



The global Internet explosion has been a mixed blessing for investment banks in the world's foreign exchange options markets. Many banks have been reluctant to join the dot.com gold rush for fear of cannibalising their own business. However, it is now time for them to embrace technology as a matter of survival. **Jane Sandiford** finds out how...

That technology and the Internet revolution have forced the investment banking industry to rethink its entire fx business is no dramatic exaggeration. Despite all appearances to the contrary, it is not simply a matter of launching a dot.com. "The new click-and-deal environment in fx has forced banks to reconsider their complete business model," explains JP Morgan md and global head of fx sales, David Newman. "If price becomes less of a differentiating factor in the future, the race is on to leverage a brand in new and more creative ways that clients will reward."

The answer lies in the unbundling of the fx business. Banks are now breaking this business up into three sections – pre-trade, liquidity provision and post-trade services. Whereas with the old fx options business model a client would go to a bank and use all three of these services, the new model, born as a result of technological advances, gives the client more choice. For example, a client may go to Bank A for pre-trade information and then to Bank B for post-trade services.

Of course, these days a client does not have to go to a bank at all. Indeed it seems a day cannot go by without a new fx dot.com launch. One such online facility is Gain Capital. Gain, scheduled to begin live trading in Q2 2000, will offer 24-hour real-time fx trading, commission free, to institutional and individual investors. The facility will start with spot and then, in approximately six months, offer fx derivatives.

Online fx trading platforms have several key advantages over banks. The most obvious of which is their significantly lower cost base, which enables them to adopt new technology more quickly and offer significantly tighter spreads. In addition, an online company can offer greater transparency. "Traditionally in the fx markets the bank knows whether its client is a buyer or seller and often shades the price accordingly," explains Mark Galant, ceo and founder of Gain

Capital. "For example, if it knows the client is a seller it will lower the market price to make the deal more advantageous for the bank."

While many Internet ventures have only digitised this process, Gain has taken what it believes is a revolutionary step. "We are making a price that is dealable 100% of the time over the Internet," says Galant. "The spread is only five basis points wide – a very tight interbank spread. The important element is that our clients deal on that price before we know who they are. As a result we cannot shade the price."

Another advantage of e-fx business is the faster trading time. "The entire process takes only one second," adds Galant. "In one second your confirmation comes back to you and your margin calculations, position and P&L are updated. This is something that you cannot get from a more traditional bricks and mortar fx desk. We are offering a tremendous amount of back office reporting in one second, and this revolutionary service can only be attained via the Internet."

Friend or foe?

While investment banks recognise the advantages of these dot.coms, they are not overly threatened by them. "At the end of the day, all many of these dot.coms have is a piece of software, and for a couple of million dollars anyone can build a piece of software," says Drew Gross head of e-commerce for the global trading division at Chase Manhattan. "Many people just don't realise how efficient the fx market is or how tight the margins are. You really have to find economies of scale in relationships, credit, clearing and risk intermediation to be able to compete successfully. The fx market is not going to 'move' to someone's platform – there will be many software platforms that will be able to connect with the fx market."

Newman agrees: "It all comes down to the question – what is the role of a market-



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maker? It is to create liquidity on demand, and that sounds a lot easier than it really is. The past is littered with failed new entrants to the fx market because many have underestimated how hard it is to be a market-maker and liquidity provider.”

However, this is not a David and Goliath online battle. “We do not wish to go head to head with the major investment banks,” says Gain’s Galant. “We aim to target the clients that have been largely ignored by the banks – the small or medium-sized institutions. Banks, because of their high cost structure, tend to target larger corporates and large hedge funds. These are the clients that they do most of their business with. It is not, therefore, worth their while to go after the smaller clients.”

The Internet revolution will not be without casualties on either side. The investment banking industry expects to see the withdrawal of the smaller fx options operations. “I expect to see the continued emergence of the top global players in the market – you will have to be in the top ten to survive,” says JP Morgan’s Newman. “The industry will see more consolidation of banks as niche players exit and as bigger players touch more clients through electronics.”

The only undisputed winner in this fx industry revolution is the client. “The Internet is a tremendous asset for the client,” says Galant. “Deals are going to become cheaper and quicker to do, more transparent, and customers will have more access to a broad range of information.”

This is only the beginning, as banks and dot.coms are only just starting to offer fx options over the Web. For example, JP Morgan only recently went live on its global fx online trading platform. This facility will start with spot and will soon offer swaps, forwards and options. “We will be able to expand this service to provide all our fx capabilities in all the currencies 24-hours a day, five days a week, within months,” says Newman.

Meanwhile, Chase Manhattan is about to launch its new ChaseFX product. This is a secure Web-based fx dealing system that will also offer spot forwards and swaps. “The real selling point for this system is its portfolio interface,” says

Gross. “The client can bulk and net transactions before sending them to us for simultaneous pricing. This is useful for those of our active fund manager clients that have numerous transactions and sub-accounts. For example, if a fund manager wanted to buy \$100m of euros and needed to break that down into one hundred different sub-accounts, we could upload the trade breakdown information, execute the trade and provide the ticket outputs to both the client and our systems. This system will improve straight-through processing activity and convenience for our clients who are transaction-intensive. Corporations that aggregate and net subsidiary exposures will also find it valuable.”

The majority of other online platforms will also offer plain vanilla products initially, with more exotic deals following within six to twelve months. However, the term ‘plain vanilla’ now encompasses products once thought exotic. For example, knock-outs, binaries, digitals and reverse knock-outs are no longer considered exotic as there is now an interbank market for all these products. “Exotics will not be the first products to be placed on an online trading platform,” says Newman. “This is simply because the confirmation process for these trades is more complex than the vanilla transactions.”

An online capability is essential for any investment bank’s survival in fx options. “However, it is no longer just about getting an e-fx product out there,” says Newman. “It is about getting the right package for each client and client segment. Part of that package also includes high quality service and content, which are primarily people driven. Few firms can deliver that.”

One final word of caution – there is as much danger of putting too much emphasis onto Web-based trading as too little. “Technology gives us another means of communication,” says Gross. “In some cases it is still more efficient to communicate by telephone, while ‘bulk’ deals are more easily communicated over the Web.” The importance of voice contact should not be forgotten in this online-obsessed world and many banks, at this stage, view the Internet as a means to complement existing fx services. However, who knows what the future will hold? ❖



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Correlation efficient

Information is key in today's foreign exchange options market, particularly following the use of the Internet.

Satu Jaatinen looks at the effectiveness of volatility research and studies the relationship between cash and volatility in fx markets...

Over the past few years, Chase Manhattan's risk management advisory group has been studying derivatives markets in order to assess whether they hold any indicative value for price movements on the underlying products. In foreign exchange markets in particular, some very clear correlation effects have been noticed.

The fact that the fx market has experienced some profound changes over the past ten years has been one of the reasons behind the increase in the size of the derivatives (options) market in fx. The requirement for protection against volatility is obvious. Simultaneously, the underlying market has become more liquid and transparent, and therefore it has become easier to trade and structure derivatives on the underlying market. Their interdependence has grown in the process.

Interdependence

Since the start of this year, the day-to-day correlation between euro/dollar spot and the one-month implied volatility, for example, has been 70%, between the spot and one-month risk-reversal (representing the market skew) the correlation has been 69%, and between spot and one-year-one-month implied volatility spread (representing the slope of the volatility curve) 63% (see more about these indicators below). The fact that the two are correlated may provide extra information to assess future market moves of either price, spot, and for example the one-month implied volatility. The fact that prices in two or more underlying prices change in a similar fashion potentially gives the observer more than one 'tool' to work with.

For example, during the yen crisis last year, when the US dollar suddenly weakened to unexpectedly low levels

against the yen, it was difficult to assess when the market was going to turn, judging alone from the historically low levels of \$/¥. The fact that volatility rose to its historically highest levels simultaneously, gave the market a little bit of extra knowledge. In addition, the fact that volatility is a mean reverting price (peaks and troughs follow each other), combined with the knowledge of the prevailing negative correlation between spot and volatility (lower dollar results in higher market volatility), made it slightly easier to conclude that if volatility seemed overpriced in historic terms, maybe dollar was also reaching levels where it in fact was undervalued.

Having more than one indicator of this type, which is closely correlated with spot, to reach historically significant levels at the same time, enables the observer to increase their confidence level judgement. Two other indicators – the risk-reversal and the shape of the volatility curve – both reached historically low levels together with the spot. Their correlation to spot had been positive in the past.

Volatility indicators

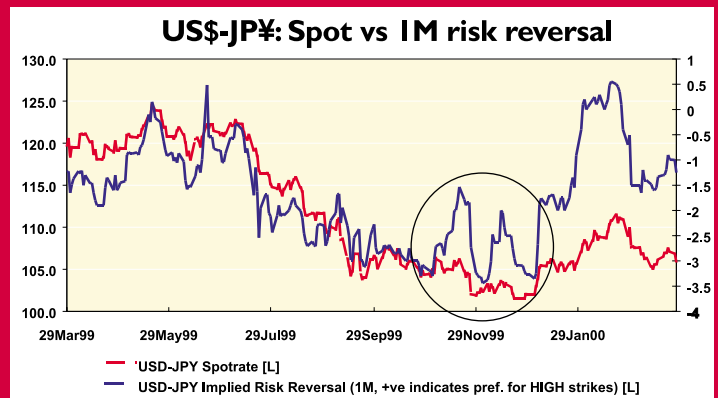
The spot market tends to have an asymmetric assessment of future risk. Furthermore, this tends to fuel a herd or panic mentality when spot moves in the direction of greater perceived risk, and will tend to cause an increase in volatil-

ity. This explains why volatility tends to be correlated to a degree with spot.

The asymmetric risk profile that the market may have is somewhat evident from the risk-reversal. The risk-reversal represents the fx market's preference for out-of-the-money puts over calls, and is expressed in terms of differing volatility quotes for each. The direction that is perceived to become more volatile (risky), demands more premium, and hence risk-reversal has often also been referred to as a sentiment indicator, effectively quantifying the future direction of spot risk.

The shape of the volatility curve, which in the study shown is expressed as the difference between one-year and one-month, also bears an increasing correlation to spot. The effect of a shock to the underlying spot price tends to 'fade' over a period of time, and hence normally when a move to the 'feared' direction takes place, short-dated volatility tends to rise more than the longer-dated volatility.

These indicators are obviously also highly inter-correlated, and therefore best



results are achieved when they are not studied in isolation of each other (including spot). Furthermore, the more fundamental, technical, flow and other types of risk analysis that support the same conclusions, the better judgement of future direction can be achieved. However, one must not forget that even though history often repeats itself, it cannot necessarily be used as future reference. ♦

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