Power Momentum Formula

By

Jake Bernstein
PMF
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Table of Contents

Table of Contents

Chapter 1
What is Momentum? ......................................................... 7
  Momentum and Rate of Change ......................................... 12
  What Momentum Can Do for You ...................................... 13
  Conclusion ....................................................................... 14

Chapter 2
Price and Momentum Relationships ...................................... 15

Chapter 3
Momentum Divergence ....................................................... 33
  My Theory of Momentum Divergence .................................... 34
  Momentum as a Leading Indicator ...................................... 35
  Conclusion ....................................................................... 36

Chapter 4
The Timing Secret: Buy Signals .......................................... 37
  Finding Buy Signals .......................................................... 38
  Choosing the Buy Point ................................................... 45
  Conclusion ....................................................................... 56

Chapter 5
The Timing Secret: Sell Signals ........................................... 57
  Looking at the Sell Signal .................................................. 58
  Choosing the Sell Point .................................................... 66
  Conclusion ....................................................................... 77
Chapter 1
What is Momentum?

Many traders are unfamiliar with the momentum indicator or with its value as an aid in timing. Although many traders have heard the term, they are not aware of how momentum is calculated, nor are they familiar with its applications.

Momentum is a very simple indicator, which is easily calculated. In order to calculate the 1-day momentum (MOM), simply subtract today’s price from yesterday’s price. The result is a 1-day MOM. Therefore, if today’s price is $77 and yesterday’s price is $78, then the 1-day momentum would be -1. If today’s price is $77 and yesterday’s price was $75, then today’s 1-day momentum would be +2.

As you can see, the calculation of a 1-day momentum index is extremely simple. To calculate a 2-day momentum index, subtract the price 2 days ago from today’s price. For calculating 3-, 4-, 5-day momentum, follow the same procedure.

Momentum is a rate change indicator, since it provides you with an idea of trend strength. When momentum is moving down very quickly, it is an indication that prices are changing rapidly on the down side with large price moves. When momentum is rising rapidly, it is an indication that the market is trending strongly higher. Momentum can be used as a trading indicator by applying some simple rules.

These will be discussed in the chapters that follow. In this chapter I will illustrate some suggested applications of momentum for the purpose of trading. I will show you some very effective applications of momentum. However, I stress at the outset that these are merely applications and not systems. I believe that they have considerable potential, but they will
require work. Figure 3-1 shows a stock chart with momentum. As you can see from my notes, momentum and price tend to move together. This is, however, not always the case as you will see later on.

**Figure 3-1: Momentum and Price on a Daily Microvision Chart**

As with many indicators, MOM is good at finding trends, however, it gives many false signals as it “flutters” above and below zero. Regardless of this limitation, MOM can be used effectively for position and day trading.

You can use a moving average of MOM to get specific timing signals. Figure 3-2 shows momentum plotted against its own moving average. Signals occur when moving averages cross one another. More about this later on. Several additional momentum and price charts on various markets show my illustration of the relationship between price and momentum in Figures 3-3 through 3-7.
Figure 3-2: Momentum and its Moving Average on an Intraday Market

Figure 3-3: Momentum and Price
Figure 3-4: Momentum and Price

Figure 3-5: Momentum and Price
Figure 3-6: Momentum and Price

Figure 3-7: Momentum and Price
Momentum and Rate of Change

Some markets analysts use rate of change instead of momentum. These indicators are actually one and the same in the final analysis. Although they are derived using different mathematical operations their output is the same in terms of highs, lows and trends. I believe that both momentum and ROC have been ignored and underrated as trading indicators and as valid inputs for trading systems.

These indicators are very adaptable. They can be used not only as indicators, but they can also be developed into specific trading systems with risk management. They can also be used for the purpose of timing spread entry and exit. They are lagging indicators to a given extent. As a result, they tend to be a little late at tops and bottoms.

Momentum and rate of change indicators can be plotted against their own moving averages in order to reduce the time lag of signals. They can also be used with seasonals and cycles as confirming indicators.

In effect, rate of change and momentum are the same indicator. The only difference is that they are computed in a different way. The rate of change is computed by dividing one price with another whereas momentum is computed by subtracting one price from another.

In the final analysis of the line plots that is derived from each of these two indicators is exactly the same. The only thing that differs is the scale value, which is computed. In practice we use momentum as opposed to rate of change since it is much easier to calculate.

As you can see from Figure 3-8, both the rate of change and momentum are exactly the same.
What Momentum Can Do for You

By now you may be wondering exactly where I’m going with this discussion about momentum. Obviously since I have written this manual I believe that momentum is an excellent indicator that can prove very valuable either as an adjunct to your trading system or as part of its own trading system.

What follows in this manual is a clear and concise discussion of a particular methodology that employs momentum as its basic timing indicator and combined with specific risk management principles in order to help you develop a total trading approach. I believe sincerely that if used in a thorough and comprehensive fashion, which includes a disciplined application of the rules and principles to be discussed in this manual, momentum can become your best overall indicator for profits in the stock and commodity markets.

Lest you begin to think that I am proposing momentum to be the “holy grail” of stock and commodity trading rest assured that I am not so naive to believe that such an approach exists. And, you would do well to avoid wallowing in such fantasies as well. The methodology that will be taught in this manual is powerful but it is nevertheless still subject to the same limitations as all trading systems and methods.
The weakest link in the chain will always be the trader. It is the trader who will make mistakes. It is the trader who will lose his or her disciplined. It is the trader who will find ways to “make” their trading system not work.

And finally, it is the trader who will apply the rules presented herein in inconsistent manner, which will ultimately prove to be the undoing of this or any other method. Ultimately the success or failure of any trading methodology including the one in this manual will be a function of the weakest link in the chain.

We know from a long and expensive experience that systems can be either successful or unsuccessful as a function of the individual who is applying that system. We know that the best system in the hands of an undisciplined trader is a losing system. We also know that and mediocre system used by a disciplined and professional trader can become a winning system.

So where does that leave us? Clearly, it leaves us with the understanding that in order for the momentum method in this manual to be successful you will need to first understand it, second apply it, and third manage the risk effectively.

**Conclusion**

Momentum is an important indicator for a number of reasons. This chapter introduced the concept in very broad terms. What remains as our next goal is a discussion, with illustrations, as to its application. This job will begin in the next chapter.
Chapter 2
Price and Momentum Relationships

There are numerous applications of momentum. This chapter will give you an overview of these applications and later chapters will expand considerably on these basic relationships.

- Price and Momentum Rising Together

This is a normal relationship. As prices go up momentum should go up as well. When prices are rising rapidly, momentum should be rising rapidly. A stock or a commodity market can only continue to go up if the move has continued buying power or momentum behind it.

Although momentum must not go up each and every time a stock or a commodity goes up there must be a general rise of both at about the same time. If this does not occur then the market is being set up for a potential top.

Note, however, that at times a market can go up for a while without momentum rising. As long as momentum then begins to rise, prices will usually move higher.

Figures 4-1 through 4-4 show price and momentum rising together in different time frames and in different markets.

Take a close look at the momentum/price lines I’ve marked on each chart. See how rising momentum and rising price run parallel. In fact, you will notice that at times momentum precedes price. In other words, momentum can sometimes tell you AHEAD of time that price will go up.
THIS IS A CRITICALLY IMPORTANT PATTERN THAT WILL BE DISCUSSED IN A LATER CHAPTER.

Figure 4-1: Price and Momentum Rising Together
Figure 4-2: Price and Momentum Rising Together

Figure 4-3: Price and Momentum Rising Together
Another important relationship is momentum and price declining together. This situation is the exact opposite of momentum and price rising together. As a market moves lower it must have a constant supply of selling pressure. Selling pressure expresses itself as momentum growing more negative.

Note that when momentum declines it does NOT mean that there is less momentum overall, it means rather that momentum in the downward direction is increasing. If you think of momentum as energy then imagine the following: you can drive a car forward or you can drive a car backward. No matter which direction you take you have expended energy to make the car move. Markets, in my estimation, are the same way.

Forget about those complicated concepts you’ve heard about. Concepts like “chaos theory,” “regression analysis” and “wave forms.” They may be right but they’re not the most simple answer to the question of “where are prices going?”

Figures 4-5 through 4-8 show the ideal relationship between declining prices and momentum becoming more negative. Remember that momentum can fall below zero. Zero is NOT a stopping point for momentum. The lower momentum goes the lower prices goes.
As momentum becomes more negative prices are likely to continue lower. Declining momentum with price moving sideways or higher is a bearish indication since momentum tends to lead price down as well as up (see the previous section).

It should be noted at this point that there IS a logical stopping point for declining momentum. Prices have a downside limit. The lowest price that a market can go to is zero. Therefore momentum will eventually stop declining when the price of a market goes to zero.

Unless a stock is going to go bankrupt and get de-listed from trading there is a good possibility that as the price of a stock approaches zero (or as a commodity price gets very low) momentum will begin to level off and turn higher. Many excellent buying opportunities in stocks and commodities develop when this occurs. More about this situation in a later chapter!

**Figure 4-5: Price and Momentum Declining Together**
Figure 4-6: Price and Momentum Declining Together

Figure 4-7: Price and Momentum Declining Together
Figure 4-8: Price and Momentum Declining Together

- Prices Move Higher while Momentum Moves Lower -- Bearish Divergence

This is a VERY important condition since it is one in which price and momentum diverge from one another. In other words they go in OPPOSITE directions. If momentum leads price and if momentum begins to decline while price is moving up then it’s a reasonable assumption that at some point in the future price will move DOWN.

Unless momentum takes a new tack up, prices will eventually move in the direction of momentum. When the direction of prices and momentum begin to move in opposite directions the market is telling us something important about it’s intended direction. And, we had better listen carefully.

Here is a simple rule to remember. Please do not forget this rule inasmuch as I will refer to it again and again throughout this manual.

- Rising Price with Falling Momentum Tends to Precede a Top

Let’s look at a few charts that show this condition in various time frames. Figures 4-9 through 4-12 illustrate this important condition VERY clearly. Please take a few minutes to examine my notes.
Figure 4-9: Bearish Divergence

Figure 4-10: Bearish Divergence
Figure 4-11: Bearish Divergence

Figure 4-12: Bearish Divergence
• **Prices Move Lower while Momentum Moves Higher -- Bullish Divergence**

This is a **VERY** important condition since it is one in which price and momentum diverge from one another in the opposite direction from the condition previously described (i.e., bearish divergence). In other words they go in **OPPOSITE** directions.

If momentum leads price and if momentum begins to rise while price is moving down then it’s a reasonable assumption that at some point in the future price will move **UP** as it follows momentum.

Unless momentum takes a new tack **DOWN**, prices will eventually move in the direction of momentum. As I stated earlier “when the direction of prices and momentum begin to move in opposite directions the market is telling us something important about it’s intended direction. And, we had better listen carefully.”

Here is another simple rule to remember. Please do not forget this rule inasmuch as I will also refer to it frequently throughout this manual.

• **Falling Price with Rising Momentum Tends to Precede a Low**

Let’s look at a few charts that show this condition in various time frames. Figures 4-13 through 4-16 illustrate this important condition **VERY** clearly. Please take a few minutes to examine my notes.
Figure 4-13: Momentum and Bullish Divergence

Figure 4-14: Momentum and Bullish Divergence
Figure 4-15: Momentum and Bullish Divergence

Figure 4-16: Momentum and Bullish Divergence
• **Momentum Crossing Below the “Zero” Line**

As you know from the foregoing discussions, momentum can read as a positive number, negative number or zero. For many years traders who used momentum as an indicator theorized (perhaps incorrectly) that when momentum has been reading plus and then crosses zero to read minus, a new bear market has likely started.

It’s true that this DOES occur in many cases. But it does not occur in all cases. I will discuss this last point later on.

Let’s examine a few charts that clearly illustrate the cross from a positive momentum reading to a negative momentum reading and an accompanying bear trend that was triggered when the momentum value crossed below zero. See my notes on Figures 4-17 through 4-21.

Note that momentum CAN be used in this way but I hasten to add that this is not the best application and it is not the most accurate.

**Figure 4-17: Momentum Crossing Below Zero**

![Chart showing momentum crossing below zero](image-url)
Figure 4-18: Momentum Crossing Below Zero

Figure 4-19: Momentum Crossing Below Zero
Figure 4-20: Momentum Crossing Below Zero

Figure 4-21: Momentum Crossing Below Zero
• **Momentum Crossing above the “Zero” Line**

For many years traders who used momentum as an indicator also theorized (perhaps incorrectly) that when momentum has been reading minus and then crosses zero to read plus, a new bull market has likely started.

This DOES occur in many cases, however, it does not occur in all cases of a market turning from bearish to bullish. I will discuss this last point later on as well.

Let’s examine a few charts that clearly illustrate the cross from a negative momentum reading to a positive momentum reading and an accompanying bullish trend that was triggered when the momentum value crossed above zero. See my notes on Figures 4-22 through 4-25.

Note that momentum CAN be used in this way but I advise you that this is not the best application and it is not the most accurate.

**Figure 4-22: Momentum Crossing Above Zero**
Figure 4-23: Momentum Crossing Above Zero

Figure 4-24: Momentum Crossing Above Zero
Moving Average Derivative

At times the problem that can be encountered with the use of momentum crossing above or below the zero line is the fact that price has usually made a large move in the direction of the crossover by that time. In other words, much of the move may already have passed by the time a bullish signal or bearish signal occurs.

This problem can be corrected by using a different approach with momentum. Specifically I mean that we can use a moving average of the momentum in order to determine when price lows and highs have developed. In order to use momentum in this particular fashion we simply construct a moving average of the momentum.

This is a very simple procedure that will be described in a later chapter as the momentum MOM/MA.
Chapter 3
Momentum Divergence

There are three essential ingredients to the application of momentum as part of the methodology that you will learn in this manual. The first of these is to recognize the existence of bullish and or bearish divergence. The second is to determine the presence or absence of a buy or sell signal. And, the third is to effectively manage risk and profit once a trade has been initiated based on a momentum divergence buy or sell signal.

In order to make our work more efficient, let’s introduce a few simple abbreviations that will be used henceforth throughout this manual.

These abbreviations are as follows:

MD+ = Bullish Momentum Divergence
MD- = Bearish Momentum Divergence
MDB = Momentum Divergence Buy Signal
MDS = Momentum Divergence Sell Signal
IT = Initial Profit Target
TS% = Trailing Stop Percent
RSL = Reverse from Short to Long
RLS = Reverse from Long to Short
M- = Momentum Below Zero
M+ = Momentum Above the Zero
MOM/MA = Momentum Moving Average
MBP = Momentum Buy Point
MSP = Momentum Sell Point

Please make note of the above abbreviations since they will be used frequently throughout the rest of this manual both in the text and on most of the charts. Until you have learned them you may wish to transfer them to a small note card so that you will not have to keep referring back to this page.

My Theory of Momentum Divergence

Although you may not agree with my theory, I will spend a little time discussing my understanding of what momentum tells us about a market at any given point in time. Inasmuch as momentum is a measure of the internal strength or weakness of a market, we can determine very easily at any time how weak or strong a market may be depending upon the behavior of its momentum indicator at that time.

As I have stated in the previous chapter the use of momentum and its various interpretations can lead to some significant understandings about the internal structure of a market. By this I mean specifically that we can tell how weak or strong a market is by understanding the momentum at any given point in time and moreover we can frequently tell when a market is about to turn higher or lower based on the behavior of its momentum indicator.

In order to truly understand where a market is going to go it is imperative to understand who is in “control” of that market. What I use the term “control” I am not referring to a group of individuals who are conspiring or plotting to corner a given market. I do not mean it in the sense of controlling the market rather I mean control in this sense of having an impact on a given market.

As an example consider the following situation. There may be 1000 traders actively involved in a given market. For the sake of example, let us assume that this particular market is feeder cattle. If 700 of the actively involved traders are buyers who believe that prices are going to go higher if they act upon their expectations, and they have a sufficient amount of money behind them, they can readily overcomes all of the selling pressure that is being applied by the other 300 traders who may be bearish on the market. In this case the Bulls are in control of the market.

The degree of control in a market depends upon the degree of bullish or bearish sentiment by the various groups of traders. Assume that a particular market or stock has been moving lower for
many weeks. As long as the fundamental conditions underlying the supply and demand factors for that market remain negative that market will continue to move lower.

Although the price of that market may continue to go down as traders continue to sell the market based on yesterday’s news, knowledgeable traders (or if you prefer “insiders”) will begin to buy that market or stock in anticipation of an eventual change of trend. Although the price of the market may still be going down momentum will begin to move in a different direction and the end result will be bullish divergence.

In other words price continues to move lower while momentum moves higher. Eventually a breaking point will occur in which the Bulls gain control over the Bears and prices begin to move higher.

Conversely a very typical situation in terms of market tops occurs while prices are still moving higher based upon public interpretations of supposedly bullish fundamentals. While the public is still buying and prices are moving higher, professional traders are liquidating long positions and selling short. In such situations prices often continue to move higher while momentum moves lower.

This condition can only continue for a certain amount of time before a significant trend change develops and prices go down either due to a lack of buying and or to a significant amount of selling. This condition is reflected by bearish divergence on the price vs. momentum chart. What you will see in this case is prices continuing to move higher as momentum continues to move lower. When the balance of power shifts and the sellers outnumber the buyers, the market will change direction.

The above explanations are as clear as I can make them without the assistance of charts. Suffice it to say for now that this manual will teach you a variety of approaches for determining a momentum divergence buy signal as well as a momentum divergence sell signal.

Once you learn to recognize the buy and sell signals you’ll find it relatively easy to spot moves within various time frames that are frequently quite large in either direction. This is in no way an indication, however, that simply being able to spot these moves you will be successful in trading the stock or commodity markets unless you have learned to apply effective money management. Therefore an integral aspect of what this manual will teach you is related specifically to risk management.

**Momentum as a Leading Indicator**

As I explained in the previous section, leading indicators tend to be more effective than lagging indicators inasmuch as they are frequently not as vulnerable to market whipsaws as are trend-following systems. In examining the charts contained in this manual as well as the charts that you study on your own, you’ll find that momentum tends to lead price most of the
time. Frequently you’ll find that if a market is declining while momentum is rising then shortly thereafter prices will begin to rise.

Conversely you’ll find that if prices are rising while momentum is falling, prices will eventually turn lower. The important factor in using any leading indicator is that it must not get you into the market too early for you may have to sit through some significant movements against you before your trade becomes profitable. In some ways this is or can be just as bad as getting into a trade too late. It is therefore important for momentum to validate its divergence signals by the use of a specific timing indicator, which will theoretically factor out incorrect trades.

**Conclusion**

Momentum divergence is the key to the PMF method. If you understand how to spot momentum divergence you will be two-thirds of the way “there.” By this I mean that you will be well on the way to completely understanding PMF. Chapter 6 will give you a step-by-step procedure for spotting PMF signals.
Chapter 4
The Timing Secret: Buy Signals

This chapter is designed specifically to familiarize you with the PMF timing method. As you know from what was discussed in previous chapters, momentum divergence can be either bullish or bearish. Bullish momentum divergence often develops prior to a price low. Bearish momentum divergence often develops prior to a price high. While this is true you must also remember that not all highs and lows are preceded by bullish or bearish divergence signals.

In a later chapter we will see how you can spot turns in market trends that are not preceded by bullish or bearish divergence and which do not give PMF buy or sell signals. But they are not part of the PMF method.

Before we do that, however, let’s examine specific PMF buy signals and how to determine them. If you understand this chapter as well as the chapter on PMF sell signals, which follows this one, you’ll understand this chapter and you’ll understand virtually everything that you need to know about the use of PMF timing. In order for you to understand the specific PMF timing method it will be necessary for you to follow me through a few simple steps. Do not get frustrated. Perseverance will pay off!

Learning any new trading system or method is like learning a new language. You’ll need to forget many of the things you have learned about timing before reading this manual. Most of them are worthless or useless.

Practice is very important in this or any other method. I’ve provided you with many practice charts and numerous examples. Use them. Once you have learned the PMF method you will
have learned a new language that I believe will serve you extremely well in the short run and in the long run.

As you use PMF and the momentum concepts that have been taught in this manual you’ll begin to realize the relationships above and beyond what I have attempted to show you. You’ll begin to realize that using momentum in the ways that I have suggested will be effective but, more important than its efficacy, will be your understanding of the approach as well as your insights and experiences with it.

In order to succeed with PMF, you need to practice, practice, practice. The more charts you work on the more you will understand what’s involved in the PMF approach. You will be able to spot PMF signals within seconds of examining the charts.

Signals will literally jump out at you once you have learned this technique. I ask you, however, to please make the investment of time that is necessary in order for you to benefit from the PMF approach, theories, and concepts.

**Finding Buy Signals**

In order for you to spot PMF buy signals you must remember the bullish momentum concept. Remember the simple fact that the mere presence of bullish momentum divergence does not immediately trigger a PMF buy signal. In fact momentum divergence can remain in a bullish condition for many weeks or months without a buy signal being triggered.

On occasion the bullish momentum divergence will fail to develop into a buy signal and may, in fact, turn into a bearish pattern without a buy signal having been triggered. In some cases momentum divergence can continue bullish for an extended period of time without a buy signal developing while prices continue lower. This is the wisdom of PMF. In other words the presence of bullish momentum divergence does not necessarily mean that there will be a buy signal.

Conversely the presence of bearish momentum divergence does not automatically trigger a sell signal. In every case the most important thing for you to remember it is that timing is of the absolute necessity. Timing must confirm all bullish momentum divergence and all bearish momentum in divergence in order for them to develop into trading signals.

To act prematurely by buying on bullish momentum divergence without a PMF buy signals is contrary to the rules. To act prematurely and sell on bearish momentum divergence without a PMF sell signals is also contrary to the rules. To do so will likely get you into trouble and will not be consistent with what I’m trying to teach you in this manual.

As an example let’s take a look at Figure 6-1. This Figure illustrates a classic example of momentum divergence. Momentum moves in a bullish direction for many weeks without a change in the underlying price trend. In this case individuals using momentum in the traditional
approach would be very confused. They would be watching prices dropping while momentum continues higher. They would be mystified by the fact that prices continue lower while momentum continues higher.

**Figure 6-1: Momentum Moves Higher as Price Declines**

Many individuals would be buyers repeatedly during this period of time, losing money as momentum continues higher while prices continue lower. This does not mean that momentum is incorrect. It merely means that the market has been under a lengthy period of accumulation without giving a buy signal.

Buy signals are the key to this whole process. If you only look at bullish momentum divergence and buy when it occurs then you’re trying to “pick a bottom” and it will likely not work for you. If on the other hand you wait for momentum divergence to develop into a buy signal then you are indeed on the right track.

Getting back to Figure 6-1, you can see very clearly that the market for one reason or another was not ready to move higher in spite of the fact that momentum continued higher. This situation could go on indefinitely. It would only be when momentum yielded a buy signal that we would actually enter the long side of the market according to the **PMF** rules (which will be explained soon).

It is impossible for me to stress too strongly the point that I have tried to make in the last several
paragraphs. In order to emphasize this point more clearly I will remind you of the following rule:

**BULLISH MOMENTUM DIVERGENCE IS NOT A BUY SIGNAL!**

If this is the case then, what exactly constitutes a PMF buy signal? I will first explain the PMF buy signal to you in words then I will show you a number of illustrations as well as a specific step-by-step procedure that will guide you through the selection process of finding not only bullish momentum divergence, but moreover specific buy signals based on the PMF approach.

Here is the written explanation. Identify a period of bullish momentum divergence, in other words of period of time during which prices move lower and make new lows for a given time frame. If, at the same time momentum is moving higher and shows higher lows, then a buy signal is generated when, on any given time frame, a new closing momentum high is made that is higher than the highest momentum during the period of bullish convergence. I’m sure that you followed that perfectly! Oh . . . you didn’t?

I think I can make it much simpler for you if you take a look at Figure 6-2. This Figure shows the following pattern: a new low in price was made at point A. At approximately the same time, at point B, momentum was not making a new low. This can readily be seen by looking to the left of point B. You can clearly see that there was a lower momentum point to the left of point B. This is the classic bullish divergence pattern.

Although price made a new low for the move momentum did not. On my chart I have marked the new price low within the corresponding momentum to that price low with B. I have also marked the previous momentum low with a C and the corresponding price with a D.
If this is confusing to you that I suggest you examine Figures 6-3 through 6-6.

Figure 6-3: Bullish Momentum Divergence
Figure 6-4: Bullish Momentum Divergence

Figure 6-5: Bullish Momentum Divergence
These Figures clearly illustrate the concept that I presented with regard to the selection of bullish divergence. Bullish divergence can be easily spotted once you have sufficient experience in doing so. Just remember that there are a number of rules that you must follow if you are going to be successful in finding periods of bullish divergence. Here is a synopsis of the rules:

1. **For spotting bullish divergence on daily charts, use a three-month timing window.** In other words during which you will spot or attempt to spot the bullish divergence. You may use up to five or six months once you become experienced with the technique.

   However the three-month window is sufficient for you to find valid signals. Do not use periods of time that are less than three months in length in order for you to develop a bullish divergence time frame. This does not mean that the bullish divergence must occur for the entire three months. Your simply using the three-month period as your frame of reference.

2. **In order for a valid bullish divergence signal to occur the period of bullish divergence must have been at least six calendar days or in other words six trading days.** This holds true if you are using intraday charts as well. If for example you are using an intraday time frame of 60-minute charts, you will still
require at least six of those hourly bars in order to develop a period of bullish divergence. You will find this more clearly shown in the illustrations.

3. Find the lowest price low on the chart. Once this price low has been found, mark it with the letter A.

4. Now move to the momentum indicator and mark it accordingly with the letter B.

5. From this point move to the previous momentum low and mark it C.

6. Move to the price that corresponds to C and mark it with a D. You should now have a configuration, which looks like the following illustration.

Figure 6-7: Bullish Momentum Divergence

7. Once you have selected your points A, B, C and D, you are ready to draw your penetration point, which will yield the buy signal.
Choosing the Buy Point

Once you have completed studying my examples, I suggest you practice finding bullish momentum divergence. It would be a good idea to review the rules 1-7 as noted on pages 57-58. I have provided a number of charts for you to use as practice. These appear in Figures 6-8 through 6-13.

Figure 6-8: Bullish Momentum Divergence (practice chart)
Figure 6-9: Bullish Momentum Divergence (practice chart)

Figure 6-10: Bullish Momentum Divergence (practice chart)
Figure 6-11: Bullish Momentum Divergence (practice chart)

Figure 6-12: Bullish Momentum Divergence (practice chart)
Once you are able to complete the selection of bullish divergence on these practice charts and you are ready to go on to the next step which is choosing the buy point. (The answer key to the charts appears in Appendix I at the end of this manual.)

You’ll find the procedure for selecting the buy point to be ultimately simple. All you need to do is to find the highest momentum point between the two momentum points that you originally chose. If we are to remain with our selected lettering procedure, then the two points on momentum are points B and C.

If you examine the ideal situation as shown in Figure 6-14, you will see precisely what I mean. This Figure illustrates a number of possible situations with which you may be confronted when selecting the buy point. Simply stated the buy point on momentum is always the highest point between the two momentum points, which you chose when you evaluated the bullish divergence situation. We will use E to mark this point. I will also call it the MBP (Momentum Breakout Point).
Figure 6-14: Bullish Momentum Divergence

Figure 6-15: Bullish Momentum Divergence
As you can see from examining Figure 6-14 the selection of the buy point for a momentum divergence buy signal is a very simple matter. At times the highest momentum point will come early by which I mean close to the first momentum point to the left (C) whereas other times it will come very late by which I mean close to the momentum point to the very right (B.)

You will observe that in my illustration below I have drawn a horizontal line across the high point of the momentum lettering this as E. The simple rule for selecting a buy signal is as follows:

THE HIGHEST MOMENTUM POINT WHICH WE HAVE DESIGNATED AS POINT E IS THE BUY POINT

Now let’s take a look at some examples of the buy point penetration. These are shown on Figures 6-16 through 6-20.

**Figure 6-16: Bullish Momentum Divergence**
Figure 6-17: Bullish Momentum Divergence

Figure 6-18: Bullish Momentum Divergence
Figure 6-19: Bullish Momentum Divergence

Figure 6-20: Bullish Momentum Divergence
As you can see the procedure is very simple and very straightforward. As you can also see in most cases, there is a virtually immediate response in price to the upside. I have included a number or examples in which the penetration and buy signal do not result in immediate response to the upside by price, however, as I stated previously, in majority of cases price does immediately respond in the direction of the momentum divergence buy signal.

As I stated many times previously, the most important aspect of my work is that you practice, practice, practice. Only in so doing will you gain the experienced necessary to choose the buy points correctly. In order to assist you in this effort I have provided five practice charts in different time frames. These are numbered Figures 6-21 through 6-25. You will find the answers in Appendix I.
Figure 6-22: Bullish Momentum Divergence (practice chart)

Figure 6-23: Bullish Momentum Divergence (practice chart)
Figure 6-24: Bullish Momentum Divergence (practice chart)

Figure 6-25: Bullish Momentum Divergence (practice chart)
Conclusion

This chapter is giving you highly specific information on how to select the **PMF** buy points as well as the bullish momentum divergence points. I gave you quite a few practice charts to help you learn the correct selection process. As before, I urge you to practice.
This chapter is designed to familiarize you with sell signals and bearish divergence using the PMF method. As you know from previous chapters, momentum divergence can be either/or bullish or bearish. In other words bullish momentum divergence tends to occur prior to lows and bearish momentum divergence tends to occur prior to highs. While this is true we must also remember the very important fact that not all highs and lows are preceded by bearish or bullish divergence signals.

In a later chapter we will see how you can spot turns in market trends that are not preceded by bullish or bearish divergence and which do not give PMF sell or buy signals. But for now, let’s look at specific PMF sell signals and how to determine them. This chapter, and the preceding chapter, are the most important ones in this manual. If you understand this chapter and the previous chapter, then you’ll understand virtually everything that you need to know about using PMF timing successfully.

In order for you to understand the PMF timing method it will be necessary for you to follow me through a few simple steps as we did in the previous chapter. I remind you that learning any new trading system or method is similar to learning a new language. You’ll need to forget many of the things you have learned about timing before reading this manual, because most of them are either effete, worthless or useless. Hopefully, when you see the effectiveness and logic of PMF you’ll see what I mean. Having already learned PMF buy signals will make this chapter easier for you.

I have previously emphasized the importance of practice. Practice is essential in learning this or
any other method of market analysis. I have, therefore, provided you with a selection of practice charts and specific examples, designed to shorten your learning curve. Once you have learned the PMF method you will have learned a new language that I believe will serve you extremely well.

Looking at the Sell Signal

In order for you to spot PMF sell signals you must remember the concept that was previously discussed with regard to momentum divergence. Sell signals are preceded by a period of bearish momentum divergence. Remember the mere presence of bearish momentum divergence does not necessarily trigger a PMF sell signal immediately.

In fact momentum divergence can remain in a bearish condition for many weeks or months without a sell signal being triggered. On occasion bearish momentum divergence will fail to develop into any kind of signal, or may in fact develop into a bullish pattern without a sell signal having been triggered.

In some cases momentum divergence can continue bearish for an extended period of time without a sell signal developing while prices continue higher. This is the wisdom of PMF. In other words just because there is bearish momentum divergence does not necessarily mean that there will be a sell signal.

In every case the most important thing for you to remember is that timing is the key! There cannot be PMF buy or sell signals without timing. Timing must confirm all bearish momentum divergence and all bullish momentum divergence in patterns.

To act prematurely and sell on bearish momentum divergence without a PMF sell signal is also contrary to the rules. To do so will likely get you into trouble and will not be consistent with what I’m trying to teach you in this manual!

As an example of lengthy bearish divergence, let’s take a look at Figure 7-1. This Figure illustrates a classic example of momentum divergence continuing in a bearish direction for many months without a change in the trend of the underlying market. In this case individuals using momentum in the traditional sense would be very confused.
They would be watching prices continue to rise while momentum continued to decline. They would be mystified by the fact that prices continue higher while momentum continues lower. In fact many individuals would be sellers during this period of time only to see their trades closed out repeatedly at losses because momentum continued lower in spite of the fact that prices continued higher.

This does not mean that momentum is incorrect, it merely means, in my estimation, that the market continued under a lengthy period of distribution without giving a sell signal. Sell signals are the key to this whole process. It’s simple and clear. If you look at bearish momentum divergence and sell when it occurs, then you’re trying to pick a top and it will likely not work for you. If on the other hand you wait for momentum divergence to develop into a sell signal then you are likely to be correct.

Getting back to Figure 7-1, you can see very clearly that the market for one reason or another was not ready to move lower in spite of the fact that momentum continued down. This situation could go on indefinitely. Only when momentum yields a sell signal would we actually have entered the short side of the market according to the PMF sell signal rules (which will be explained later on).
It is impossible for me to stress too strongly the point that I have tried to make in the last several paragraphs. In order to emphasize this point more clearly I will remind you of the following rule:

**BEARISH MOMENTUM DIVERGENCE IS NOT A SELL SIGNAL!**

If this is the case then what exactly constitutes a PMF sell signal? I will first explain it to you verbally and then, in order to clarify the explanation, I will show you a number of illustrations. I will give you a specific step-by-step procedure that will guide you through the selection process of finding not only bearish momentum divergence, but moreover specific sell signals based on the PMF approach.

Here is the written explanation of a PMF sell signal. Find a period of bearish momentum divergence, in other words, a period of time during which prices move higher and make new highs for that given time frame but during which time momentum is moving lower. A sell signal is generated when, on any given time frame, the closing is lower than the lowest momentum low during the period of bearish divergence.

I think I can make it much simpler for you if you take a look at Figure 7-2. This Figure shows specifically the following pattern: a new high in price was made at point A. At approximately the same time, at point B, momentum was not making a new high. This can readily be seen at point C (looking to the left of point B).
Figure 7-2: Bearish Momentum Divergence

Although price made a new high for the move, momentum did not. You can see that on my chart I have marked the new price high within the corresponding momentum to that price high with the B. I have also marked the previous momentum high with a C and the corresponding price with a D.

If this is confusing to you that I suggest you examine Figures 7-3 through 7-6. These Figures clearly illustrate the concept that I presented above with regard to the selection of bearish divergence.
Figure 7-3: Bearish Momentum Divergence

Figure 7-4: Bearish Momentum Divergence
Figure 7-5: Bearish Momentum Divergence

Figure 7-6: Bearish Momentum Divergence
Bearish divergence can be easily spotted once you have sufficient experience in doing so. Just remember that there are a number of rules that you must follow if you are going to be successful in finding periods of bearish divergence. Here is a synopsis of the rules:

1. **For spotting bearish divergence on daily charts, use a three-month time window.** In other words this is the time span during which you will spot or attempt to spot the bearish divergence. You may use up to five or six months once you become experienced with the technique. However the three-month window is sufficient for you to find valid signals.  
   Do not use periods of time that are less than three months in length. This does not mean that the bearish divergence must occur for the entire three months. You’re simply using the three-month period as your frame of reference.

2. **In order for a valid bearish divergence signal to occur the period of bearish divergence must have been at least six trading days.** This holds true if you are using other time frames as well.
   If for example you are using an intraday time frame on 60-minute charts, you will still require at least six hourly bars in order to develop a period of bearish divergence. You will find this more clearly shown in the illustrations.

3. **Find the highest price on the chart. Once this price high has been found mark it with the letter “A.”**

4. **Now move to the momentum indicator for the same date and mark it accordingly with the letter “B.” This point can vary by a few days left or right of “A.”**

5. **From this point move to left on momentum to find the highest momentum and mark it with the letter “C.”**

6. **Now move up to the price point that corresponds with “C.”**

7. **Mark this point with the letter “D.” You should now have a configuration, which looks like the illustrations in Figures 7-1 through 7-6.**

8. **Once you have selected your points A, B, C and D, you are ready to draw your penetration point, which will yield the sell signal.**

For the purposes of review, please examine Figure 7-7.
Figure 7-7  Bullish & Bearish Momentum Divergence Schematic

**Bullish Divergence**

Price

Indicator

**Bearish Divergence**

Price

Indicator
Choosing the Sell Point

Once you have completed studying my examples I suggest you practice finding bearish momentum divergence on your own. It would be a good idea to review the rules 1 through 8, as noted on page 78. I have provided some charts for you as practice. These appear in Figures 7-8 through 7-12.

Figure 7-8: Bearish Momentum Divergence (practice)
Figure 7-9: Bearish Momentum Divergence (practice)

Figure 7-10: Bearish Momentum Divergence (practice)
Figure 7-11: Bearish Momentum Divergence (practice)

Figure 7-12: Bearish Momentum Divergence (practice)
Once you are able to complete the selection of bearish divergence on these practice charts, you are ready to go on to the next step, which is choosing the sell point. (The answer key to the charts appear in Appendix I at the end of this manual).

You’ll find the procedure for selecting the sell point to be ultimately simple. All you need to do is to find the lowest momentum point between the two momentum points B and C that you originally chose. If you examine the ideal situation as shown in Figures 7-13 and 7-14 and you will see precisely what I mean.

Simply stated the sell point on momentum is always the lowest point between the two momentum points that you chose when you evaluated the bearish divergence situation. This point is marked as “E.”

**Figure 7-13: Bearish Momentum Divergence**
As you can see from examining Figure 7-14 the selection of the sell point for a momentum divergence sell signal is a very simple matter. At times the lowest momentum point will come early by which I mean close to the first momentum point to the left (C) whereas other times it will come very late by which I mean close to the momentum point to the very right (B).

You will observe that in my illustration I have drawn a horizontal line across the low point of the momentum lettering this as (E). The simple rule for selecting a sell signal is as follows:

**THE LOWEST MOMENTUM POINT WHICH WE HAVE DESIGNATED AS POINT E IS THE SELL POINT.** When it is penetrated on a closing basis, a sell signal is triggered.

Now let’s take a look at some examples of the sell point penetration. These are shown on Figures 7-15 through 7-20.
Figure 7-15: PMF Sell Signal

Figure 7-16: PMF Sell Signal
Figure 7-17: PMF Sell Signal

Figure 7-18: PMF Sell Signal
Figure 7-19: PMF Sell Signal

Figure 7-20: PMF Sell Signal
As you can see, the procedure for selecting a momentum sell point is simple and straightforward. As you can also see, in most cases there is virtually an immediate response in price to the downside. I have included a number or examples in which the penetration and sell signal do not result in immediate response to the downside by price, however, as I stated previously, in majority of cases price does immediately respond in the direction of the momentum divergence sell signal.

It is important that you practice, practice, practice! Only in so doing will you gain the experience necessary to choose the sell points correctly. In order to assist you in this effort I have provided five practice charts in different time frames. These are numbered Figures 7-21 through 7-25. Please use them for practice now. You will find the answers in Appendix I.

**Figure 7-21: Bearish Momentum Divergence (practice)**
Figure 7-22: Bearish Momentum Divergence (practice)

Figure 7-23: Bearish Momentum Divergence (practice)
Figure 7-24: Bearish Momentum Divergence (practice)

Figure 7-25: Bearish Momentum Divergence (practice)
Conclusion

This chapter has given you very specific information on how to select PMF sell points as well as the bearish momentum divergence points. I gave you a few practice charts to help you learn the correct selection process.