FINANCE HEALTH & LIFESTYLE TECH

Technical Analysis

# **How to Calculate MACD**

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The MACD indicator measures the difference between **two moving averages** (EMA) and is depicted as a line.
The usual representation of the MACD indicator has another line – a short 9-day EMA of MACD – plotted
together with the MACD in the chart, to act as a trigger indicator.

A buying signal is gotten from MACD when the MACD line crosses the 9-day trigger EMA. In turn, a sell signal is gotten from the reverse. It's however always important to remember that an indicator showing good entries rarely shows good exits. If you find MACD to give you good entries, then you can almost be certain that you can find other indicators to help you find the best exits.

As stated above, MACD measures the difference between two EMAs. A positive MACD means that the 12-day EMA is above the 26-day EMA. If MACD is positive and rising, then the gap between the 12-day EMA and the 26-day EMA is increasing. This is considered bullish as the rate-of-change of the faster moving average is higher than the rate-of-change for the slower moving average.

Constructing a MACD is really quite simple, as soon as you know how to calculate moving averages. For any given stock or underlying security:

- 1. Calculate a 12 day EMA of closing prices
- 2. Calculate a 26 day EMA of closing prices
- 3. Subtract the longer EMA in (2) from the shorter EMA in (1)
- 4. Calculate a 9 day EMA of the MACD line gotten in (3)

That's it. You now have a MACD line (gotten from the subtraction in 3) and a 9-day EMA of the MACD line. In the image below, the MACD line is the thick black line, and the 9-day EMA of it is the red line.

When plotting the MACD, it usually comes with a histogram as well, as can be seen in the image.

This is gotten from *subtracting the 9-day EMA line from the MACD-line*. The slope of the MACD histogram shows what crowd is growing stronger. A rise in the histogram above zero shows bulls getting stronger, and vice versa.

## When to Use MACD

MACD lines follow trends, so any time of trending sees very good results from using MACD as opposed to very choppy trending times, when it will likely cause for erroneous entry calls. It is especially good for determining when to enter a market.

### **How To Use MACD**

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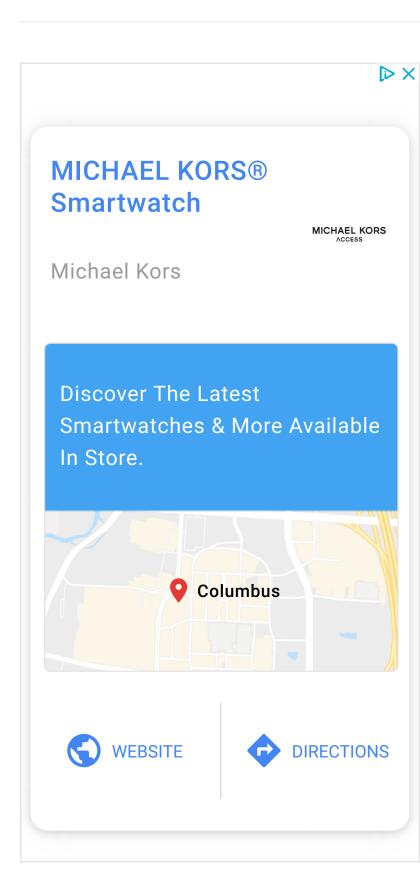
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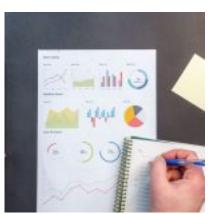
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As already stated, the crossovers of the MACD and the MACD 9-day EMA marks entries and exits. However, it's also important to watch the histogram closely. When the histogram is in negative territory, but have turned upwards, it is usually good to keep an extra for possible early entries. Likewise, if the histogram plots a high bar above the rest, it shows how strong the bulls are and even if a minor decline is imminent it is probably not time to sell, since this has marked a very strong bullish sentiment for the underlying security.

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