WELLS FARGO
INVESTMENT INSTITUTE

ASK THE INSTITUTE

What Is Technical Analysis?

Technical analysis assesses whether prices are rising (uptrends) or declining (downtrends) without any regard to the cause. Put another way, it can help ascertain whether there are indeed more buyers than sellers, or vice versa, in the market at a point in time.

How Can Technical Analysis Help?

Our basic philosophy is that using technical analysis does not have to come at the expense of fundamental and economic analysis and rather can help add another lens for looking at assets. For example, when the fundamental outlook seems rosy but the technical outlook is starting to look less positive, it may suggest that much of the good news has been discounted and existing holders are moving on by selling their shares to fewer willing buyers, thereby driving down the price.

This divergence may lead the investor to reevaluate whether "the crowd" may be on to something. The reverse can also happen from time to time. Beaten-down markets where the fundamentals look poor may begin to exhibit less negative price action, which may mean investors are starting to see signs of a turn. If the early fundamentals also begin to turn more positive, the combination could be a good entry point to bet on a turnaround.

How can Technical Analysis Bring Another Dimension to Investment Decisions?

Key Takeaways

- Technical analysis can help identify established trends in financial markets.
- Incorporating technical analysis alongside fundamentals and macroeconomics can help with looking at financial markets from different angles and lead to greater conviction.
- Our Technical Strategy Briefing, available from a Wells Fargo investment professional, provides a regular update on the technical outlooks for five major markets, two large sectors, and a rotating "Chart of the Week."

What Can a Technical Market Chart Tell Me?

S&P 500 Index
Short-term trend: Sideways 1

The S&P 500 Index continues to trade in a wide range. With the index having pulled back, support should be found at the 200-day moving average (2597), followed by the recent low (2581) and the August 2017 low (2426). Resistance on the way back up should be found first at the 50-day moving average (2696), followed by the recent high (2787), and the all-time high (2873). 2

Source: Bloomberg, 4/13/18. Copyright ©2018 Bloomberg Finance L.P. SPX Index is the ticker for the S&P 500 Index on Bloomberg.

Past performance is no guarantee of future results.

The S&P 500 is a market capitalizaation-weighted index considered representative of the US stock market. An index is unmanaged and not available for direct investment.

SUPPORT 2 **RESISTANCE**

2426	2581	2598	2664	2693	2787	2873
			CURRENT LEVEL			

2 Quick summary of what the chart shows and the important support and resistance levels to watch.

1 The index that we are analyzing and the near-term technical outlook.

3 An oscillator that shows whether the price level of a market is stretched to the up or downside.

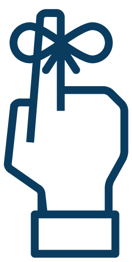
Investment and Insurance Products:

NOT FDIC Insured ▶ NO Bank Guarantee ▶ MAY Lose Value

How Do Technical Analysis and Fundamental Analysis Differ?

Technical Analysis	Fundamental Analysis
Evaluates: The outlook based on price trends, sentiment, seasonality, and money flows	**Evaluates:** The outlook based on the economics, market cycle, and the fundamentals of the asset class
Key metrics: Closing prices, moving averages, oscillators, fund flows, historic tendencies	**Key metrics:** Valuation, macroeconomic trends/data, monetary policy considerations

How Do You Know If a Trend Is Shifting?



Technical analysis can be as much art as it is science, but there are some rules of thumb that can help identify a change in trend:

- If the current price level is above widely watched moving averages and support levels, the market is more likely to be in an uptrend, and vice versa.
- If the picture is less clear and we have less conviction, then we are more likely to wait until a clearer picture emerges.
- Oscillators, such as the relative strength index (RSI) can help identify moments in time when prices may have run up (or down) too far and too quickly, leading to a reversal or consolidation.

What Are the Risks and Limitations of Technical Analysis?

A large part of investing boils down to generating expected returns and the risks associated with those returns—then allocating investments in line with an investor's investment objective and risk-tolerance levels.

Technical analysis ignores these pieces of information, assuming instead that they are aggregated and reflected in the broader price action. This leads to higher sensitivity to markets, which can be noisy from time to time and generate false signals. A good example of this takes place during market pullbacks when fear and outflows can drive markets lower than their intrinsic value (a company's value based on the underlying perception of its true value, which may or may not be the same as the current market value).

During those times, it can help to consider the forecasted economic outlook and what it means for returns and risk rather than getting carried away with the deteriorating technical picture. That is not to say that the technical indicators should be ignored; it just means they need to be part of a broader investment process. Such a multifaceted approach should help investors keep from overreacting to short-term market moves while not missing out on changes in trend. This multifaceted approach is one that we favor (and use) to help navigate fast-paced markets.

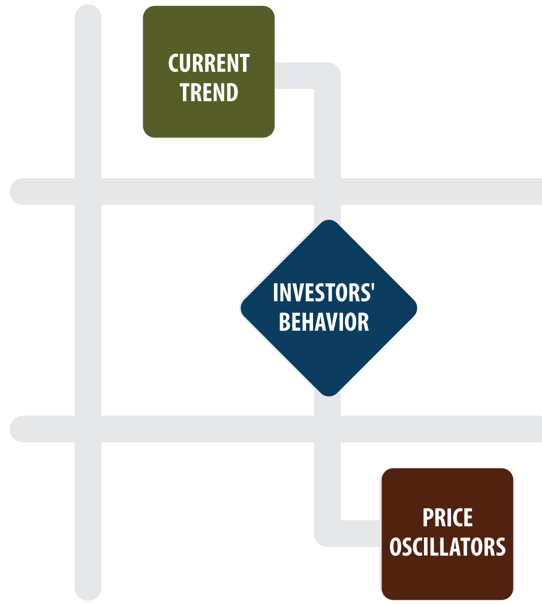
How Do We Conduct Technical Analysis?

There are almost as many ways to conduct technical analysis as there are analysts who utilize it. We focus on attempting to forecast the coming quarters and years because indicators such as sentiment, seasonality, moving averages, fund flows, and price oscillators seem to have the greatest impact in the near term. Also, we monitor what we believe to be the most widely used indicators so we can get a feel for how "the crowd" may be positioned and what the path of least resistance for markets seems to be.

To summarize our approach:

1. We use tools such as moving averages of varying length to determine what the current trend is (up, down, or sideways).
2. Price oscillators such as relative strength can help indicate where markets may be within the trend (upper end, lower end, middle).
3. Other factors like sentiment, flows, and seasonality can help us incorporate history and investors' behavior to see what role they may play in the near future.

We distill these factors into a short-term technical opinion (is the trend higher, lower, or sideways) and highlight which support and resistance levels we consider pivotal (likely to lead to further buying or selling) in the coming months.



All investing involves risks including the possible loss of principal. Equity securities are subject to market risk which means their value may fluctuate in response to general economic and market conditions and the perception of individual issuers. Investments in equity securities are generally more volatile than other types of securities.

Relative strength is a measure of price trend that indicates how a stock is performing relative to other stocks in its industry.

Technical analysis is based on the study of historical price movements and past trend patterns. There is no assurance that these movements or trends can or will be duplicated in the future.

Global Investment Strategy (GIS) is a division of Wells Fargo Investment Institute, Inc. (WFII). WFII is a registered investment adviser and wholly-owned subsidiary of Wells Fargo Bank, N.A., a bank affiliate of Wells Fargo & Company.

The information in this report was prepared by Global Investment Strategy. Opinions represent GIS' opinion as of the date of this report and are for general information purposes only and are not intended to predict or guarantee the future performance of any individual security, market sector, or the markets generally. GIS does not undertake to advise you of any change in its opinions or the information contained in this report. Wells Fargo & Company affiliates may issue reports or have opinions that are inconsistent with, and reach different conclusions from, this report.

This report is not intended to be a client-specific suitability analysis or recommendation, an offer to participate in any investment, or a recommendation to buy, hold or sell securities. Do not use this report as the sole basis for investment decisions. Do not select an asset class or investment product based on performance alone. Consider all relevant information, including your existing portfolio, investment objectives, risk tolerance, liquidity needs, and investment time horizon.

Wells Fargo Advisors is registered with the U.S. Securities Exchange Commission and the Financial Industry Regulatory Authority, but is not licensed or registered with any financial services regulatory authority outside of the U.S. Non-U.S. residents who maintain U.S.-based financial services account(s) with Wells Fargo Advisors may not be afforded certain protections conferred by legislation and regulations in their country of residence in respect of any investments, investment transactions, or communications made with Wells Fargo Advisors.

Wells Fargo Advisors is a trade name used by Wells Fargo Clearing Services, LLC and Wells Fargo Advisors Financial Network, LLC, Members SIPC, separate registered broker-dealers and non-bank affiliates of Wells Fargo & Company.
© 2018 Wells Fargo Investment Institute. All rights reserved.