



## Trading with Objectivity: How to Use Systems Testing and MACD in MetaStock

by Jeff Gibby, MetaStock

### Why Technical Analysis?

Technical analysis has been evolving since the 18th century, beginning with Candlestick patterns and Dow Theory. Today, there are hundreds—if not thousands—of methods ranging from simple to complex. Some work well, others fall short. Some are profitable and consistent, others are inconsistent or unpredictable.

So, with so many tools and strategies out there, the question becomes:

Which ones should you use?

Do you want to trade several times a day, week, or year?

What fits your risk tolerance?

Are you chasing big gains with big drawdowns, or are you a slow-and-steady “Turtle” trader?

One of the biggest strengths of technical analysis is its objectivity. When used correctly, it removes emotion and guesswork from the trading equation—allowing you to focus solely on price action and probability.

### Meet MACD: A Simple Yet Powerful Tool

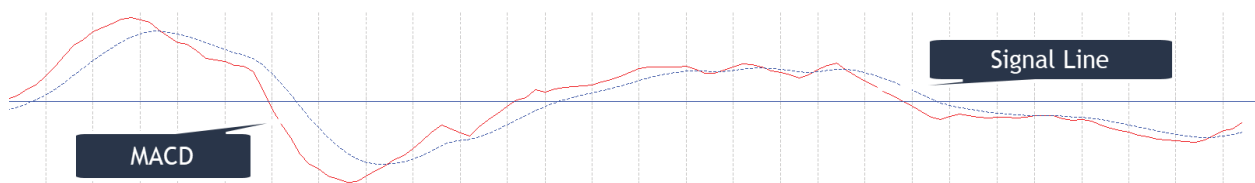
Let’s take a look at one of the most popular indicators: the **MACD (Moving Average Convergence/Divergence)**.

At its core, MACD is straightforward:

It subtracts a 26-period exponential moving average (EMA) from a 12-period EMA.

The result is the MACD line.

A 9-period EMA of the MACD line (called the signal line) is then plotted on top.



## Why is MACD useful?

It helps you measure both **trend** and **momentum**.

In uptrends, the MACD line increases as the 12 EMA pulls away from the 26 EMA.

In downtrends, the MACD goes negative.

In flat markets, the MACD flattens near zero.

MACD can also be used as an **overbought/oversold indicator**—ideal for traders looking for mean reversion. Just be cautious: always confirm reversals before trading against the trend.

## MACD Signals 101

The simplest way to use MACD is by observing **crossovers** with its signal line:

**Bullish Signal:** MACD crosses **above** the signal line → Potential long entry

**Bearish Signal:** MACD crosses **below** the signal line → Potential short entry

These signals are clear, rules-based, and easy to test—which brings us to the power of system testing.



## Why Objectivity Matters

The beauty of indicators like MACD is their **repeatability**. You can back test them, measure performance, and remove “gut feelings” from your trading process.

With objective tools, you no longer need to worry about news, stimulus packages, or political spin. Instead, you focus solely on **price**, **trend**, and **momentum**—treating trading like a true business.

## MACD in Action: Testing with MetaStock

Want to know how MACD really performs? Let's find out.

Using MetaStock's **Systems Tester**, I ran a simulation:

**Stock:** Costco (COST)

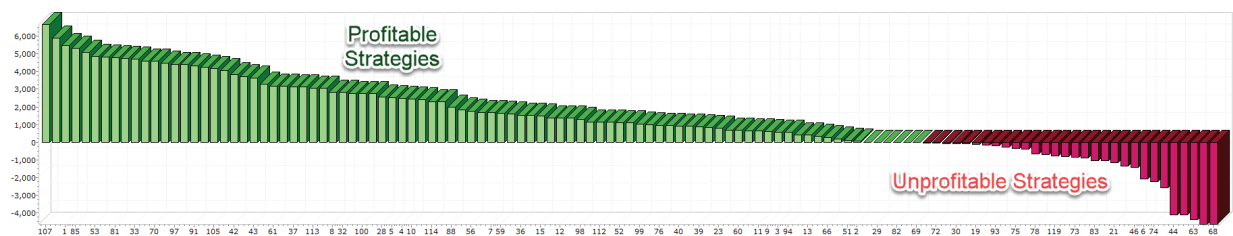
**Timeframe:** 2 years of historical data

**Strategies Tested:** 119 built-in systems

**Initial Capital:** \$10,000

**Position Size:** 75% of equity per trade

Total tests run: **118** (1 stock × 118 strategies)



Here's what happened:

MACD placed **27th** in profitability.

It made **46 trades**, generating a 31.5% hypothetical return.

The top-performing system (Michael Mermer's ETS system) made only 13 trades—but returned a whopping **65.56%**.

**Lesson:** While MACD is useful, it's not always the best performer. This is exactly why system testing is crucial—it helps you **separate signal from noise**.

## Shortcut Your Learning Curve

There's no need to test everything manually. MetaStock lets you compare hundreds of strategies with just a few clicks. You can:

Back test systems

Measure performance in up, down, and sideways markets

Track wins vs. losses

Understand drawdowns

Discover the best-fit strategy for *your* trading style

## More Tools to Explore

Beyond back testing, MetaStock offers tools to enhance every part of your trading workflow:

### Expert Advisors™

Provide buy/sell signals, chart highlights, and market commentary

Help you understand what's happening and *why*

Support over 150 trading methodologies (including Turtle Trading, candlestick patterns, stochastics, statistical methods, and more)

Here's an example of the **MACD Expert Commentary** for Costco:



## MACD By MetaStock

Review of COSTCO WHOLESALE (Trade Price) (COST.O)  
as of 7/30/2025

### Current Statistics

Close: 927.510  
Change: -7.060  
MACD Value: -15.361  
Signal Line: -13.442

The MACD can provide buy/sell indications in three ways, signal line crossovers, overbought/oversold conditions, and divergences.

### Crossovers

Currently the MACD is **bearish** since it is trading below its signal line. The MACD crossed below its signal line 37 period(s) ago. Since the MACD crossed its moving average, COSTCO WHOLESALE (Trade Price)'s price has **decreased 8.24%**, and has ranged from a high of 1,051.050 to a low of 925.135.

### Overbought/Oversold

The MACD is not in an Overbought/Oversold range.

### Divergence

There have been no divergence signals within the last 5 periods.

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## **About the Author**

**Jeffrey Gibby** has worked at MetaStock for over 25 years. He leads the sales and business development teams and is responsible for creating strategic partnerships and launching new products. Jeff has trained traders worldwide and regularly speaks at industry events—bringing decades of practical experience to his educational sessions.

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