital requirements from $5m to $20m, the number of NFA-registered foreign exchange dealers fell from 41 to 17.

Spot forex dealers are not the only way for small investors to trade forex. CME Group, the derivatives exchange operator, launched "micro" FX futures in March 2009 that are one-tenth the size of its benchmark FX futures contracts, making them accessible to individuals. Trading volume remains a fraction of the overall FX futures market.

Small investors can also make bets on currency moves with exchange-traded funds that invest in currency futures on their behalf. (As a measure of retail sentiment, assets in the PowerShares DB US Dollar Index bullish fund outweigh its bearish counterpart by a ratio of six to one.)

Wall Street banks offer forex trading platforms, though Finra, the regulator for broker-dealers, has proposed limiting leverage to four to one. "That level of leverage is far more consistent with the overall services and products provided by broker dealers," a representative says. The Securities and Exchange Commission also has a mandate, under the Dodd-Frank act, to implement separate FX rules.

Beady eye: regulators have to target bad practice but not scare off investors

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