Trend vs. No Trend

Which Technical Indicators to Use?

If "the trend is your friend," what happens when there is no trend? This is more than just a rhetorical question, since markets tend to move sideways much more frequently than they trend. For example, currency markets are particularly well known for long-term trends, which are in turn caused by long-term macro-economic trends, such as interest rate tightening or easing cycles. But even in currency markets, historical analysis reveals that trending periods only account for about 1/3 of price action over time, meaning that about two-thirds of the time there is no trend to catch.

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■ The Trend/No Trend Paradox

To make matters worse, many traders typically utilize only one or two technical indicators to identify market direction and trade-timing. This one-size-fits-all approach leaves them exposed to the trend/no-trend paradox – an indicator that works well in trending markets can give disastrous results in sideways markets and vice versa. As a result, individual traders frequently find themselves exiting positions too early and missing out on larger moves as a bigger trend unfolds. Conversely, traders may end up holding onto a short-term position for too long following a reversal, believing they are "with the trend," when no trend exists.

To avoid getting caught in the paradox, this article will suggest using several technical tools in conjunction to determine whether or not a trend

is in place. This will in turn dictate which technical indicators are best used to gauge entry/exit points as well as provide some risk management guidance. Rather than setting forth a list of concrete trading rules, this article seeks to outline a dynamic approach to the use of technical analysis to avoid getting caught in the trend/no-trend paradox.

Trend-friendly Tools

The obvious starting point for this discussion is to define what is meant by a trend. In terms of technical analysis, a trend is a predictable price response at levels of support/resistance that change over time. For example, in an uptrend the defining feature is that prices rebound when they near support levels, ultimately establishing new highs. In a downtrend, the opposite is true – price increases will reverse as they

near resistance levels, and new lows will be reached. This definition reveals the first of the tools used to identify whether a trend is in place or not – trendline analysis to establish support and resistance levels.

Trendline analysis is sometimes underestimated because it is perceived as overly subjective in nature. While this criticism has some truth, it overlooks the reality that trendlines help focus attention on the underlying price pattern, filtering out the noise of the market. For this reason, trendline analysis should be the first step in determining the existence of a trend. If trendline analysis does not reveal a discernible trend, it's probably because there isn't one. Trendline analysis will also help identify price formations that have their own predictive significance.

Trendline analysis is best employed starting with longer timeframes (daily and weekly charts) first and then carrying them forward into shorter timeframes (hourly and 4-hourly) where shorter-term levels of support and resistance can then be identified. This approach has the advantage of highlighting the most significant levels of support/resistance first and minor levels next. This helps reduce the chances of following a short-term trendline break while a major long-term level is lurking nearby.

A more objective indicator of whether a market is trending is the directional movement indicator system (DMI). Using the DMI removes the guesswork involved with spotting trends and can also provide confirmation of trends identified by trendline analysis. The DMI system is comprised of the ADX (average directional movement index) and the DI+ and DI- lines. The ADX is used to determine whether or not a market is trending (regardless if it's up or down), with a reading over 25 indicating a trending market and a reading below 20 indicating no trend. The ADX is also a measure of the strength of a trend – the higher the ADX, the stronger the trend. Using the ADX, traders can determine whether or not there is a trend and thus whether or not to use a trend following system.

As its name would suggest, the DMI system is best employed using both components. The DI+ and DI- lines are used as trade entry signals. A buy signal is generated when the DI+ line crosses up through the DI- line; a sell signal is generated when the DI- line crosses up through the DI+ line. (Wilder suggests using the "extreme point rule" to govern the DI+/DI- crossover signal. The rule states that when the DI+/- lines cross, traders should note the extreme point for that period in the direction of the crossover (the high if DI+ crosses up over DI-; the low if DI- crosses up over DI+). Only if that extreme point is breached in the subsequent period is a trade signal confirmed.

The ADX can then be used as an early indicator of the end/pause in a trend. When the ADX begins to move lower from its highest level, the trend is either pausing or ending, signaling it is time to exit the current position and wait for a fresh signal from the DI+/DI- crossover.

Non-trend Tools

Momentum oscillators, such as RSI, stochastics, or MACD, are a favorite indicator of many traders and their utility is best applied to non-trending or sideways markets. The primary use of momentum indicators is to gauge whether a market is overbought or oversold relative to prior periods, potentially highlighting a price reversal before it actually occurs.

However, this application fails in the case of a trending market, as the price momentum can remain overbought/oversold for many periods while the price continues to move persistently higher/lower

F1) EUR/USD Chart
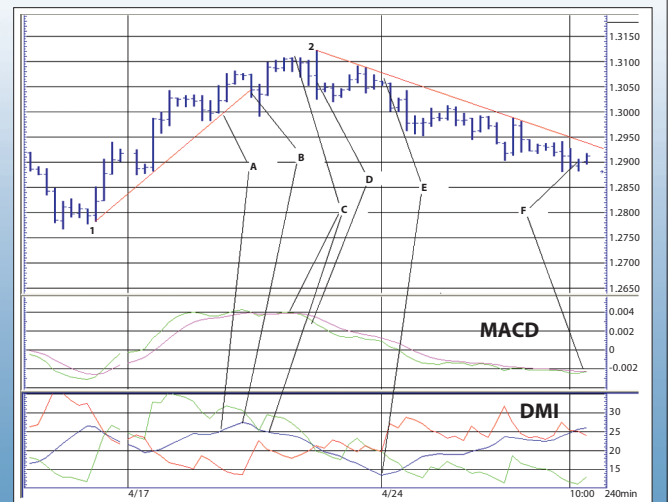
4-hourly EUR/USD chart illustrates use of MACD as the primary signal in the absence of a trend, as indicated by the ADX.

in line with the underlying trend. The practical result is that traders who rely solely on a momentum indicator might exit a profitable position too soon based on momentum having reached an extreme level, just as a larger trend movement is developing. Even worse, some might use overbought/oversold levels to initiate positions in the opposite direction, seeking to anticipate a price reversal based on extreme momentum levels.

The second use of momentum oscillators is to spot divergences between price and momentum. The rationale with divergences is that sustained price movements should be mirrored by the underlying momentum. For example, a new high in price should be matched by a new high in momentum if the price action is to be considered valid. If a new price high occurs without momentum reaching new highs, a divergence (in this case, a bearish divergence) is said to exist. Divergences frequently play out with the price action failing to sustain its direction and reversing course in line with the momentum.

In real life, though, divergences frequently appear in trending markets as momentum wanes (the rate of change of prices slows) but prices fail to reverse significantly, maintaining the trend. The practical result is that counter-trend trades are frequently initiated based on price/momentum divergences. If the market is trending, prices will maintain their direction, though their rate of change is slower. Eventually, prices will accelerate in line with the trend and momentum will reverse again in the direction of the trend, nullifying the observed divergence in the process. As such, divergences can create many false signals that mislead traders who fail to recognize when a trend is in place.

Putting the Tools to Work

Let's look at some real-life trading examples to illustrate the application of the tools outlined above and see how they can be used to avoid the trend/no-trend paradox. For these examples, MACD (moving average convergence/divergence) will be used as the momentum oscillator, though other oscillators could be substituted according to individual preferences.

F2) USD/CHF Chart
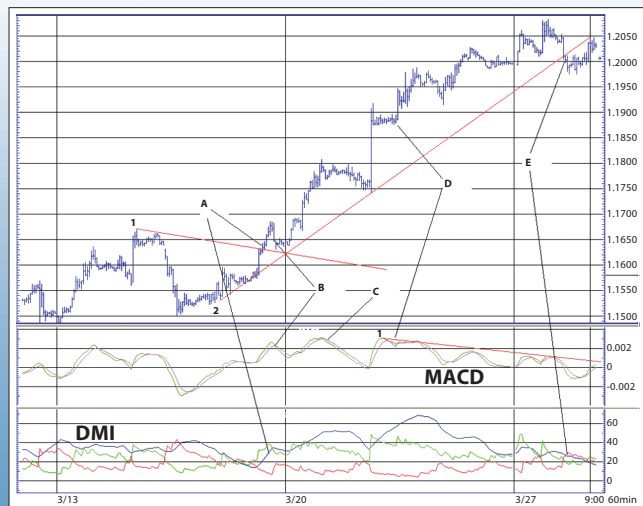
Hourly USD/CHF chart – with DMI (ADX>25) indicating a trend is in place, reliance on momentum oscillators should be discounted.

The first example (Figure 1) illustrates 4-hour EUR/USD price action with MACD and the DMI system (ADX, DI+, DI-) as accompanying studies. Following the framework outlined above, trendline analysis reveals several multi-day price movements, identified by trendlines 1 and 2. Looking next at the ADX, it rises above the "trend" level of 25 at point A, indicating that a trend is taking hold and that momentum readings should be discounted. This is helpful, because if one looked only at the MACD at this point, it might be tempting to conclude that the upmove was stalling as the MACD begins to falter. Subsequent price action, however, sees the market move higher.

Along the way however, trendline 1 is broken and the ADX tops out and begins to move lower (point B). While the price action has been extremely volatile around this point, it should be noted that the ADX over 25 negated the premature crossover signal of MACD as well as the break of support on trendline 1. At point C, the ADX has fallen back below 25 and this suggests taking another look at the MACD, which is beginning to diverge bearishly, as new price highs are not matched by new MACD highs. A subsequent sharp downmove in price generates another negative crossover on the MACD, and since ADX is now below 25, a short position is taken at about 1.3060 (point D).

Following along with trendline 2 now, MACD is clearly weakening as prices move lower. The ADX initially continues to fall indicating the absence of any trend, but begins to turn up after a failed test of trendline resistance at point E. The focus remains on the MACD at this point as the ADX is still below 25. As price declines slow, MACD crosses upward indicating it is time to exit the position at around 1.2900 at point F. Subsequent price action is extremely whippy and the ADX again fails to signal an extended trend, confirming the decision to exit.

The above example showed the interplay between ADX and momentum (MACD), where the absence of a trend indicated traders should focus on the underlying momentum to gauge price direction. Let's now look at an example where a trend is present and it essentially cancels out signals given by momentum.

Figure 2 shows USD/CHF in an hourly format with DMI and MACD as the studies. Beginning with trendline analysis again, trendline resistance from previous highs is broken at point A. Momentum as shown by MACD has been moving higher and supports the break higher. The ADX also rises above 25, confirming the break higher and indicating a long position should be taken at approximately 1.1650. The trade entry could also have been signaled earlier by the crossover of DI+ over DI- and the application of Wilder's 'Extreme Point Rule.'

Subsequent price moves are modest initially, but the relevant feature to note is that the ADX remains well above 25, suggesting momentum signals should be disregarded. This is critical since the MACD quickly generates a signal to exit the trade at point B. Relying on the ADX alone at this point, however, the long position is maintained and subsequent price gains cause MACD to reverse higher again. ADX continues to rise with the price gains, which are also adhering to trendline support. MACD again generates a sell signal at point C, but this is ignored as the ADX approaches 50, suggesting a strong trend is now in place. Price gains become more explosive and the ADX goes on to register new highs. Contrast that with the MACD which is indicating a bearish divergence from point D onwards, even though the uptrend remains intact. The ADX also indicates a bearish divergence, implying trend intensity is fading. Only at point E are exit signals given by the break of trendline support and the decline of ADX below 25 at point E around 1.2000. In this example, a short-term trade was able to capitalize on a much larger move by employing the ADX in addition to the MACD. A strictly momentum based approach would have been caught in multiple whipsaws, or even a premature short based on bearish divergence.

Bottom line

Financial markets are inherently dynamic environments. Nowhere is this more apparent than in the trend/no trend paradox. Trading rules or themes that apply one day might be obsolete by the next day. Carrying that notion over to technical analysis suggests traders need to employ dynamic technical tools to adapt to ever changing markets. An approach that utilizes trendline analysis, Wilder's DMI system, and momentum oscillators can yield far better results across varying market conditions than a single-indicator approach.

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