

Improving execution results utilising PTS venues

Chuck Chon*

The most significant difference between the primary exchanges, such as the Tokyo Stock Exchange (TSE) and Osaka Stock Exchange (OSE) and PTS venues, such as SBI Japannext (JNX) and Chi-X Japan, is the difference in tick sizes. With TSE and OSE, the minimum tick size is ¥1, whereas the minimum tick size of PTS venues is ¥0.1 or 1/10th of the primary exchanges. Due to the tick size difference, institutional and retail investors can gain tremendous improvement in execution results, realising an additional 30-40bps on many wide bid/ask spread blue chip stocks, such as Mizuho Financial Group (Mizuho) – as shown in Figure 1.

Figure 1 clearly shows that the primary exchange's bid/ask spread of 115/116 for Mizuho is 86.6bps wide, whereas the JNX bid/ask spread of 115.1/115.5 is only 34.7bps wide. This difference in spread for Mizuho at JNX is quite compelling and anyone interested in improving execution results should not ignore this fact.

For wide spread names such as Mizuho, it certainly pays to make

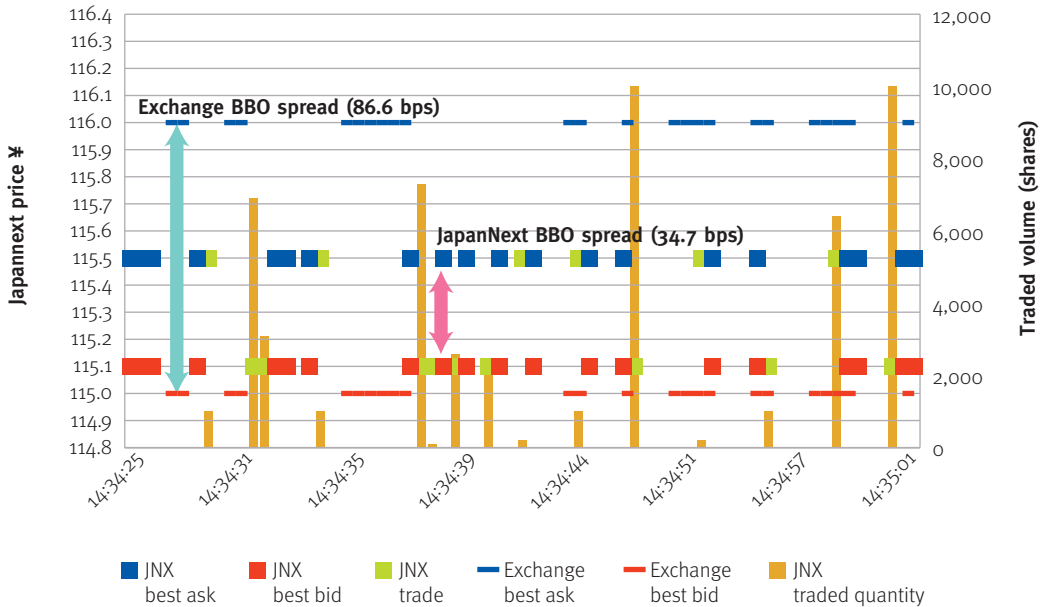
use of PTS venues. For example, as indicated in Figure 1, if a buyer and seller cross at a mid-point as indicated by '■' in Figure 1, then savings for the buyer and seller are 43.3bps each when compared to crossing the spread on the primary exchange. Having the ability to reduce the tick size to 1/10th gives market participants an inherent ability to trade at mid-points that are fairer for both liquidity providers and takers alike. This is a far-reaching development in the Japanese equities market and, perhaps, a prelude to an inevitable change to the trading landscape across Asian markets.

In other developed markets such as in the US and Europe, decimalisation and smaller tick sizes are the norm. However, in Japan this opportunity did not exist until JNX first introduced 1/10th tick size of TSE to its members on 28 October 2008, when it spearheaded and launched the daytime side-by-side market to compete with the incumbent exchanges. Decimalisation of the Japanese equities market is arguably the single greatest contribution made by JNX and is to a certain

* **Chuck Chon**,
co-CEO and
representative
director,
SBI Japannext

Market report – Japan

FIGURE 1: JAPANNEXT BEST BID/ASK VS TSE – CASE OF MIZUHO FG (8411)



Source: Market data via THOMSON REUTERS in September 2011

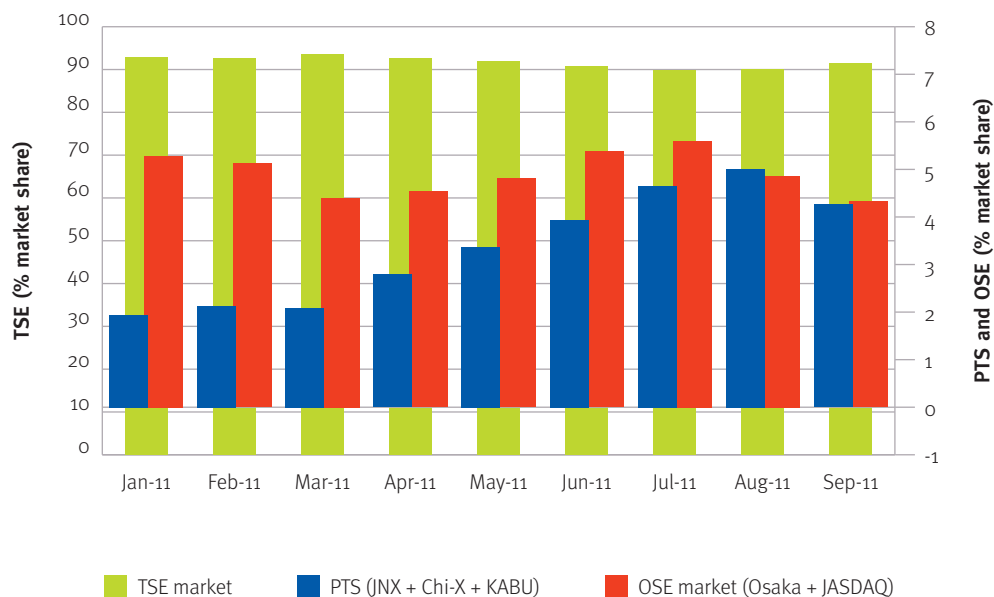
extent responsible for triggering fragmentation in earnest in the Japanese equities market.

For those unfamiliar with the Japanese equities market, reducing the tick size to 1/10th of the primary exchanges' may sound obvious and trivial. However, the decimalisation of tick sizes required JNX members to undertake a high level of investment and the allocation of significant resources to retrofit their systems to handle decimal numbers. The retrofit projects took up to six months for some members and in

some cases incurred costs of over half a million dollars.

To date the vast majority of mid- to small-sized local brokerage houses and many online securities firms in Japan – with the exception of Japan's leading online securities firm SBI Securities – are unable to handle decimal numbers. As a result, the majority of local brokerage firms are still not able to access the price improvement readily available on PTS venues for their clients. That said, with increased sales and marketing campaigns by PTS venue

FIGURE 2: JAPANESE MARKET VOLUME BREAKDOWN



Source: Market data via THOMSON REUTERS & JSDA PTS Information Network

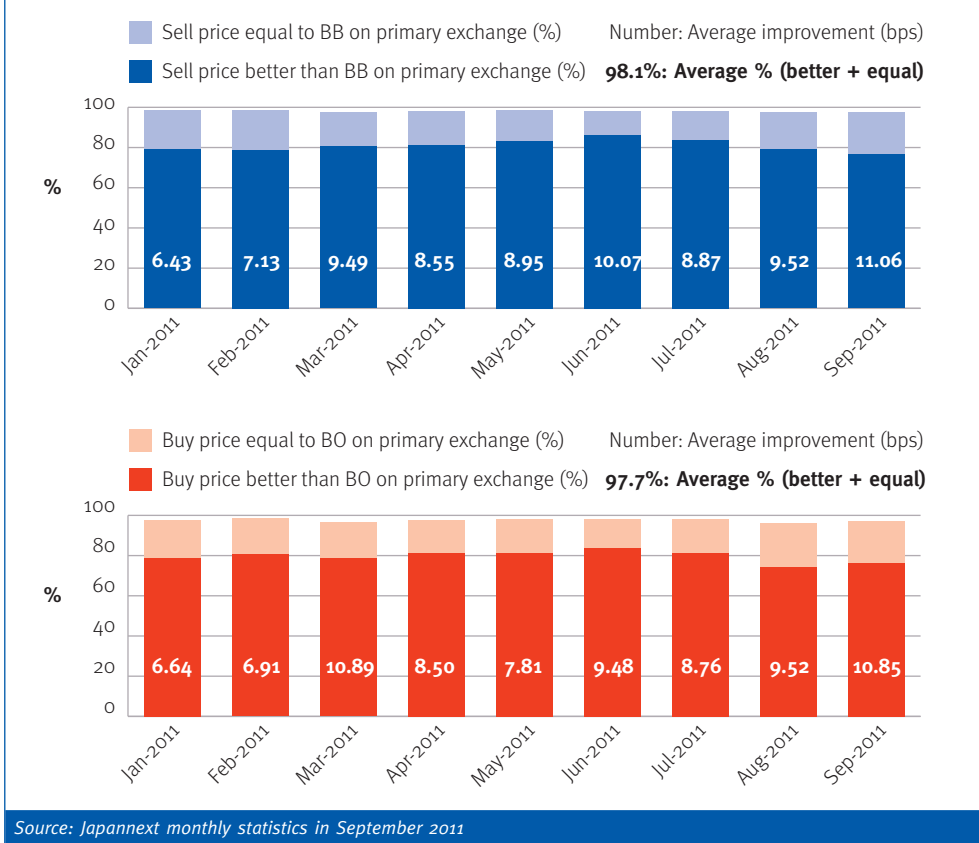
operators in Japan, via public and private fragmentation forums, investment seminars conducted by PTS member brokers, media coverage of PTS venues, and by word of mouth, momentum is gathering pace. Many indigenous mid-size brokerage houses and online securities firms are now evaluating their systems with a view to handling decimals and are enquiring after membership of the JNX.

Confirmation of the depth of fragmentation in the Japanese market came recently from a

Nikkei newspaper article, which highlighted that combined PTS market share had surpassed the OSE in August for the first time since PTS regulation was introduced in 1998 (29 September 2011 edition in Japanese, see Appendix I). The article pointed to the fact that the combined market share of the three PTS venues, kabu.com, Chi-X, and SBI Japannext, surpassed the combined turnover of both the OSE and JASDAQ. In terms of value, the combined PTS turnover stood at US\$16.5 billion,

Market report – Japan

FIGURE 3: JAPANNEXT MONTHLY AVERAGE IMPROVEMENT

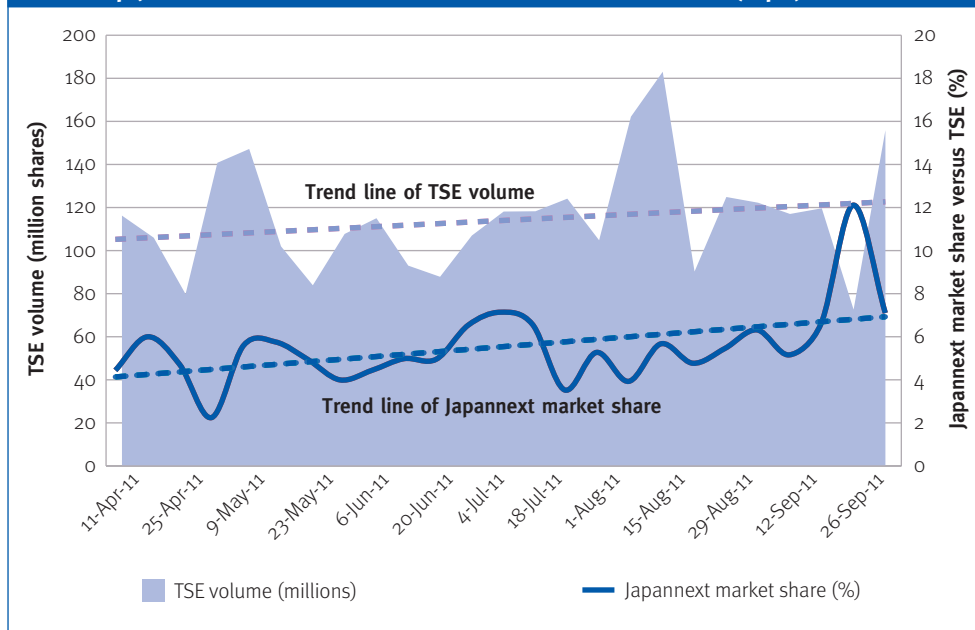


compared with US\$14.9 billion for the OSE and JASDAQ.

Figure 2 provides a breakdown of Japanese market volume and clearly highlights the accelerated growth of market share amongst PTS venues. In January 2011 the combined market share of PTS venues amounted to no more than 2%, rising to 5% by August.

PTS venues, such as JNX, are benefiting market participants by consistently delivering improvements in execution results. Figure 3 shows that the execution ratio for JNX participants consistently improved in more than 80% of cases. For example, in September 2011, the average improvement on ‘sells’ was 11.06bps and on ‘buys’ 10.85bps.

FIGURE 4: JAPANNEXT MARKET SHARE – CASE OF MIZUHO FG (8411)



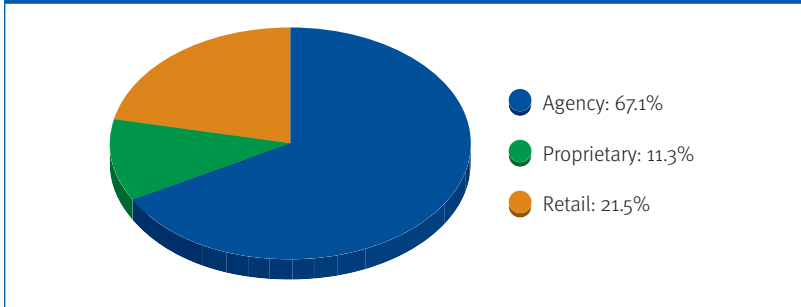
Source: Japannext Weekly Statistics in September 2011

Once again using the example of the blue chip bank stock Mizuho, JNX’s market share on a daily average basis is around 8% of the TSE’s total volume traded for Mizuho (see Figure 4). Interestingly, with increased PTS market share of Mizuho stock, one would naturally assume that TSE’s volume would drop by the same ratio. However, the data seems to indicate that this is not a zero sum game. If we were to look at TSE’s turnover of Mizuho stock in terms of the number of shares traded at both venues, TSE’s number of

shares does not seem to indicate a decrease by the same factor as the increase of JNX’s number of shares. It is somewhat difficult to prove that PTS venues have the effect of increasing the size of the overall pie on a down trend market, but looking at the graph in terms of shares traded at TSE versus JNX, it is obvious that they are highly correlated and the trend lines of both venues indicate a rise in the number of shares traded at the respective venues. It is possible that on a wide spread name such as Mizuho, market participants may

Market report — Japan

FIGURE 5: JAPANNEXT PARTICIPANT BREAK DOWN OF MIZUHO FG (8411)



Source: Jannext monthly statistics in September 2011

be doing some arbitrage between the two venues and thereby increasing the overall size of the pie.

Figure 5 shows the participant breakdown of Mizuho at JNX. From this it can be seen that the retail share is 21.5%, agency share is 67.1%, and principal share is 11.3%. The figure of 11.3% principal participation is much lower than the TSE's official 30% HFT participation.

On average, for wide spread names such as Mizuho, 99.9% of the duration of the side-by-side market with TSE bid/ask spreads are inside the TSE's bid/ask quotes. This is a remarkable achievement made possible by giving the market means to split ¥1 minimum tick sizes into even smaller ¥0.1 tick size

increments. This results in significant savings for market participants that would otherwise be unattainable on the primary exchanges.

In summary, while the current downward trend in global equities markets tempers optimism, as with the US and European markets, the fragmentation of the Japanese equities market promises to deliver better execution results for market participants. This can only help in assuring positive results for PTS venue participants. And it is only a matter of time before the mainstream investment community starts demanding access to PTS venues once they realise the significant savings and trading opportunities they are missing out on. ■



Appendix I: Nikkei newspaper article detailing combined PTS market share (29 September 2011)

上場株取引に占めるPTSのシェア

| 年月 | PTS | 大証 |
|---------|-----|-----|
| 2012/1 | 0.1 | 0.1 |
| 2012/4 | 0.2 | 0.2 |
| 2012/7 | 0.3 | 0.3 |
| 2012/10 | 0.4 | 0.4 |
| 2011/1 | 0.5 | 0.5 |
| 2011/4 | 0.6 | 0.6 |
| 2011/7 | 0.7 | 0.7 |
| 2011/10 | 0.8 | 0.8 |
| 2011/1 | 0.9 | 0.9 |
| 2011/4 | 1.0 | 1.0 |
| 2011/7 | 1.1 | 1.1 |
| 2011/10 | 1.2 | 1.2 |
| 2011/1 | 1.3 | 1.3 |
| 2011/4 | 1.4 | 1.4 |
| 2011/7 | 1.5 | 1.5 |
| 2011/10 | 1.6 | 1.6 |
| 2011/1 | 1.7 | 1.7 |
| 2011/4 | 1.8 | 1.8 |
| 2011/7 | 1.9 | 1.9 |
| 2011/10 | 2.0 | 2.0 |
| 2011/1 | 2.1 | 2.1 |
| 2011/4 | 2.2 | 2.2 |
| 2011/7 | 2.3 | 2.3 |
| 2011/10 | 2.4 | 2.4 |
| 2011/1 | 2.5 | 2.5 |
| 2011/4 | 2.6 | 2.6 |
| 2011/7 | 2.7 | 2.7 |
| 2011/10 | 2.8 | 2.8 |
| 2011/1 | 2.9 | 2.9 |
| 2011/4 | 3.0 | 3.0 |
| 2011/7 | 3.1 | 3.1 |
| 2011/10 | 3.2 | 3.2 |
| 2011/1 | 3.3 | 3.3 |
| 2011/4 | 3.4 | 3.4 |
| 2011/7 | 3.5 | 3.5 |
| 2011/10 | 3.6 | 3.6 |
| 2011/1 | 3.7 | 3.7 |
| 2011/4 | 3.8 | 3.8 |
| 2011/7 | 3.9 | 3.9 |
| 2011/10 | 4.0 | 4.0 |
| 2011/1 | 4.1 | 4.1 |
| 2011/4 | 4.2 | 4.2 |
| 2011/7 | 4.3 | 4.3 |
| 2011/10 | 4.4 | 4.4 |
| 2011/1 | 4.5 | 4.5 |

PTSと大証の株式売買代金

株私設取引、大証上回る

8月 売買代金4割増1.6兆円

証券取引市場を通じて株式売買する私設取引システム（PTS）の利用が急拡大している。8月の売買代金は前月に比べて1割増1.6兆円、3カ月連続で過去最高を記録した。高値取引が広がる外国人投資家の利用、国内機関投資家が追随している形だ。月間売買代金は初めて大証取引所の銘柄株の売買を上回り、存在感を高めている。

PTS運営会社1社の1億円を回った上、合計売買代金は8月、4割増1.6兆円に達した。PTSの運用会社は、前月の1兆4400億円を大きく上回り、1兆8000億円に達した。PTSの運用会社は、前月の1兆4400億円を大きく上回り、1兆8000億円に達した。PTSの運用会社は、前月の1兆4400億円を大きく上回り、1兆8000億円に達した。

私設取引システム

証券取引市場を通じて株式売買する私設取引システム（PTS）の利用が急拡大している。8月の売買代金は前月に比べて1割増1.6兆円、3カ月連続で過去最高を記録した。高値取引が広がる外国人投資家の利用、国内機関投資家が追随している形だ。月間売買代金は初めて大証取引所の銘柄株の売買を上回り、存在感を高めている。

PTS運営会社1社の1億円を回った上、合計売買代金は8月、4割増1.6兆円に達した。PTSの運用会社は、前月の1兆4400億円を大きく上回り、1兆8000億円に達した。PTSの運用会社は、前月の1兆4400億円を大きく上回り、1兆8000億円に達した。

証券取引市場を通じて株式売買する私設取引システム（PTS）の利用が急拡大している。8月の売買代金は前月に比べて1割増1.6兆円、3カ月連続で過去最高を記録した。高値取引が広がる外国人投資家の利用、国内機関投資家が追随している形だ。月間売買代金は初めて大証取引所の銘柄株の売買を上回り、存在感を高めている。

PTS運営会社1社の1億円を回った上、合計売買代金は8月、4割増1.6兆円に達した。PTSの運用会社は、前月の1兆4400億円を大きく上回り、1兆8000億円に達した。PTSの運用会社は、前月の1兆4400億円を大きく上回り、1兆8000億円に達した。

PTSの運用会社は、前月の1兆4400億円を大きく上回り、1兆8000億円に達した。PTSの運用会社は、前月の1兆4400億円を大きく上回り、1兆8000億円に達した。