**Re-Engineering the Kospi 200 Options Market**

By Nick Ronalds

The Kospi 200 stock index options has been the most heavily traded derivatives contract in the world for the last 10 years, but that's about to change. The Korea Exchange this year is changing the size of the contract by making a five-fold increase in the multiplier. The reason? Regulators want to discourage retail speculation in these options.

That's quite a change for this contract, which has long enjoyed tremendous popularity among Korean investors. The contract was listed in July 1997 and by 2002 it had surpassed all the major stock index contracts in Europe and North America in terms of trading activity.

One key to its success is the relatively small size of the contract. With a multiplier of just 100,000 won ($85), it doesn't cost that much for investors to buy a handful of options on the index, which is the main benchmark for the Korean stock market.

Another key to its success was the widespread access to the internet in Korea, which encouraged vibrant competition among Korean brokers to offer online trading services to retail investors. A raft of websites sprang up with market analysis and research designed to make it easier for what one observer called "a nation of cyber traders" to trade the Kospi 200 options. (See "The World's Biggest Equity Index Derivative," Futures Industry, November 2002.)

During the early years, retail participation in the Kospi 200 options volume accounted for approximately two-thirds of the entire market, an exceptionally high level relative to most other large futures and options market. Since 2002, however, the character of the market has gradually changed, with more participation by institutional players such as domestic securities firms and institutional investors as well as foreign banks, and foreign trading firms. The increase in trading by non-Korean companies has been especially noteworthy, rising from under 10% in 2001 to more than a third in 2011.

This year, retail traders made up 28.8% of the Kospi 200 option market in April, according to data posted on the KRX website. Foreign entities accounted for 42.3% of volume in April, and Korean institutions made up the remainder.

**Information Disadvantage**

The increasing institutionalization of the Korean market has been supported by the exchange, but it also prompted some local observers to comment that retail investors were suffering from "information disadvantages" compared to domestic and foreign institutions. This issue came to the forefront as it became clear that retail investors generally were losing money in their trading of Kospi options. In a May 2011 working paper, the Korean Capital Market Institute, a local think-tank, cited one estimate that Korean retail investors had lost 1.7 trillion won during the same period.

"The huge losses inflicted on individual investors, and the fact that the losses continue, show that it is necessary to control individual investors’ derivatives trading at a reasonable level," the KCMI paper recommended.

That concern has not gone unnoticed by the government. The Financial Services Commission, the primary markets regulator in Korea, has taken a number of actions in the last year or so to discourage excessive retail speculation in derivatives. When KRX announced the change in the multiplier in January, the exchange explained that the FSC wanted the exchange "to address the issues related to the excessive speculation and high participation of retail investors in the derivatives market."

The change began taking effect on March 9, when the September 2012 contract was listed for trading with the new multiplier of 500,000 won (equivalent to $425), which is the same size as the Kospi 200 futures. Every time a nearby contract expired, the newly added contract will have the new multiplier until the old multiplier is extinguished. Since KRX lists four contracts at a time, three serial months and the next quarterly, the process will be complete when the June contract expires on June 15.

**Effect on Volume**

One certain effect of the increase in the contract size will be a nominal decrease in the number of contracts traded. If the value of trading stays unchanged, the Kospi 200 option volume will drop 80% to one-fifth of its previous volume. For example, the Kospi option traded 3.67 billion contracts in all of 2011; assuming the new multiplier and the same notional value, the volume would have been 734 million contracts.

Even with the adjustment for size, that...
is still a huge amount of trading activity, but it would have knocked the contract out of first place in the FIA’s 2011 global volume ranking. Interestingly, it appears that another Asian equity index option, the Nifty index option traded on the National Stock Exchange of India, could become the new number one this year. More than 868 million Nifty options were traded last year. In the first quarter of this year the Kospi 200 options still outranked the Nifty options in terms of volume, but that was before the new multiplier took effect.

What is less certain is whether the larger size will cause the overall value of the market to shrink. Chris Price, managing director of AsiaEx, a financial consultancy, said many brokers in Korea are worried that lower turnover from the larger contract size could widen spreads and reduce market depth, hampering pricing efficiency. But Kevin Lee, managing director for Newedge in Korea, has a more upbeat view.

“In the short term, the notional value could decline more than proportionally to the change in multiplier,” Lee told Futures Industry. “But I think the notional value will return to the status quo quickly.” He predicted that over the long term the contract volume could bounce back above its prior level after the market has time to adjust.

Gyun Jun, an analyst for Samsung Securities, commented in a recent report that the increased size could result in a widening of the bid-ask spread, a reduction in market depth, and a drop in “noise traders” in the second half of the year. On the other hand, he sees a silver lining for the futures contracts because both contracts now have the same multiplier. “All things considered, we expect pricing efficiency in index options to deteriorate,” he says, “but the parity in the multipliers in the futures and options contracts should improve liquidity and market impact in the futures.”

**Less Hedging**

The change in multiplier comes at a time when trading volume is down considerably from last year. As of the end of April, year-to-date volume was down by 30% from the same period in 2011. The decline has been largely driven by a major contraction in the equity-linked warrant market, according to market participants. The ELW market was so hot last year that the Financial Services Commission introduced a series of measures to cool it off, starting with mandatory minimum account balances. Restrictions on liquidity providers in March of this year has pulled ELW trading down over 65% since they went into effect. Since Kospi futures and options are often used as a hedge for warrant issues and as one leg of an active spread strategy, the reduction in ELW trading has weighed heavily on the Kospi market.

Clearing and exchange fees for the Kospi option remain unchanged. Both were assessed on a notional value basis prior to the switchover and still are. Similarly, Korean brokerage is generally based on a notional value, so no impact on incentives seems likely from that quarter. Interestingly, the exchange’s trading fee on Kospi futures and single stock futures was cut 20% on May 2.

**Faster Access**

While the change in contract size may lead to lower retail volumes, other changes being made by the exchange could lead to more participation from automated trading firms. On June 4, KRX opened a proximity hosting center in Busan, the exchange’s headquarters, that will provide faster access to the KRX markets than the existing point of access in Seoul. A number of trading firms and service providers have already set up shop in the new facility to take advantage of the faster connection. On the other hand, market data continues to come out of Seoul, which means the latency gains from moving servers to Busan are partially offset by having to route the data from Seoul to Busan.

Whatever the ultimate impact on the volume, for the Kospi 200 options to stand at the pinnacle of listed derivatives for over a decade is a singular achievement. Even if it first drops a place or two in the rankings it will doubtless continue jostling for the top spots for years to come, a magnet for traders and institutional investors alike.

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