Chapter 24

DIVERGENCE DECISIONS

The subject of divergence is one that we will approach with the utmost caution. We hope we have made ourselves clear in the other volumes of this course that we have little regard for oscillators and indicators when such "tools" are used indiscriminately, or used as a mechanical way to trade. However, when used intelligently, with full understanding of what and how they are constructed, and with knowledge as to when they will be accurate and when they will be misleading, we are not against the use of such tools.

Divergence is a topic that has been hotly debated over the years. An indicator can be divergent from prices for much longer than proponents of its use may care to admit. Yet if used intelligently, divergence can be a useful tool. Our advice is to learn to use it at appropriate times, and perhaps with a few other measurements that will tend to confirm its validity.

In this chapter, we are going to combine the delicate matter of divergence with an indicator that you may find useful.

YOUR JOB AS A TRADER

The job of a trader is that of decision making. A trader uses available practical tools to perform this job.

An interesting trading tool a person can use to help in making a trading decision involves finding divergence in the MACD Histogram (MACDH) oscillator in conjunction with a seasonal entry signal. MACD stands for Moving Average Convergence and Divergence.

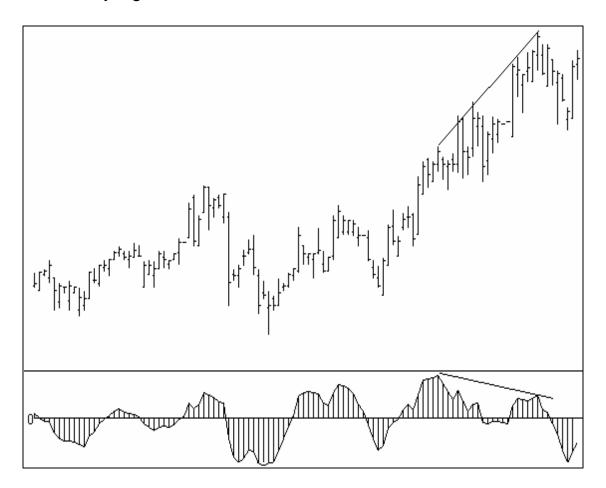
MACDH is a histogram display of the difference between two moving averages.

PUTTING IT ALL TOGETHER WITH MACDH

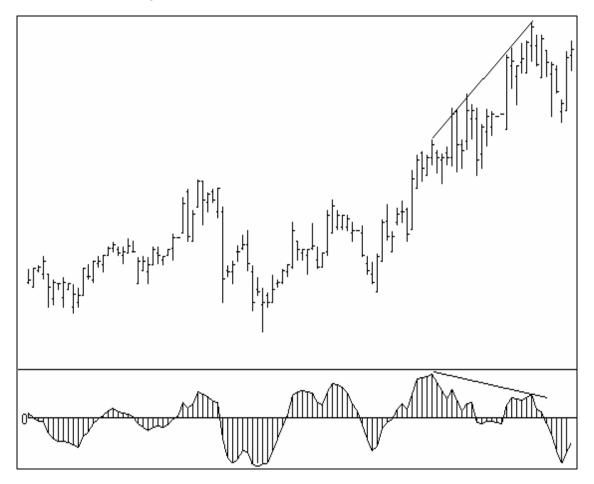
We want to show you a method that you might use in your approach to making a trading decision using a couple of sample trades in which we were involved. This method and approach is valuable for analyzing trades in any time frame.

For the two trades we have chosen we used MACDH to assist in making our trading decision as to the validity of the divergence we were seeing on the shorter term chart.

We are going to look at several tools which may be used to filter these trades. A couple of these tools are historic in nature. For purposes of the MACDH study analysis we used a short-term moving average of 9 bars and a longer term moving average of 19 bars. Although there is nothing magic about them, the 9 bar and 19 bar moving averages are fairly standard when employing MACDH for trade entry signals.



Years of study by the originator of MACDH, Gerald Appel, has shown that divergence such as you see on the following chart offers a very strong confirmation of a trend change. The divergence we are referring to is that while prices are moving higher and making new highs, MACDH is moving lower and <u>not</u> making new highs. As you view this first chart, ask, "Could it be that prices were about to rollover into a downtrend? In that case, you might want to sell short. Or you might think, "Perhaps prices will not go down and perhaps they will enter into a congestion phase!"



THE SHORT-TERM CHART

The chart we are showing you for this particular trade allows you to see prices before you know the final outcome of the divergence shown on the chart. However, entry into this trade, as with any trade, should always be decided on a risk-versus-reward-versus-probability basis. This kind of decision making is the job of a trader. Prior to a proposed long entry, prices had been in an established uptrend.

One has to consider that the price action as shown on the chart may very well lead to prices moving into congestion, as opposed to a genuine down-move in prices. The amount of risk is of course dependent upon where you place your protective stop or your trade exit strategy.

We must now look at the risk/reward possibilities. In order to arrive at a sensible answer, we must assume a protective stop. What percentage of our money are we willing to risk on an outright short position?

Another factor in our decision is the probability of prices entering into a prolonged congestion at this point. History shows that futures prices seldom make Vee-bottoms, but in this case we are concerned with whether or not prices will make a Vee-top. A look at the monthly chart just ahead reveals that prices have entered an area of previous congestion and may move higher before moving back toward the base of a long term congestion.

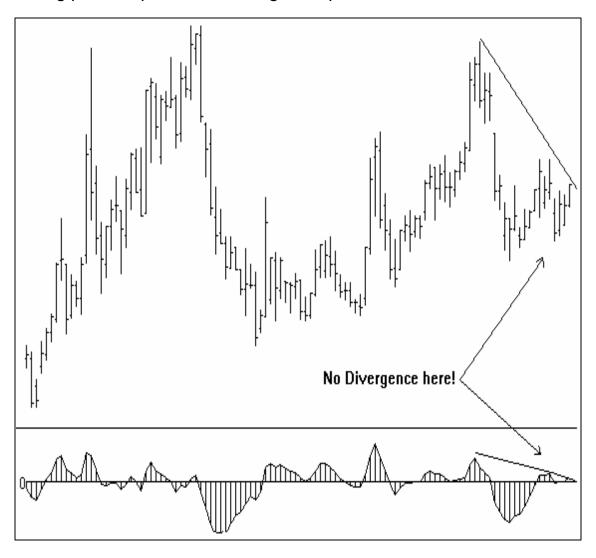
We will combine two studies in different time frames for help in analyzing whether or not, from a technical standpoint, we might expect prices to move down at this point in time. The first is MACDH. The second will be the Bollinger Bands.

We will use three different time frames: short, intermediate, and long term to make our trading decision. The ratio of the time frames will be five to one as follows:

- The intermediate time frame will be five times as long as the shortterm time frame.
- The long-term time frame will be five times as long as the intermediate time frame.

Because we will be looking first at the long-term chart, we're going to shorten the moving averages on MACDH to 5 months and 11 months respectively. The smoothing factor will be 11 months. The smoothing factor can be used to more accurately place the peaks and troughs of the histogram in line with the peaks and troughs of the price action. We shortened the moving average lengths because we want to cause

MACDH to show us on a more dynamically current basis what is taking place in prices. The long-term price chart follows:

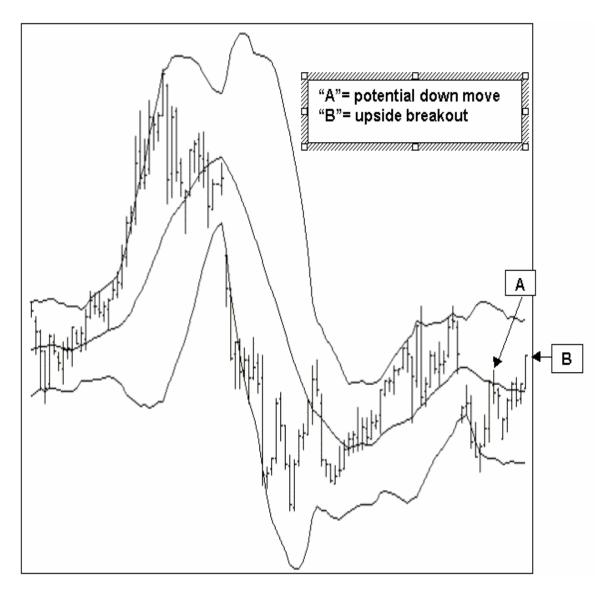


LONG-TERM CHART

We'll also look at a chart showing the Bollinger Bands before we tell you how it was that we rendered our decision to refrain from selling short. Whether we were correct or incorrect you will be able to judge based on the chart that follows the intermediate-term chart.

Keep in mind also, that of the three things price action can do, two of them are against taking this trade. Prices can move up, down, or sideways. For prices to move down significantly, we will need some indication of strong downside action. The most likely price action, if this trade is to be successful, would be for prices to fail to make a new high, thus bearing out the truth of the divergence shown on the short-term MACDH. If prices are not to develop into a congestion, we can expect prices to continue in the direction of the uptrend. The likelihood of a trend continuation is equal to that of a Trading Range top.

Was there any clue as to a potential down move on the basis of the intermediate term chart?



THE INTERMEDIATE-TERM CHART

Not really. We find nothing to indicate such a move. In fact, prices have broken to the upside on the intermediate-term chart.

The Bollinger Bands are flat and parallel to one another. This typically occurs when prices are in a Trading Range.

Bollinger Bands are extremely reliable for showing us likely price containment areas. Looking at them on the previous page indicates containment. The Bands are relatively flat, as is the 20 bar moving average in the center.

The Bollinger Bands indicate a Trading Range continuation as the most probable outcome for prices based on the weekly chart. Prices are moving steadily towards the top of the Trading Range. Experience with Bollinger Bands has shown that when the Bollinger Bands are roughly parallel, the likelihood is for an immediate continuation of the present price action.

The flatness of the bands indicates steady volatility and prices that, for the time being, are basically at equilibrium.

There are also fundamental factors that should be taken into consideration provided we can find out anything through the news or from appropriate reports.

Based on what we have already seen, and quite apart from any fundamental considerations, it is quite possible to make an intelligent trading decision.

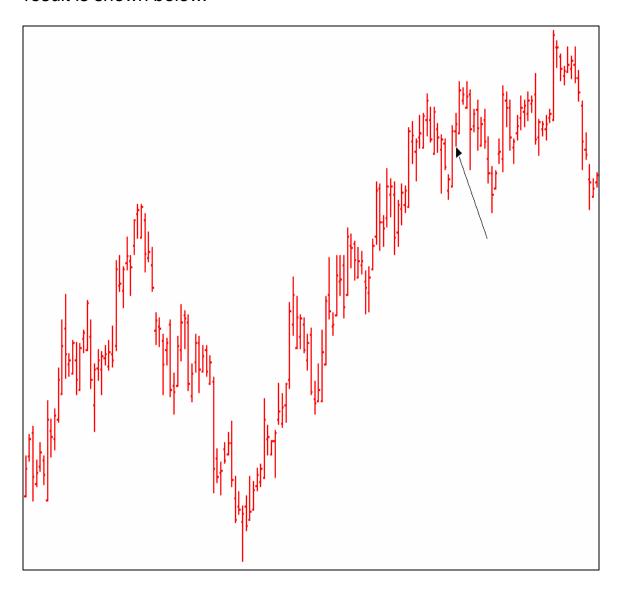
Favoring a Short Position:

Daily chart divergence of MACDH

Against a Short Position:

- Two out of three chart probabilities indicate a Trading Range or upward trend continuation.
- MACDH on the long-term chart shows no divergence and a Trading Range market.
- Bollinger Bands on the intermediate-term chart show steady volatility and upward continuation on a weekly basis.

Our decision: There are more factors against a short position than there are for a short position. Do not take this trade. The near-term result is shown below.



THE NEAR-TERM RESULT

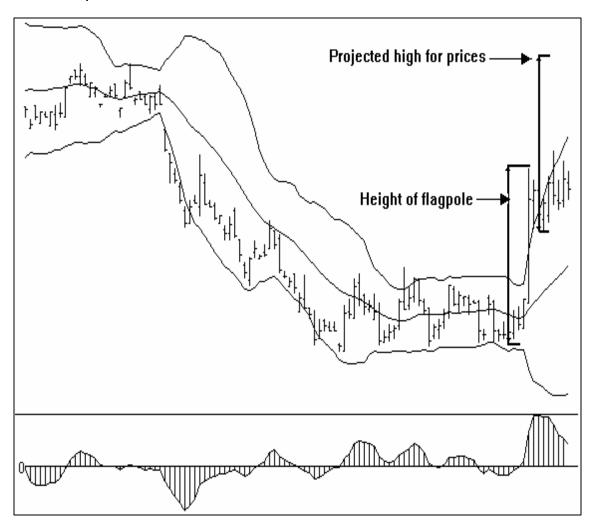
The arrow on the chart above points to the last bar we saw on the short-term chart. Had we made a decision to sell short, we would have been wrong. We would have failed to look at the entire picture prior to making a trading decision.

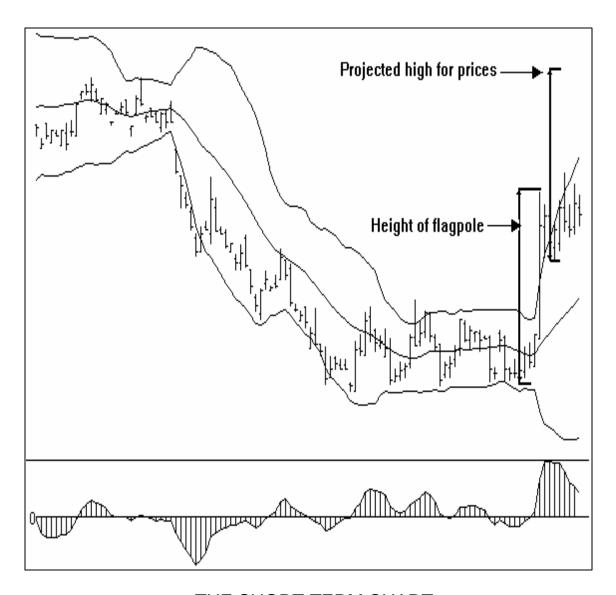
Now, let's take a look at a proposed long trading situation mentioned earlier.

On the short-term price chart, we see that prices have broken out of a Trading Range and are now forming what some call a "flag." According to some technicians, an upside breakout of the flag will lead to a rise in prices to an amount approximately equal to the height of the flagpole.

Notice that prices moved up rather quickly from what had previously been a downtrend. The sudden move has resulted in a minor price consolidation. Experience shows that, unless there is a continuing strong demand, prices will retreat to test the top of the former Trading Range.

Notice that any stops that might have accumulated above the top of the flagpole were recently taken out. A second-time through breakout of the top of the flagpole (not the flag itself) may signify a further real move in prices.





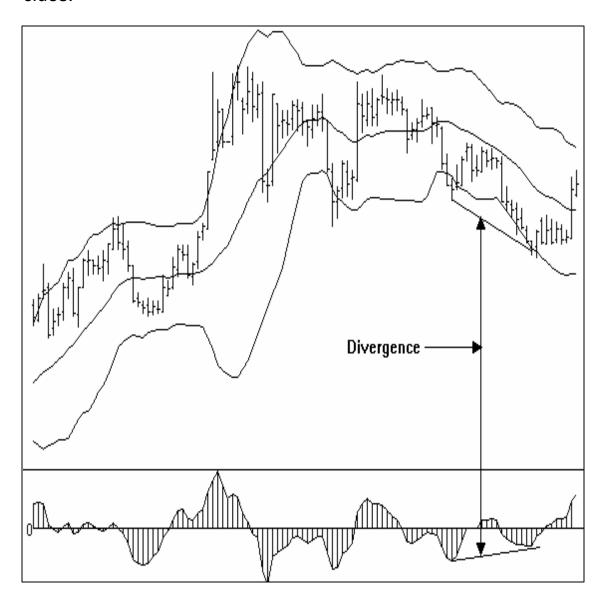
THE SHORT-TERM CHART

The relationships of opens to closes is of no help on the daily chart. Since the correction from the top of the flagpole, there have been an equal number of high and low closes relative to the opens. Prices have been flip-flopping in the minor price consolidation

Bollinger Bands on the short-term chart are showing a rising market, but that is because the reality of the minor price consolidation has not yet registered. MACDH is showing divergence from the Bollinger Bands.

What else might be there to help make a trading decision?

Reviewing the intermediate-term chart below, gives a few additional clues.



THE INTERMEDIATE-TERM CHART

- 1.) MACDH had been divergent to the price action prior to prices leveling off and then moving higher. The divergence proved to be an excellent indication of what was to come.
- 2.) Bollinger Bands: The lower Bollinger Band has turned in and is now flat. This indicates an end to the downtrend, and the beginning of either an uptrend or a Trading Range action. When both Bollinger

Bands are flat, prices tend to move from one Band to the other. A move by price to the level of the upper band would bring prices exactly to the area of the projection on the short-term chart.

3.) That prices may go into a Trading Range is indicated by the fact that there is a previous matching congestion at a price level similar to the current price level.

It is now time to make a decision.

Favoring a Long Position:

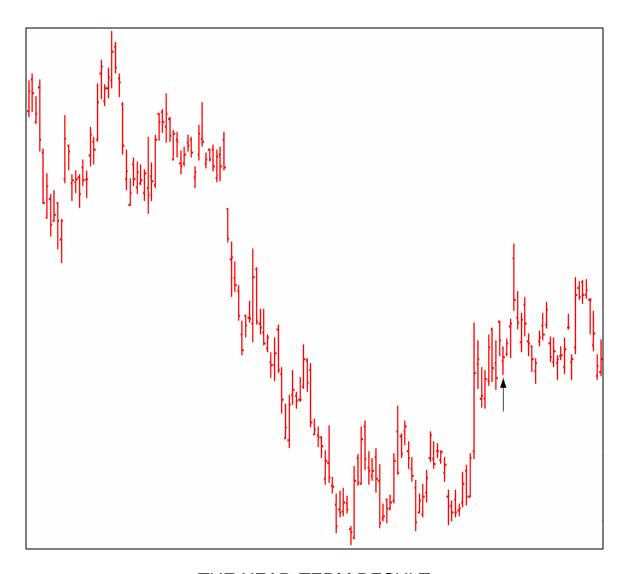
- Prices on the intermediate-term and short-tem chart are rising.
- The shorter term chart favors a move up to the top of the flagpole.
- The intermediate-term chart is supportive of a move to the upper band. Taken together, the chances are prices will pause briefly and then rise further.

Against a Long Position:

 Prices may have moved up too fast and prices are now ready to consolidate.

Our decision:

There are more factors in favor of a long position than there are against it. We will enter a long position at the first opportunity. The near term result is shown on the following page.



THE NEAR-TERM RESULT

The arrow points to the last bar we saw on the short-term chart. So it wasn't such a great trade! We're not perfect. But prices did break out and go up to the top of the flag pole. The only problem was we barely had time to get in before we had to get out (gulp).