

# Moving Average Convergence Divergence - MACD

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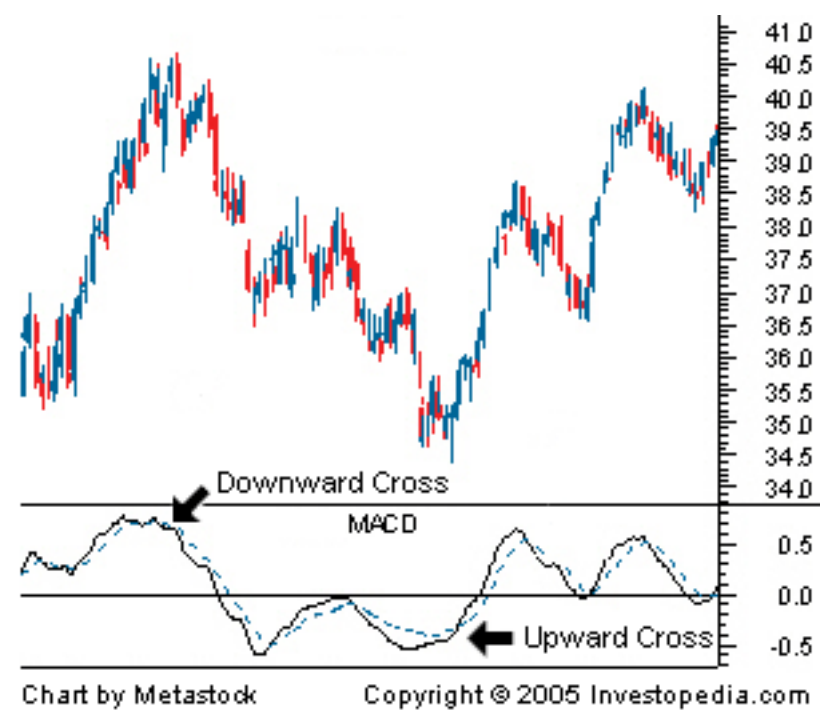
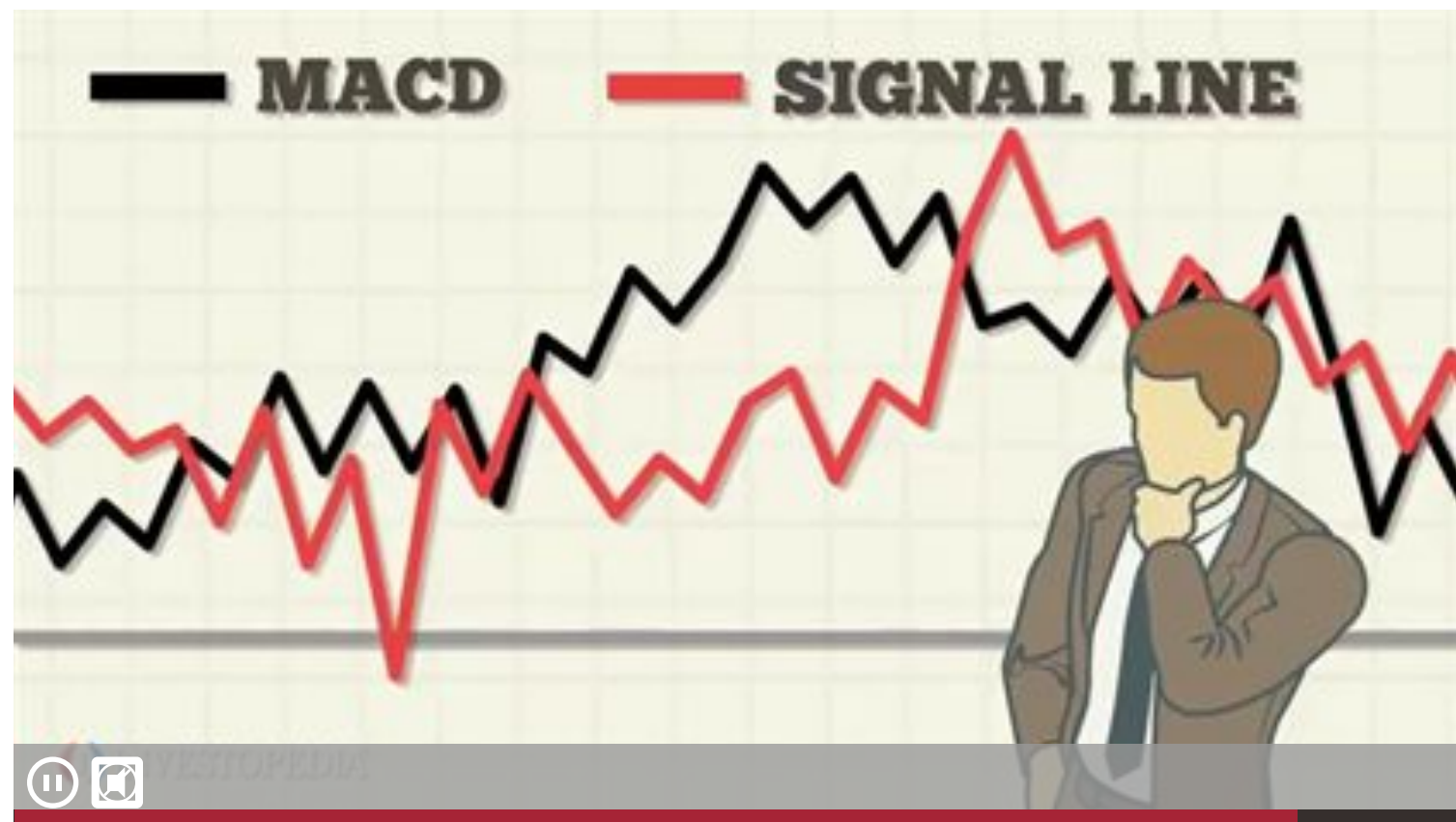
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## What is the 'Moving Average Convergence Divergence - MACD'

Moving average convergence divergence (MACD) is a trend-following momentum indicator that shows the relationship between two moving averages of prices. The MACD is calculated by subtracting the 26-day exponential moving average (EMA) from the 12-day EMA. A nine-day EMA of the MACD, called the "signal line", is then plotted on top of the MACD, functioning as a trigger for buy and sell signals.



### Next Up

TRIGGER LINE

OSMA

CONFIRMATION

EASE OF MOVEMENT

>

>

## BREAKING DOWN 'Moving Average Convergence Divergence - MACD'

There are three common methods used to interpret the MACD:

- Crossovers** - As shown in the chart above, when the MACD falls below the signal line, it is a bearish signal, which indicates that it may be time to sell. Conversely, when the MACD rises above the signal line, the indicator gives a bullish signal, which suggests that the price of the asset is likely to experience upward momentum. Many traders wait for a confirmed cross above the signal line before entering into a position to avoid getting getting "faked out" or entering into a position too early, as shown by the first arrow.
- Divergence** - When the security price diverges from the MACD. It signals the end of the current trend.
- Dramatic rise** - When the MACD rises dramatically - that is, the shorter moving average pulls away from the longer moving average, it is a signal that the security is **overbought** and will soon

### HOT DEFINITIONS

Custodian  
Supply Chain

return to normal levels.

Traders also watch for a move above or below the zero line because this signals the position of the short-term average relative to the long-term average. When the MACD is above zero, the short-term average is above the long-term average, which signals upward momentum. The opposite is true when the MACD is below zero. As you can see from the chart above, the zero line often acts as an area of support and resistance for the indicator.

Are you interested in using the MACD for your trades? Check out our own [Primer On The MACD](#) and [Spotting Trend Reversals With MACD](#) for more information!

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```

* */ var ratetablessavings = angular.module("ratetablessavings",
['common','GeoFactory','SavRatesFactory','MarketsFactory','ngDialog'])
.controller('Ctrl',function($scope,$filter,$sce,$q,$http,$window,GeoData,SavRatesData,MarketsData,
{ //load evironment config -- this file is used to load the configuration object: /Affiliate
Center/Avalon/widgets.bankrate.com-dev/js/services/envconfig.js $scope.$watch(function(){return
$window.bankrateEnvConfig;}, function(){ $scope.bankrateEnvConfig =
$window.bankrateEnvConfig; }); $scope.$watch('clientconfigid',function(){ $scope.attr =
config.tcfg[$scope.clientconfigid]; $scope.isMobile = false; $scope.technicaldifficulties = false;
$scope.savvalidsearch = true; $scope.attr.poweredby = $scope.attr.poweredby || "text"; //function to
reset sorting to default state $scope.resetSorting = function() { //sort rates rows
$scope.savOrderByAttribute = 'defaultSort'; $scope.savReverse = false; } //reset rates sort on load
$scope.resetSorting(); /*Open Lightbox*/ $scope.openNgdialog = function (lightboxID) {
ngDialog.open({ template: lightboxID, className: 'ngdialog-theme-default', scope: $scope}); }); /**/
//Template in use $scope.attr.template = $scope.attr.template|| "default"; //function called to sort
rates based on the selected sorting option $scope.sortRates = function(orderBy, direction) { if (
direction == 'asc' ) { $scope.savReverse = false; } else if ( direction == 'desc' ) { $scope.savReverse
= true; } $scope.savOrderByAttribute = orderBy; } //swap between search by market and search by
zipcode. Track the search view state $scope.saventerbyzip = false; $scope.setGeoSearchType =
function (enterbyzip) { $scope.saventerbyzip = enterbyzip; }; //all available mma/savings prods
$scope.savprods = { "33": {name:"MMA & Savings",order:1}, "34": {name:"$10K MMA &
Savings",order:2}, "35": {name:"$25K MMA & Savings",order:3}, "36": {name:"$50K MMA &
Savings",order:4}, "76": {name:"IRA MMA",order:5}, "37": {name:"Jumbo MMA & Savings",order:6} };
if ( $scope.attr.savprods ) { var savprods = $scope.attr.savprods.split(','); for ( var k in
$scope.savprods ) { if ( savprods.indexOf(k) == -1 ) { delete $scope.savprods[k]; } } } //
MMA/Savings map $scope.savproducts_map = {'33': '271', '34': '545', '35': '546', '36': '547', '37':
'533', '271': '33', '533': '37', '545': '34', '546': '35', '547': '36'}; //widget width $scope.attr.widgetwidth =
$scope.attr.widgetwidth || ""; //Output as html $scope.trustAsHtml = $sce.trustAsHtml; /* override
style, customizations */ //widget $scope.attr.fontfamily = $scope.attr.fontfamily || "";
$scope.attr.widgetWrapperStyle = {}; if ( $scope.attr.fontfamily ) {
$scope.attr.widgetWrapperStyle['font-family'] = $scope.attr.fontfamily; } //search area
$scope.attr.searchareabackgroundcolor = $scope.attr.searchareabackgroundcolor || "";
$scope.attr.searcharealabelcolor = $scope.attr.searcharealabelcolor || "";
$scope.attr.searchareaStle = {}; if ( $scope.attr.searchareabackroundcolor ) {
```

## RELATED TERMS

### Trigger Line

A moving-average line found in the moving average convergence ...

### Confirmation

The use of an additional indicator or indicators to substantiate ...

### Exponential Moving Average - EMA

A type of moving average that is similar to a simple moving average, ...

### OsMA

An abbreviation for Oscillator - Moving Average. OsMA is used ...

### Ease Of Movement

A technical momentum indicator that is used to illustrate the ...

### Derivative Oscillator

The Derivative Oscillator is a technical indicator that applies ...

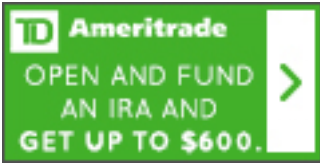
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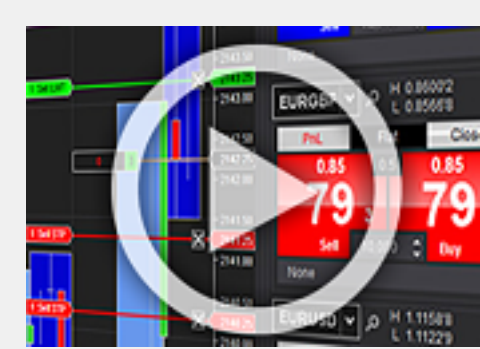




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A Primer On The MACD

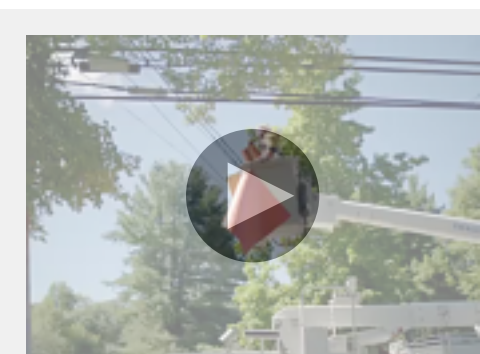
Learn to trade in the direction of short-term momentum.



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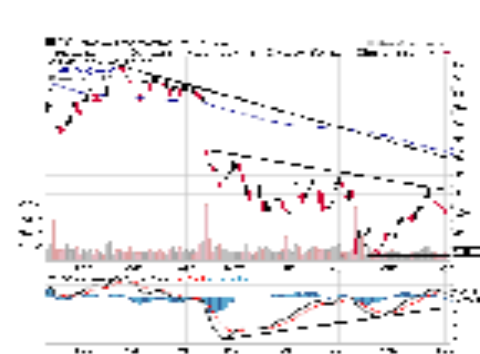
Knowing when trends are about to reverse is tricky business, but the MACD can help.



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MACD Bearish Crossover in Downtrending Stocks (NWSA, URBN)

The MACD is a popular moving average based indicator, and it is signaling the downtrend will continue in these stocks.



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These stocks are exhibiting bearish crossovers in their MACD readings, indicating potential short-term weakness, but also longer-term buying opportunities.



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Read the case against this well-established indicator.



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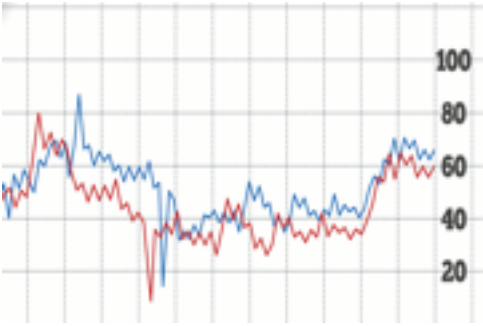
MACD Histogram Helps Determine Trend Changes

Learn how this momentum indicator is used to determine price action on a stock.

TRADING

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TRADING

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