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On Balance Volume [1]

The On Balance Volume (OBV) for an n-day period is defined as the sum of all volumes for up days minus all volumes for down days. An up day is one where the price closed higher or the same as the previous day. The On Balance Volume study calculates the n-day OBV for each day and charts it as a line or histogram which can oscillate around the zero line.

A "Cumulative" option forces the OBV to consider all previous data when calculating, as opposed to only the previous period. The OBV values accumulate throughout the chart. If the "Cumulative" option is unchecked, the user may specify a period over which the OBV will be calculated.

A "Normalized" checkbox option is available which results in an oscillator that ranges between extreme values of -100 and +100. The OBV is normalized by first dividing the result by the total volume, and then multiplying by 100. When "Cumulative" is checked, the total volume is the sum of the volume of all previous bars. When "Cumulative" is unchecked, the total volume is the sum of the volume of the bars in the previous period. A normalized result of +100 would mean that each bar over the period was an up bar, and therefore all volume was considered up volume. Similarly, a value of -100 would mean that each bar over the period was a down bar, and therefore all volume was considered down volume. A value of 0 would represent an even mixture of up volume and down volume over the period.

Presentation



Above is a 15 Minute Bar Chart of a Intel Corporation (INTC). The histogram in the middle window pane is the On Balance Volume.

Preferences:

OBV Period:

☐ Cumulative

☒ Divide By Average Volume

- **OBV Period** -Number of periods over which to sum the up and down volumes.
- **Cumulative** -When the "Cumulative" option is checked, the period is not considered, and the OBV is computed using all previous data. When "Cumulative" is unchecked, OBV will only consider the volumes over the previous OBV period. When this checkbox is checked, the "OBV Period" control is disabled since it is not considered.
- **Normalized** -If this checkbox is checked, the result will be divided by the total volume over the

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period (or over all previous bars if cumulative) and then multiplied by 100. The result is an oscillator that ranges between extreme values of -100 and +100.

- **Draw Type** -OBV can be drawn as either a histogram (solid or hollow) or a line (continuous or connected).

Formula Copy

Not Cumulative, Not
Normalized
$$\frac{\text{SUM}\{\text{UVOL}, \text{Period}\} - \text{SUM}\{\text{DVOL}, \text{Period}\}}{\text{SUM}\{\text{UVOL}, \text{Period}\} + \text{SUM}\{\text{DVOL}, \text{Period}\}}$$

Cumulative, Not

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