

DERIVATIVES HOUSE OF THE YEAR, JAPAN

Goldman Sachs

Goldman Sachs is one of the most deeply entrenched foreign banks in Japan with its 1,400 staff providing global-to-local, local-to-global and local-to-local services. In fact, Goldman Sachs' Japan securities franchise run by Katsunori Sago is held up by co-president of Asia, Yusuf Alireza, as a benchmark for the rest of the dealer's businesses in the region.

That's perhaps not a surprise given the pivotal role the Japan operation plays as a funding and distribution channel for the rest of the firm. In equities, two-thirds of the dealer's clients are offshore with the remainder based locally. In fixed income, the vast majority of clients are based in Japan, but 50% of the business flows are linked to offshore instruments.

Goldman Sachs has some enviable local market strengths. It is a leading participant in the Japanese government bond (JGB) market, securing a number two ranking in the overall JGB auction rankings and number one for super-long maturities of more than 15 years in the fiscal first half of 2011 (April–September), according to data released by the Ministry of Finance. The dealer is also active in municipal underwriting and agency business, and has the strongest illiquid and distressed credit business in Japan, according to Eiji Ueda, co-head of fixed income, currencies and commodities (FICC) at Goldman Sachs in Tokyo. The firm is also a major participant in the domestic foreign exchange markets, with its RediTrader platform hooking up to retail aggregators and other local clients.

Riding volatility

The full strengths of Goldman Sachs were on display following the Great East Japan Earthquake of March 11, which caused severe market turbulence – the Nikkei 225 fell more than 600 points on March 14 and more than 1,000 points on March 15, closing at 8,605; while US dollar/yen rates moved by 5% a day. While some dealers claim they were ready to make markets in these volatile trading conditions, few if any were able to match Goldman Sachs in terms of deal size.

"The week after the Japan earthquake we were prepared to make markets for domestic counterparties and provided a lot of liquidity where we saw almost no liquidity from our competitors," says Mark Agne, head of equity trading for Asia at Goldman Sachs. "When we priced on Monday and Tuesday for a lot of domestic life insurers and banks, they told us nobody else was making markets in our size."



Eiji Ueda,
Goldman Sachs

Senior managers at life insurance companies, banks and even rival dealers in Japan concur. "Goldman Sachs had no period of business stoppage even after the earthquake," say an official in the equities department at life insurance company in Tokyo, who also ranks the dealer as the best provider of large ticket trades of up to \$500 million in size. "A few days after the earthquake, Goldman Sachs continued to offer prices at times when other companies were unable to provide them."

Clients offered similar comments about Goldman Sachs stepping up to meet their needs in August, when markets once again became volatile. The US dealer also drew praise for its suite of FX services aimed at helping Japanese export companies to cope with the surging value of the yen versus both the US dollar and euro.

In interest rates, meanwhile, Goldman Sachs has helped to deal with other issues, for example hedging mismatches associated with trillions of yen of loans made by Japanese banks under the BOJ's 'loan scheme', where interest repayments are linked to the BOJ target rate. So if an entity wanted to swap the floating rate debt into fixed, traditionally the swap would reference Tibor, leaving the hedging party exposed to basis risk (which has blown out substantially since the global financial crisis). Goldman Sachs solved the mismatch problem by introducing BOJ target-rate linked swaps in Japan, and has traded several billion yen of these swaps since September 2010.

Goldman Sachs also introduced another innovation for its clients trading Japanese rates by providing them with analysis on the shape of the yen interest rate curve and the forces behind it. For example, Japanese life insurance companies have significant overseas bond investments that they typically hedge using short-dated FX forwards, which are relatively cheap. This leaves them exposed to forward rate risk should hedging costs rise substantially. Also new Japanese solvency regulations, which will become effective this financial year, significantly increase the regulatory charge for unhedged foreign bonds.

As a result, Goldman Sachs expects Japanese lifers to shift back to long-dated yen bonds, resulting in the flattening of the yield curve. Furthermore, the firm proposed the carry for putting yen flatteners on is the cheapest if compared to other major rates markets. While local financial institutions put the trade on through JGBs, hedge funds based offshore wanted a limited downside implementation. As a result Goldman



Mark Agne,
Goldman Sachs

Sachs provided the first-ever constant maturity swap (CMS) spread curve floor on the 20- to 5-year spread. These were first traded in the second quarter of 2011.

The US dealer also differentiates itself in the credit markets by "focusing on providing liquidity to illiquid assets and bankruptcy situations including consumer finance and manufacturing companies", says Ueda.

This has involved tight bids and offers on credits linked with now-bankrupt consumer credit company Takefuji, as well as being active in credit default swap settlement auctions. Goldman Sachs has also provided liquidity for high volatility bonds such as Covalent Material and Tepco, even in challenging markets, and is also active in defaulted non-recourse loans linked with real estate and leveraged buyouts.

Redi for business

The US dealer has invested in upgrading its FX technology platform with the introduction of RediTrader, on which clients can trade all FX and precious metal products, including swaps and options. RediTrader supports client hedging services as well as retail aggregators in Japan. RediTrader also offers several algorithms and trade strategies.

Indeed, Goldman Sachs has tapped its algorithmic strategies unit – a business area that tied up a high percentage of its strategists, quantitative analysts, exotic derivatives traders and structurers – to offer smart solutions to clients across the board.

For example, the US dealer developed a systematic hedging strategy after some of the firm's clients said they wanted to protect their equity portfolios without having to rush and put on expensive trades in the event of a market crash. Goldman Sachs proposed an automated hedging programme using an enhanced rolling liquid index options methodology, with the algo working out how to set the premium as well as selecting the indexes underlying the put options. It does this using predetermined rules related to scaling and index selection aimed at reducing time value decay and carry costs while increasing volatility and correlation benefits for the client. "It is the first option-based hedging strategy in Japan and gives clients a low-cost but efficient hedge," says Ichiro Amano, head of equity derivatives structuring and marketing at Goldman Sachs in Tokyo, adding the biggest single trade was for \$200 million.

Other popular algorithms offered in Japan include an alpha strategy for non-Japan Asia equity investment;



Fumiko Ozawa,
Goldman Sachs

a systematic methodology to extract stable returns linked to oil; and a cross-asset alpha-generating strategy. Total volumes of all algo products sold in OTC, structured note and fund formats in Japan were in excess of \$2 billion, says Fumiko Ozawa, co-head of FICC at Goldman Sachs in Tokyo.

Algorithmic strategies were also deployed to secure business in the \$200 billion-plus Japanese variable annuity (VA) market. Low interest rates and high market volatility in Japan have made it hard for insurance companies to offer attractive VA products to customers that also make them money. Meanwhile, hedging fees associated with liabilities linked to legacy trades often offer thin margins making VA hedging a relatively unattractive area for dealers. Goldman Sachs has helped to get around these issues by offering innovative assistance to some of Japan's largest VA companies.

For example, Tokio Marine & Nichido Financial Life's 'Good News III' variable annuity is a principal-protected product offering a guaranteed minimum accumulation benefit and guaranteed minimum death benefit. Goldman Sachs' involvement largely centred on lowering the fund's construction fees as well as liability hedging costs to enable Tokio Marine to offer an attractive product to customers. It did this by developing a new index for each asset class based on the performance of the relevant futures contract rather than using a traditional index, such as the Citigroup World Global Bond Index, which can be expensive to replicate when trying to hedge the liability. This saved the annual fund fee between 10–20 basis points.

Meanwhile, the insurance premiums were invested in a global tracker portfolio featuring an automated asset allocation adjustment facility done on a monthly basis through a swap transaction with Goldman Sachs. This meant the US dealer received the funds and posted collateral back to the fund to secure credit risk via a repo. Since this helped with Goldman Sachs' funding, it reduced the overall costs of the structure.

Another VA with Goldman Sachs technology was launched in April this year and uses a systematic, balanced portfolio strategy comprising traditional assets with a dynamic rebalancing feature for which Goldman Sachs offered an algo aiming to optimally adjust the equity risk exposures according to the macro-market environment based on proprietary risk signalling methodology. The strategy also incorporates a volatility target to control the entire risk in the portfolio. ●