When I landed my first job in the financial services industry, my employers sent me to New York, one of the most exciting cities in the world, for training. For a small town southern boy, it was an eye-opening experience. One of the most fascinating, and certainly the liveliest, places I visited was Wall Street. The floor of the New York Stock Exchange is always jumping. People move around faster than a hive of worker bees. Everyone is yelling and shouting. On the surface it looks like total chaos, but you soon learn that it is an orderly chaos. All of the players have a clear understanding of how the game is played and they understand their role in it. During the course of my training, I received many hours of instruction on corporate research. I learned the traditional methods used to rate and select various stocks and investments. A lot of my time was spent on learning the intricacies of technical analysis. I was a good student and studied hard. I had a desire to learn about the markets because I enjoyed investing. When I left the big city, I admit that I truly believed that I knew something and I was proud of it. Little did I know the extent of my ignorance!

Immediately upon my return to Oklahoma City and the local brokerage office, I reported for duty. One of my fellow brokers, Chappy, had been working in the financial management field for almost 30 years. I saw him busy at work and stepped over to speak to him. On the corner of his desk was an enormous pile of paperwork. A voluminous stack of research detailing just about anything anyone would want to know about dozens and dozens of companies and their stocks.
I struck up a conversation with Chappy, just small talk. I wanted him to know how much I knew. After a few minutes, he smiled at me and said, “See all of this research. These papers contain millions of dollars worth of analytical studies. In this pile of papers are ratios, charts, and all sorts of information, but all of that stuff really doesn’t matter.” Then, he took his arm and shoved that huge stack of paper right off the desk and right into the trash. “See that,” he pointed to the tickertape running across one wall of the office. “That, my friend, is all that matters. If you want to make money on Wall Street, learn to read that tape.”

Today, after I have been investing and trading for almost 30 years, I agree with Chappy. If you want to be a successful trader, you have to learn to read the tape. Reading the tape is much more than just looking at a number running across a bar. Reading the tape means understanding the significance of the numbers as they move and understanding them in relation to other numbers and other data, including time. It is a skill that is learned with much effort.

SOMETIMES, THERE IS TOO MUCH OF A GOOD THING

In my office I have an old tape reader. It is a nice conversation piece. With the tiny band of paper, it looks almost like a small cash register receipt. It is incredible to think that years ago that simple machine was the way traders received market data. In fact, that original tape reader, slow and awkward as it must have been, was actually superior to previous methods (Figure 4.1).

I have heard stories about early days when flagmen actually transmitted data from Wall Street to Philadelphia. These men stood on high ground and communicated stock prices by the movements of their flags. Each flagman received data from the man before him, and he, in turn, sent the information down the line to the next flagman. Wow! In the age of information, that seems almost unbelievable. I wonder how accurate those transmissions were?

Today, with a computer, an internet connection, and a data feed source that transmits real time quotes, we can get more information than we want. We can gather all sorts of numbers and charts and watch dozens of indicators. In fact, frequently, there is so much data that it is difficult to determine what is useful and what is garbage. If you get too much data it is confusing and impossible to know what to do. Later in this chapter, I explain the indicators I use and how I interpret them. As you trade, you will gather the indicators that you find to be the most reliable. Just do not try to get too much information because it will confuse you. At least today we do not suffer from a lack of information (Figure 4.2).
FIGURE 4.1 Stock prices were transmitted via a small tape reader.
Source: www.dtitrader.com

FIGURE 4.2 RoadMap™ is my current tape reader. Technology has come a long way.
Source: www.dtitrader.com
TRADING IS AN ART

Trading is an art and not a science. The trading process is as intricate and delicate as the finest ballet. In fact, just like a ballet, the markets have a unique rhythm. There is a tempo for an up market and another for a down market. And there are times when the market’s rhythm is so complex that the astute trader knows that it is not time to dance. If you want to be a good trader, you have to learn to understand the market’s beat, and step to it.

Learning which numbers to watch and how to interpret them takes time and patience. To know that a stock is trading at a certain price means nothing unless you know something about where the stock has been trading and where it is likely to go from this point. Likewise, to understand an index, you need to know its key numbers, its highs and lows, how it generally responds during specific times of the day and the year, and its trading history.

It would be easy to get paid on Wall Street if there were a simple set of rules to follow. Just learn the rules, obey them, and get rich. A scientist works by rules. A scientist takes a known substance, subjects it to a series of tests, and identifies it. Or, the scientist can follow an established procedure and produce a known result. There is a proven method that is followed to get the same results time and time again. Trading is not like that. There are no set rules that always work. The market is dynamic; it changes with world events. If there is a political upheaval, if there is scarcity of a needed commodity, if there is a major technological breakthrough, the markets respond. But, the exact response cannot be known. The truth is, it does not even take a major event to affect market direction. Sometimes markets seem to shift for no particular reason at all. That is why trading is so difficult.

An experienced trader has identified the gauges to watch and knows the amount of importance to give each of them. An experienced trader has learned this through careful observation and experience. The learning process will not be easy and it will very likely involve some initial financial loss. If you are new to trading, do not expect to be profitable from the beginning. While you are learning, be prepared to lose some money. Without experience, it is very easy to be misled by incorrectly interpreting the data. The more you know, however, the less likely it will be that you will fall for the market’s tricks. It’s just like dancing. Keep practicing the steps; watch the swings and dips, and pretty soon you will be swaying to the market’s rhythm and hopefully making money.
GET THE BIG PICTURE

Sometimes you can't see the forest for the trees. We all have heard the expression but we may not have realized its importance to us as traders. It is easy to look at one stock price or one indicator and form an opinion. If IBM is soaring, that must mean that a rally is beginning. Or, if Microsoft is reporting bad numbers, we should sell our high techs. Right? Such an approach is easy, but not very reliable because the opinion is formed with limited data that are not placed or evaluated within the broader context of the market.

In order to read the tape accurately, you have to analyze the information in context. I am able to put data in context because I keep a big picture of the structure of the market in my mind at all times. Day after day, I look at the big picture and remind myself of it. Then, I take my analysis from the big picture down to the month, the week, the day, and finally to the minute that I am trading. My system of analysis looks like a pyramid standing on its head. As the focus gets narrower, my analysis is honed in to the present market and the immediate trade at hand. Trust me, if you do not have some structure or framework to work from, you will not be able to understand the numbers that you are seeing and you will not be able to know what they mean. The rhythm of the market will escape you and every little false move that is made will lure you into a losing position. To read the tape accurately, get a big picture view.

KEEP A TREND LINE OF YOUR TRADING VEHICLES

As you already know, I start each year by recording the opening prices for every index, stock, or other market that I intend to trade during the year. Then, as the year progresses, I add each monthly open and each weekly open and connect the dots to make a trend line. If the line is moving up, I know the bulls are strong; if it is moving down, I know that the bears are no longer in hibernation.

I trade many index futures. When I consider the price of an S&P Futures contract, I consider that price in relation to my trend line. If the market stays above the yearly open, I consider there to be a general bullish tone to the market. The farther above the yearly open, the more bullish I consider the tendency to be. For example, if February, March, and April all have higher monthly opens, I note it. Then, I know to scrutinize bearish positions carefully. Figures 4.3 through 4.6 illustrate an example of my monthly trend line, on a weekly basis, for early 2005 for the S&P Futures.
As the trend lines in the example graphically show, domestic futures indices struggled in early 2005. Prices fell and none of the indices were able to return to the yearly opening price until sometime in mid to late February. As each week in January began, I was well aware that we were trading below the watershed yearly open. I knew that until the yearly opening price could be passed, any rally was uncertain. Therefore, I took long posi-
tions with caution. Near the end of February, the yearly open was finally surpassed and I was certain that I did not want to be short because the strength of the bulls had been exhibited, at least momentarily.

Just because there is a bullish overtone to the market does not mean that I only trade to the long side. I let the numbers tell me what to do. Each day I look at key numbers (see Chapter 3 on key numbers) and I read the
indicators. I put this information in the proper context. If the numbers tell me to go short, I listen. But if the big picture has a strong bullish overcast, I will not take a short position for the long term. I will short the market and take advantage of the down movement, but will be ready to shift my position when the indicators shift. Also, I will be more cautious going short if I know that the dance of the market is bullish.

By having an expansive view of Wall Street, I am less likely to be tricked by false moves. I am more cautious of moves that I know are contrary to the true disposition of the market. If I decide to take a trade that goes against the big picture bias, I look for confirmation of all my indicators. That way, I am better able to stay profitable.

Sometimes I miss moneymaking opportunities. That is true. But, I would rather err on the side of caution than frivolously throw my money away. If you miss a trade, do not worry. There will be another one. That is one redeeming thing about Chicago and New York: They always give you a second chance. Just be patient and wait for it. The market generally offers numerous opportunities each and every day.

**Never Read a Price in Isolation**

Stocks and indices rarely move very far from the pack. That is, if there is a market trend, all of the major markets tend to join it. If one or more of the markets is not coming to the party, be cautious because you may be misreading the indicators. For example, if the S&P Futures is trending up, expect the other futures indices to also trend up. If the Dow Futures is holding back and refusing to join the S&P in the bullish move, be careful. That could mean that the market's movement is momentary and not genuine. Wait for confirmation from the laggard before becoming a believer. If you take a position when you see market divergence, take a small one. Probe the market, but do not buy the farm. Divergence between indices and exchanges generally spells trouble.

For example, if the S&P Futures is moving up, the Dow Futures is moving up, and the Nasdaq Futures is also moving up, but the DAX Futures are refusing to move, it may be time for caution. Many times I have been saved because I correctly read the warning signal that was being sent by one lagging market. The old adage about birds of a feather flocking together goes for the markets, too. Generally, they trend together. That is one of the most basic keys to tape reading.

Stocks also follow the general trend of the overall market and their sector in particular. If pharmaceuticals are bullish, unless a corporation is experiencing a problem, its stock price will generally follow the established movement of the sector. There are, of course, exceptions. If a company is
having a management problem, the price may lag. Or, if there is rumor on the street of an imminent merger, the stock may soar. However, in general, the rule applies. Most of the stocks in a sector will follow the trend of the sector.

Therefore, one of the first steps to reading the stock tape is to place the stock price in the context of its sector. If you are looking at Microsoft, how are all of the other high techs doing? If you are look at Merck, how are most of the pharmaceuticals doing? Never read a price in isolation. Always put it in the context of the sector and the overall market.

### NOTE KEY NUMBERS

When trading a market, it is imperative that you know its key numbers. This fact is so important that one of the previous chapters is devoted to the concept. Knowing key numbers is essential to reading the tape. There is absolutely no way to properly read the tape without using them. You may want to refer back to the chapter on key numbers because they are that important.

Use key numbers for market entry, for protection, and for profit taking. For example, if you plan to buy an index, you do not want to buy it just before it hits major resistance. Likewise, you do not want to sell a down market just before a key support level. Wait and see how the market responds when the support number is hit because you must know if the down movement is strong enough to break through support. If support is broken, then it is time to sell. There is no sicker feeling than the one you get when you sell the daily low or buy the high.

The market usually follows the path of least resistance. Say, for example, that the market tries to move down and hits strong support. The market tries repeatedly to break the support but the bulls are too strong. Support just cannot be broken. Then you notice that a number of your indicators are shifting from negative to positive and the market looks as though it is gaining strength. Perhaps this is the time to buy. Support could not be broken; the bears tried but were not strong enough. I suggest you write this one down: A market that cannot move down will move up; and a market that cannot move up will move down. That is one of the laws of Wall Street.

If you are skilled at tape reading, it is possible to buy at the bottom and ride the market as it moves up. Some of my students have mastered this technique and it has paid them handsomely. Just be sure that you are reading the indicators carefully. This type of trade is very risky unless you are skilled. It is not a trade for an amateur. Be sure that you are dancing to the right tune and step lively.
CHECK MAJOR INDICATORS

A big part of correctly reading the tape is reading the market indicators. All experienced traders have indicators that they trust. Every day, I monitor several market indicators including two that I designed. Learning to interpret these indicators will enhance your trading. I list and explain the indicators I monitor and tell you how I read each indicator. The order in which the indicators are discussed is of no significance.

The Issues

The NYSE Issues is an indicator that reflects the number of issues that are above their previous day’s close as compared to the number of issues that are below their previous day’s close on the New York Stock Exchange. The Nasdaq Issues measures the same factors but is a Nasdaq indicator. I consider these indicators to be very important. When gauging the NYSE Issues, I believe 500 to be somewhat of a watershed number. If 500 of the issues are above their closing price, I will generally be looking more to the bullish side. Unless there is strong evidence to the contrary from other indicators, I will be hesitant to sell the market. Likewise, if the NYSE Issues is −500. I will be looking toward the short side. Again, unless the market has been far more negative and there is strong evidence that the market is reversing to the upside, I will be hesitant to buy the market with such a negative reading.

I always watch these two indicators. Sometimes the NYSE Issues will be strongly moving in one direction and the Nasdaq Issues will not follow, or vice versa. Such divergence raises flags of caution. Look for opportunities when both of these gauges are giving the same message. As I stated above, I consider the NYSE Issues and the Nasdaq Issues to be significant indicators and I always take them into account when trading during the daytime sessions.

The New York Tick (TICK)

Another indicator that I rely on is the New York Tick or the TICK. This indicator reflects the difference between the number of stocks ticking down and the number of stocks ticking up in price on the New York Stock Exchange. The TICK is a leading indicator for market direction. It is like the RPM gauge of Wall Street. If the TICK is positive, start looking up; if it is negative you probably want to consider the short side. A TICK reading of plus or minus 300 tends to be a neutral zone and is not affirmatively pointing in either direction. On the other hand, if you see a reading of plus or
minus 1,000, the market has a definite view of things. The message is unmistakably clear. However, exercise caution because extremely high readings probably mean that the market is overbought or oversold. Generally, after the market reaches such levels, it needs to take a breather and there is a correction. The correction may be slight and it may be brief, but the market is unable to sustain a 1,000 TICK reading for a prolonged period of time. After a breather, if there is enough momentum, it may surge again.

I use the TICK as one indicator among a number of other indicators and criteria. I never rely upon any single indicator. Also, I read the TICK in relative terms. For example, if the TICK reading has been –450 and it moves into positive territory, say to a positive 200, the movement of the market is bullish. The number reflected by the reading is not particularly bullish, but in relative terms, there is some strength in the market. Perhaps a shift of some degree is in the making. Before taking any action, look at other indicators and check markets and indices for confirmation or denial.

The TRIN

The TRIN, which is also known as the Arms Index or Trading Index, measures volume and the previous day's close. The TRIN is a ratio of ratios. It is calculated as follows:

\[
\frac{\text{Advancing Issues/Declining Issues}}{\text{Advancing Volume/Declining Volume}}
\]

A TRIN of 1.00 is considered neutral. The lower the TRIN, the more bullish the indication; the higher the TRIN, the more bearish. Like the TICK, the TRIN is a short-term indicator. However, unlike the TICK, the TRIN is an inverse indicator. As the TICK moves up, the TRIN moves down and vice versa. The TRIN may go as high as 3.5 or as low as 0.30. Between 1.20 and 0.80 tends to be a noise zone in which no direction is indicated. When watching the TRIN, look at relative price action and not absolute value. For example, if the TRIN was 1.5 and it moves to 1.2, the direction is bullish even though the absolute value is slightly bearish.

Again, I read this indicator in relation to other indicators. Sometimes the markets will appear to be moving in a certain direction. For example, say that the S&P Futures moves up a point or two and some of the other futures markets join in the move. But the TICK and the TRIN are not showing signs of strength; they are telling a different story. I pull my hand away from the mouse and take a closer look. By reading the tape carefully, I am less likely to hastily join the potentially losing party.
MY INDICATORS

After trading for so many years, I designed two additional indicators. One of these is the V-factor; it records and reflects volume. The other is the TTICK. I designed the TTICK years ago. This indicator uses the TICK and the S&P Futures Index movement and merges them. It then smoothes out this information and numerically reports it. The TTICK and the V-factor are just two more indicators that I use and I think that they give my trading an edge over others.

The V-Factor

Volume is a very important characteristic of a really good market. With high volume comes liquidity. Most experienced traders use volume data in some manner when they trade. Generally, if a trend is strong it will intensify as volume increases. Likewise, as volume significantly wanes, it may be time to exit the market because the momentum is probably lost.

The V-factor records the volume and identifies the number of buyers and sellers. Then, the ratio is numerically expressed. The V-factor can be reset during critical times during the day to check the volume and the bias of the majority of traders during any trade zone or significant time.

Here is how the V-factor works: if the V-factor is 1.0, there are an equal number of buyers and sellers. If the V-factor is 0.5, there are twice as many sellers as buyers. If the V-factor is 2.0, there are twice as many buyers as sellers. I watch the V-factor while I am trading. If I am long in the market and the V-factor indicates that a lot of selling has stepped into the market, I may seriously consider exiting my position or lightening it. Use whatever program or method you like, but it is a good idea to watch volume when

![Image of V-factor]

**FIGURE 4.7** I use the V-factor, which I designed, to help me monitor volume.
*Source: [www.dtitrader.com](http://www.dtitrader.com)*
you are trading and take note if you observe large volume swings. A problem may be lurking in the background.

The TTICK

Some years back I created an indicator that I use every day. I call it the TTICK. It combines information from the TICK and the S&P Futures and synthesizes it and smoothes it out. The TTICK readings run from +30 to −30. A plus ten is an indication of a strong market. If the TTICK hits plus 20, the market is probably overbought and it may be time to exit a long position. Likewise, a negative ten is very bearish and a negative 20 may be a good point to exit a short position because the market may be oversold.

I use the TTICK and rely on it heavily for my trading. I correlate it to the other indicators and it guides my trading. For example, say that the TTICK hits +10 and I buy the market either in stock or in futures. The TTICK continues to rise and hits +15. The market is really moving up. Then, rather abruptly the indicators shift and the TTICK falls to +5. I may exit all of my positions. The TTICK is signaling to me that the market has shifted and there is no need to wait before I exit the trade. By watching the TTICK, I can better gauge entry points and exit points. The TTICK has made more money for me and my students than any other indicator. If the market data appears foggy, the TTICK is the ultimate judge for me.

**FIGURE 4.8** One of the indicators that I always watch is the TTICK. It is an indicator that I designed and I believe it greatly enhances my trading.

*Source: www.dtitrader.com*
You certainly do not have to use my indicators. Find indicators that are helpful to you and learn to use them. Market indicators are to traders like thermometers are to doctors. They let you know if there is a problem that needs to be addressed. If all is well, the indicators will tell you that also.

**THE SIGNIFICANCE OF TIME**

When I read the tape, I also consider the time of day. An entire chapter is devoted to the use of time in my trading method and I do not want to be redundant. However, I would be remiss if I did not tell you that when I read the tape, time matters. For example, if I see that a key number is broken and it is 1:45 P.M., I may not be too impressed. I know that this is the time of day that I refer to as the Grim Reaper time. The market is very volatile during this time. Bonds are going to close soon and the market often gives off false or short-lived signals. If it is not a trade zone for me, I very rarely place a trade. The market is just too hard to read during some times of the day and it is too easy to lose money. Therefore, remember that timing is everything and keep time in mind when reading indicators. I believe that the trade zones identified in Chapter 2 generally offer the best trading opportunities during the day session. During these times, I find it generally easier to accurately read the tape and get on the right side of the market.

**TRUST THE NUMBERS**

Anyone who has traded for any length of time knows that the numbers tell the truth. Do not rely upon your preconceived ideas or your emotions. If the numbers and the tape tell you to go long and the time is right, just do it. Forget about what you think or want. What you want to happen is irrelevant. The market does not really care about what you think. Just look at what is actually happening. All too often traders begin their day with a view of what the market should do. Then they plan their day and place their trades based upon their predetermined views. Often the results of such trading are disastrous. Our challenge is to put aside our views and our biases and let the numbers speak. Believe it or not, my Achilles’ heel is experience. Sometimes I see a pattern that I have seen before. I form a bias about the market and determine what I think will happen next. This is a recipe for disaster. Never impose your bias on the market. Read and trust the numbers.
REVIEW

Trading is an art that is perfected over time. It is not easy to trade successfully. Some people may try to sell you a system that claims to be simple and reliable. The system may work in certain market conditions and during specific times. However, don’t expect it to work for long because the market is a dynamic institution that is always changing. Trading is complex. The only way to win at this game is to learn to read the tape and to read it consistently and correctly. Education is the only real answer. The market has a rhythm of its own and you have to learn the points of support and resistance, the key numbers, the best trading times, and the market’s indicators so that you can get in step with that rhythm.

Remember that you cannot read a stock quote, an index price, or a market indicator in isolation. The tape must be read in the context of the overall market. At all times, you need to keep both a big or long-term picture and a short-term or current picture of the market in your head. That is the only way that you can read the tape correctly because you must put the numbers and indicator readings into that context. Look for confirmation of your moves from multiple indicators and multiple markets. If there is divergence, keep your hand off of the mouse.

Also, trade during the right time and read the indicators during the right time. Timing is important; an indicator reading may have one meaning at 9:00 A.M. and that identical reading may have another meaning at 1:30 P.M. Be sure that you get time working for you.

When reading the tape, keep the big picture in mind. Be sure that you have a clear understanding of the structure of the market. Let your analysis move from the big picture down incrementally to the moment that you are trading. Like a rifleman aiming at a target, set your sites and focus.

Chappy was right, the tape is all that matters. Learn to read it correctly and you will make money.

LESSONS LEARNED

- Reading the tape is an art and not a science.
- The market has a unique rhythm. Move with it.
- Never read an index price or stock price in isolation. Put the data in the context of the market.
- Trust the indicators, not your preconceived notions.
- Watch key numbers and time of day when reading the tape.