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VettaFi Japanese and Korean Dividend Adjustment

Rules and Methodology

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VettaFi Japanese and Korean Dividend Adjustment

Official Rule Book

I. General Description

Japanese and Korean companies tend to postpone official dividend payment rates until after the established ex-date has passed. As a result, the total return and net total return variants of international VettaFi indexes are calculated using, when available, estimated payments as of the ex-date of the dividend. This poses an issue to the accuracy of these index variants since the actual dividend paid can differ from the adjustments made to total return and net total return variants for indexes which contain Japanese or Korean companies.

To provide a more accurate index, VettaFi will make a post hoc adjustment to its total return and net total return variants if its data provider updates the payment amount after the fact with a new, different dividend amount.

Japanese companies tend to issue estimates of the dividend prior to the ex-date which VettaFi uses for total return calculation. Korean companies are more likely to issue both the payment amount and ex-date after the ex-date has passed. Therefore, dividend adjustments will either be made for a difference in estimated and actual dividend rates or will be for the entire dividend amount, depending on whether an estimated rate was published prior to the ex-date. Although the mathematics of the adjustment remains consistent with these two scenarios, the a further breakdown can be found in part III.

The underlying principle of this procedure is to derive the difference between estimated and actual dividend payments (the unapplied dividend quantity), using the index shares, foreign exchange rates, and divisors of the dividend paying security at the original ex-date, and calculating the index level adjustment which can be applied to the total return and net total return variants at the time actual payment amounts are made public.

II. Dividend Adjustment Arithmetic

i) Replicating Value of Dividend at Time of Payment

The value of the dividend adjustment that will be applied to TR/NTR variants will be determined by the index shares of the security on original ex-date, fx-rate of dividend currency on original ex-date, the divisor of the index on original ex-date, the difference in the estimated and actual dividend rates. The formula for calculating the adjusted dividend points **for a single security** to be applied is:

$$= \frac{(Div_{Actual} - Div_{Estimated}) * Index\ Shares_{Ex-Date} * DivFX_{Ex-Date}}{Divisor_{Ex-Date}}$$

Dividend points, or index level dividend adjustments, are calculated individually for each dividend since adjusted payment rates for dividend that had separate ex-dates can come in on the same post facto date. These dividend points are then aggregated and applied to the total return and net total return variants of the index.

ii) Index Level Dividend Calculation

The final XD/NXD value, the dividend/net dividend points applied to the index, is derived by adding the aggregated adjusted dividend points calculated in part II.i and the “standard dividend” point value, where “standard dividend” point value is dividend points aggregated during standard operations (dividends paid that are unrelated to the dividend adjustments at time t). The formula for calculation to total index level dividend adjustment:

$$= \sum_{i=1}^{n} (AdjPoints_{it}) + \frac{\sum_{i=1}^{q} (Standard\ Dividend_{it})}{Divisor_t}$$

In the formula above, AdjPoints refers to the index adjusted dividend adjustment from II.i to be applied at time t.

III. Additional Comments

When possible, client files will have a 2-day notice prior to the implementation of a post hoc dividend adjustment. Dividend adjustments will be implemented two business days after VettaFi receives the updated dividend amount from our data provider. Within the provided VFA file, clients will have access to updated dividend and net dividend amounts, as well as the dividend points, net dividend points, and the original ex-date of the dividend.

Also note that although the same mathematical approach for adjusting dividend quantities after the ex-date is the same for both Japanese and Korean dividends, the reason of the adjusted dividend is likely different.

Japanese companies issue estimates of the dividend prior to the ex-date which VettaFi uses for total return calculation. They then amend the estimate after the ex-date with the real dividend payment amount. As a result, adjustments for Japanese dividends are the difference between the actual and estimated dividend.

Korean dividends, however, are more likely to not issue estimates. Instead, both actual dividend amount and ex-date are announced after the fact. You can treat this as an “estimated” dividend of 0 applied on the ex-date, with the dividend adjustment being the full amount of the dividend paid. That is, an adjustment for a Korean dividend could be described as:

$$= \frac{(Div_{Actual} - Div_{Estimated}) * Index\ Shares_{Ex-Date} * DivFX_{Ex-Date}}{Divisor_{Ex-Date}}$$

$$= \frac{(Div_{Actual} - 0) * Index\ Shares_{Ex-Date} * DivFX_{Ex-Date}}{Divisor_{Ex-Date}}$$

$$= \frac{(Div_{Actual}) * Index\ Shares_{Ex-Date} * DivFX_{Ex-Date}}{Divisor_{Ex-Date}}$$