Combining Multiple Level and Event Adjustment Models

Building Multiple-level Models · https://dev.forecastpro.com/documentation/forecast-pro-trac/building-multiple-level-models/combining-multiple-level-and-event-adjustment-models/

In many cases, the SKUs or product lines in a multiple-level hierarchy are subject to promotional effects. You can use the event model methodology described in the Building Event Models tutorial to account for such effects.

Example 1. A product line, consisting of aggregated SKUs is promoted as a unit. You believe that all the SKUs in the product line will be affected similarly. You can deal with this by using the following approach.

LINE **\EVENT=PROMO \TOPDOWN**

- SKU1
- SKU2
- SKU3

This causes Forecast Pro to execute the following procedure.

Forecast the group LINE, taking promotions into account.

Forecast the SKUs *without* taking promotions into account.

Adjust the SKU forecasts so that they sum to the LINE forecasts. This propagates the group level promotional effects to the SKUs.

Example 2. Now suppose that only one SKU of the group is promoted. The following approach can account for this promotion.

LINE

- SKU1 **\EVENT=PROMO**

- SKU2
- SKU3

This causes Forecast Pro to forecast the SKUs individually. It then sums these forecasts to obtain forecasts for the group LINE.

What if you were to add the keyword **\TOPDOWN** to the group LINE in this example? The effect would be that the promotion of SKU1 affects it but does not affect overall sales at the group level. This might be the case if the promotion affected sales only by cannibalizing other SKUs in the group. This is a dubious effect. It is usually better to prepare forecasts bottom-up when there are distinct models for the lower-level units.