

Asia Pac Derivatives

Japan equity futures roll preview: Q1 2024

Roll long Nikkei and Topix futures early

As of the 27 Feb close, the Nikkei (NK) and Topix (TP) rolls traded 3bps and 13bps rich to JPY TONAR rates (based on forecasted gross dividends of 283 and 26.8 index points), respectively. Both rolls are statistically rich (>90th 5yr %-ile), consistent with the positive sentiment towards Japanese stocks, with both indices trading near all-time highs.

We think that long futures rollers should consider rolling early this quarter. While rolls are already statistically elevated, chances are that long rollers – who dominated during the last roll – will end up pushing roll costs even higher late this week or early next.

Stop-loss levels for CTAs are likely relatively far from here

Risks to rolling at these statistically rich levels would be a sell-off towards 37,379 on the Nikkei (-4.7% from here, ref 39,240). This is currently where our CTA model has stoploss triggers for trend-following strategies (see exhibits 6 and 12 in this report: Systematic Flows Monitor, 23 February 2024). Therefore, we expect limited impact from CTA positioning on this quarter's Japanese equity futures rolls.

27 February 2024

Equity Derivatives Asia Pacific

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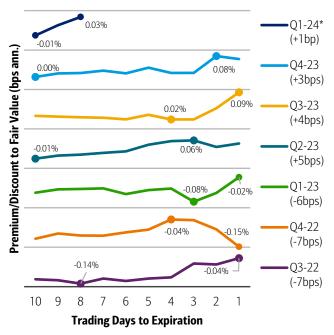
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Nikkei 225 Mar-24/Jun-24 Futures Roll

Nikkei 225 futures roll snapshot

Exhibit 1: The evolution of Nikkei 225 futures quarterly roll spread richness/cheapness over the current QTD and prior six quarters

Positive number = Cost to a long futures roller Negative number = Benefit to a long futures roller



Source: BofA Global Research. Data as of 27-Feb-24. *Data before completion of quarterly roll spread trading.

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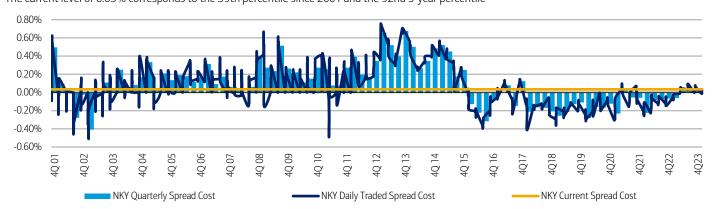
The Mar-24/Jun-24 Nikkei 225 (NK) futures roll is currently trading 3bps rich to JPY TONAR** rates (based on forecasted gross dividends of 283 index points). The volume weighted-average premium to fair value has been 1bp over the last three trading sessions. This is rich versus recent years (92nd 5-year percentile) but more in line with the long-term history (39th percentile versus rolls since 2001). Over the last year, Nikkei 225 futures have on average traded 2bps rich (+3bps, +4bps, +5bps, and -6bps; Exhibit 1).

We believe that Nikkei futures positioning remains long. While a potential sell-off could trigger stop-loss, as the bear case in our CTA model suggests (see exhibits 6 and 12 in this report: Systematic Flows Monitor, 23 February 2024). However, stops should not be hit until just above 37,000 on the Nikkei (model has 37,379 as of 26 Feb, or 4.7% down from here; ref 39,240 as of 27 Feb). Therefore, we expect limited impact from CTA positioning on this quarter's Japanese equity futures rolls.

Given that a **statistically rich** roll should not be surprising amid the strong sentiment towards Japanese stocks, we would not rule out a richening trend similar to what we saw during last quarter's roll (long rollers dominated short rollers in December). Moreover, with positioning risks not suggesting any large downside risks, we think that **long futures rollers should roll early**. While the roll could cheapen a few bps from here, locking in roll costs (+3bps) still seems to offer a good risk/reward, in our view.

Assuming cash collateralized at JPY TONAR**, the cost of holding Nikkei 225 futures from Mar-24 expiry through Jun-24 expiry is currently 3bps rich annualised. Since 4Q 2001, the average quarterly cost of holding Nikkei 225 futures was 10bps rich. At current levels, the cost of rolling Nikkei futures ranks in the 39th percentile since the end of 2001 (Exhibit 2).

Exhibit 2: The cost (assuming cash collateralized at JPY TONAR) of holding NKY futures over the next 3 months is quite rich versus recent history** The current level of 0.03% corresponds to the 39th percentile since 2001 and the 92nd 5-year percentile



Source: BofA Global Research. Data as of 27-Feb-24. Quarterly spread cost measured as a volume weighted average of daily roll spread costs over the final 10 days of each quarter's roll spread trading period. Daily spread costs shown for the final 10 days of each quarter: **TONAR has replaced LIBOR in Japan.



Nikkei 225 futures prior roll (Dec-23/Mar-24) review

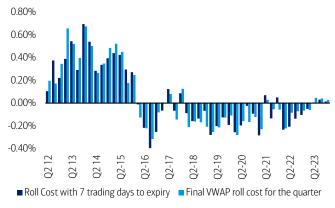
The Dec roll richened in the last week

With 7 trading days to expiry, the roll was trading at 1bp rich, and the final VWAP roll cost for the quarter ended up at 3bps rich, after richening by an additional 2bps (Exhibit 3 and Exhibit 4).

The roll richened as roll activity picked up, suggesting that long rollers dominated the flow. As seen in Exhibit 1, the roll richened from 0bp to 8bps as the roll volume bars increased (Exhibit 5).

Exhibit 3: Nikkei 225 quarterly roll spread cost measured (1) with 7 days remaining for spread trading (2) on average over the entire

Roll spread cost measured on average over the entire quarter is typically not too dissimilar to the cost as measured over the final 7 days as volume peaks into expiry

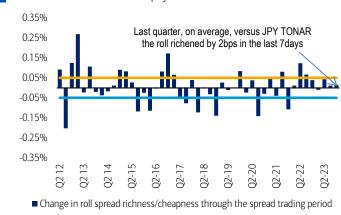


Source: BofA Global Research

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Exhibit 4: NKY roll spread cost measured as the difference between the average over the entire quarter and the cost with 7 trading days remaining for spread trading

The Dec-23 roll richened into expiry



Source: BofA Global Research

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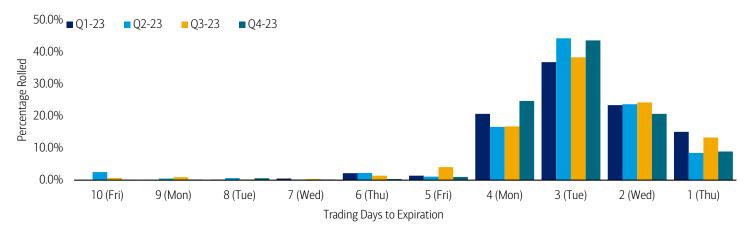
Nikkei 225 futures roll progression

Monday and Tuesday were the most active roll days in December

As is typical, peak roll volume through last quarter's roll came on Tuesday of expiry week (Exhibit 5), and the roll progressed largely as per normal. We note, however, that fewer investors than normal waited until the last 1-2 days to roll their positions.

Exhibit 5: Percentage of Nikkei (NK) futures rolls n trading days to expiry over the prior four quarters

Based on the volume traded in the futures spread contract



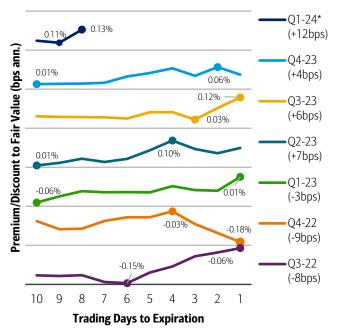
Source: BofA Global Research

Topix Mar-24/Jun-24 Futures Roll

Topix futures roll snapshot

Exhibit 6: The evolution of Topix futures quarterly roll spread richness/cheapness over the current QTD and prior six quarters

Positive number = Cost to a long futures roller Negative number = Benefit to a long futures roller



Source: BofA Global Research. Data as of 27-Feb-24. *Data before completion of quarterly roll spread trading.

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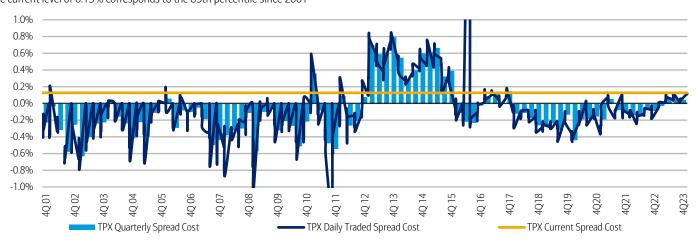
The Mar-24/Jun-24 Topix (TP) futures roll is currently trading 13bps rich to JPY TONAR** rates (based on forecasted gross dividends of 26.8 index points). The volume weighted-average premium to fair value has been 12bps over the last three trading sessions. This is rich versus recent years and elevated relative to longer-term history (99th and 85th 5-year and 21-year percentiles, respectively). Over the last four completed rolls, Topix futures have on average traded at 4bps rich (+4bps, +6bps, +7bps, and -3bps) dating to last year's Q4 Dec/Mar roll (Exhibit 6).

Like Nikkei futures, we believe that **Topix futures positioning is long**. We furthermore see stop-loss levels relatively far from here. As such, positioning risk seems muted going into this roll.

Given that a **statistically rich** roll should not be surprising amid the strong sentiment towards Japanese stocks, we would not rule out a richening trend similar to what we saw during last quarter's roll (long rollers dominated short rollers in December). Despite already elevated levels, risks are that they get even richer from here, and we think that **long futures rollers may roll early**. Locking in roll costs (+13bps) still seems to offer a good risk/reward, in our view.

Assuming cash collateralized at JPY TONAR**, we note that the cost of holding Topix futures from Mar-24 expiry through Jun-24 expiry is currently 13bps rich annualised. Since 4Q 2001, the average quarterly cost of holding Topix futures was 9bps cheap. At current levels, the cost of rolling Topix futures ranks in the 85th percentile since the end of 2001 (Exhibit 7).

Exhibit 7: The cost (assuming cash collateralized at JPY TONAR**) of holding TPX futures over the next 3 months is in line with long-term levels. The current level of 0.13% corresponds to the 85th percentile since 2001



Source: BofA Global Research. Data as of 27-Feb-24. Quarterly spread cost measured as a volume weighted average of daily roll spread costs over the final 10 days of each quarter's roll spread trading period. Daily spread costs shown for the final 10 days of each quarter. ** TONAR replaces LIBOR in Japan.



Topix futures prior roll (Dec-23/Mar-24) review

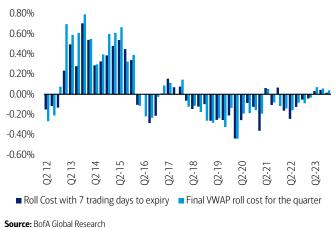
The Dec roll richened as roll volume picked up and stocks rallied

With 7 trading days to expiry, the roll was trading 1bp rich but richened by a further 3bps into expiry, finishing at 4bps. The final volume-weighted average price (VWAP) roll cost for the quarter ended up being 4bps rich (Exhibit 8 and Exhibit 9).

Given that the roll cost richened alongside increasing roll activity and rallying markets, long rollers likely dominated, and/or investors were chasing the Japan rally using futures.

Exhibit 8: Topix quarterly roll spread cost measured (1) with 7 days remaining for spread trading (2) on average over the entire quarter

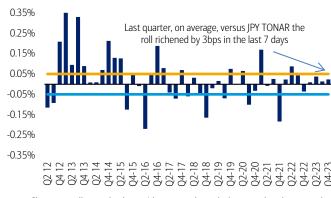
Roll spread cost measured on average over the entire quarter is typically not too dissimilar to the cost as measured over the final 7 days as volume peaks into expiry



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Exhibit 9: Change in TPX roll spread cost measured as the difference between the average over the entire quarter and the cost with 7 trading days remaining for spread trading

The Dec-23 roll cost picked up



■ Change in roll spread richness/cheapness through the spread trading period

Source: BofA Global Research

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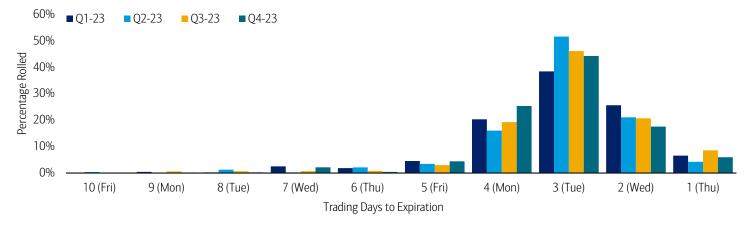
Topix futures roll progression

Most of last quarter's roll went through on Tuesday of expiry week

As usual, peak roll volume through last quarter's roll came on Tuesday of expiry week, when 44% of the rolls were traded (see Exhibit 10). We note, however, that roll trading started a bit earlier than normal, with more roll activity up on the last Monday before expiry.

Exhibit 10: Percentage of Topix (TP) futures rolls in trading days to expiry over the prior four quarters

Based on the volume traded in the futures spread contract



Source: BofA Global Research

Summary of Prior Roll Strategy Reports

Exhibit 11: Summary of prior roll strategy reports

Roll timing recommendations, rationale and the subsequent outcome

Index	Futures ticker	Roll	Report date		Final quarter average cost	Strategy & rationale
Nikkei 225	NK	2024-Q1 (Mar-24/Jun-24)	27-Feb-24	+3bps	TBD	Long rollers should consider rolling early as upside chasing could add further upside pressure to the roll cost. Risks to this view are linked to stop-loss triggers near 37k.
Topix	TP	2024-Q1 (Mar-24/Jun-24)	27-Feb-24	+13bps	TBD	Long rollers should consider rolling early as upside chasing could add further upside pressure to the roll cost. Risks to this view are linked to stop-loss triggers near 2.6k.
Nikkei 225	NK	2023-Q4 (Dec-23/Mar-24)	28-Nov-23	+1bp	+3bps	Long rollers should consider rolling early despite a statistically rich roll. With not much positioning risk chances are that long rollers dominate and drive costs higher as in Sep.
Topix	TP	2023-Q4 (Dec-23/Mar-24)	28-Nov-23	+2bps	+4bps	Long rollers should consider rolling early despite a statistically rich roll. With not much positioning risk chances are that long rollers dominate and drive costs higher as in Sep.
Nikkei 225	NK	2023-Q3 (Sep-23/Dec-23)	29-Aug-23	+3bps	+4bps	Long rollers should consider rolling early despite a statistically rich roll. With not much positioning risk chances are that long rollers dominate and drive costs higher as in June.
Topix	TP	2023-Q3 (Sep-23/Dec-23)	29-Aug-23	+4bps	+6bps	Long rollers should consider rolling early despite a statistically rich roll. With not much positioning risk chances are that long rollers dominate and drive costs higher as in June.
Nikkei 225	NK	2023-Q2 (Jun-23/Sep-23)	30-May-23	-1bp	+5bps	Long rollers should roll late since the roll is already historically rich and positioning risk seems very asymmetric with downside risks much larger than upside risks.
Topix	TP	2023-Q2 (Jun-23/Sep-23)	30-May-23	+2bps	+7bps	Long rollers should roll late since the roll is already historically rich and positioning risk seems very asymmetric with downside risks much larger than upside risks.
Nikkei 225	NK	2023-Q1 (Mar-23/Jun-23)	28-Feb-23	-5bps	-6bps	Long rollers should consider rolling late as the roll cost is statistically rich and positioning risks seem skewed to the downside in the near term.
Торіх	TP	2023-Q1 (Mar-23/Jun-23)	28-Feb-23	-4bps	-3bps	Long rollers should consider rolling late as the roll cost is statistically rich and positioning risks seem skewed to the downside in the near term.
Nikkei 225	NK	2022-Q4 (Dec-22/Mar-23)	30-Nov-22	-11bps	-7bps	Long rollers want to roll early in anticipation of continued buying pressure from trend- following investors.
Торіх	TP	2022-Q4 (Dec-22/Mar-23)	30-Nov-22	-8bps	-9bps	Long rollers want to roll early in anticipation of continued buying pressure from trend-following investors.

Source: BofA Global Research

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