Basic Candlestick Techniques

Introduction

The Japanese candlestick charting technique dates back to the 1700s when bar charting and point-and-figure charting were not even discovered. Japanese traders, on the other hand, were already using this technique to trade their rice markets. Yet this technique of charting was confined strictly to Japan until the Americans discovered this technique from Japanese traders who traded the U.S. financial markets in the 1980s.

What fascinated the U.S. traders in the late 1980s was its uncanny trading accuracy in the purchase and sale of stocks, stock index and commodity futures, currency and treasury bonds on the New York and Chicago exchanges. Yet, the Americans were unaware of the techniques used by the Japanese. Strong interest emerged amongst the U.S. traders as to how the Japanese arrived at their buy and sell decisions.

They reasoned that if they were going to beat the Japanese at their game, the American traders would have to fully understand how the Japanese traders' minds worked. That entails knowing their charting technique. Understanding how

Japanese traders use their charts would help the American traders answer the question "What are the Japanese going to do next?" This accounts for the resurgence of interest in the West into this previously obscure technique of technical analysis.

More information is now available on candlestick charting after extensive research by an American analyst, Steve Nison. His two books, *Japanese Candlestick Charting Techniques* and *Beyond Candles*, offered the outside world a first glimpse into this ancient methodology of the Japanese traders.

As Nison's research into this mystically obscure charting technique became available through his two books, traders in the United States and the rest of the world began to realise its forecasting value. When combined with Western technical concepts, forecasting and trading the markets can be—in the words of Steve Nison—exciting, powerful, fun, and much more rewarding.

Even as recently as the late 1980s, real-time quote and chart services offered to investors in the United States, Europe, and the rest of the world did not feature candlestick charts—only bar charts. Yet within two years after Nison's first book, published in 1991, almost every real-time technical service and end-of-day technical analysis software package offered candlestick charts to their clients. In Malaysia, every major real-time technical chart service provider such as Thomson-Reuters, Bloomberg, Updata, Meta-Trader, and Bursa Station supports real-time candlestick charts. The inclusion candlestick charts into these companies' services underscores their popularity and usefulness.

■ Historical Background

After the unification of Japan under the Tokugawa Shogunate (Eighth Shogunate) from 1615 to 1867, its agrarian economy grew. By the seventeenth century, Osaka was regarded as Japan's capital and commercial centre. Osaka's easy access to the sea made it a national port for the shipping of supplies, including rice. Strategically located, Osaka soon became the centre for the rice trade, and rice brokerage became the foundation of Osaka's prosperity. The Dojima Rice Exchange became the centre of rice trade for physical delivery.

Into this background, Munehisa Homma (1716–1803) was born in the city of Sakata, Yamagata Prefecture, Japan. His real name was Kosaku Kato, but he took up the name Munehisa Homma later in his life after his adoption by the wealthy Homma family. At that time, the port of Sakata was a distribution centre for *shonai* (rice). Homma concentrated his attention on the rice market and later on the popular fixed rice market. By 1750 he was trading at his local rice exchange in Sakata. After the death of his father, he was placed in charge of managing his family's assets. With this money he went to the Dojima Rice Exchange in Osaka and began to trade rice futures.

His detailed attention to the markets and his understanding of candlesticks propelled him to become a very wealthy man. He was considered an elusive and feared trader because of his effective understanding of candlesticks and the psychology of the rice markets. He would keep records of yearly weather conditions. To analyse the psychology of investors, Homma analysed rice prices

going back to the time when the rice exchange started. Using his own network of communication links he made a killing in the Osaka Rice Exchange and later in the Edo (now Tokyo) exchange.

It was believed that Homma even achieved the feat of 100 consecutive winning trades. Munehisa Homma was perhaps the first person in recorded Japanese history to have used past prices to predict futures price movements—and he did it successfully.

His charismatic personality and highly effective trading methods gained him the nickname "Dewa's long-nosed goblin" and an honour as the "god of the markets." He was such a legend that a folk song from Edo was composed to honour his feats. "When it is sunny in Sakata [Homma's hometown], it is cloudy in Dojima [the Dojima Rice Exchange in Osaka] and rainy in Kuramae [the Kuramae Exchange in Edo]." Interpreted, it means: When there is a good rice harvest in Sakata, rice prices fall on the Dojima Rice Exchange and collapse in Edo. This song underscores Homma's control over the rice markets during his time.

In later years, Homma became the financial consultant to the Japanese government and was given the title of "Samurai." He died in 1803, but his books about the markets (*Sakata Senho* and *Soba Sani No Den*), which revealed his trading principles, evolved into the candlestick charting technique that we know today.

■ Reasons Candlestick Charts Are So Popular Today

Here are six reasons that candlestick charts are so popular amongst professional traders today:

1. **Leading indicator:** Candlestick charts have the ability to show reversal signals earlier than Western charting techniques. As such, candlestick charts are a true leading indicator of market action. They regularly identify potential moves before they become apparent with Western technical tools. Many Japanese candlestick patterns are not found in Western chart techniques. Figure 1.1 shows an example of how candlesticks lead moving average convergence divergence (MACD) in timing entry and exit.

2. **Pictorial:** Candlestick charts are very pictorial and describe the state of players' psychology at a particular moment, which can be utilised to make meaningful trading decisions. Terminology like the "hangman," "shooting star," "dark cloud cover," "hammer," and "abandoned baby" paints indelible word pictures that can assist the trader to remember the pattern through recalling its name. The candlestick technique consists of hundreds of different pattern groups that accurately identify specific traits and tendencies.

3. **Versatile:** Candlestick charts are versatile in that they can be used alone or in combination with Western technical tools. They are unlike point-and-figure charts, which cannot be used alongside other Western technical indicators. Candlesticks use the same price data as bar charts, yet the candlestick technique better promotes the ability to recognise complex pattern groups and predict the next possible outcome based on them.

4. **Can be applied to any time dimension:** Candlestick charting techniques can be adapted for either short- or long-term trading. Candlestick charts are excellent for short-term
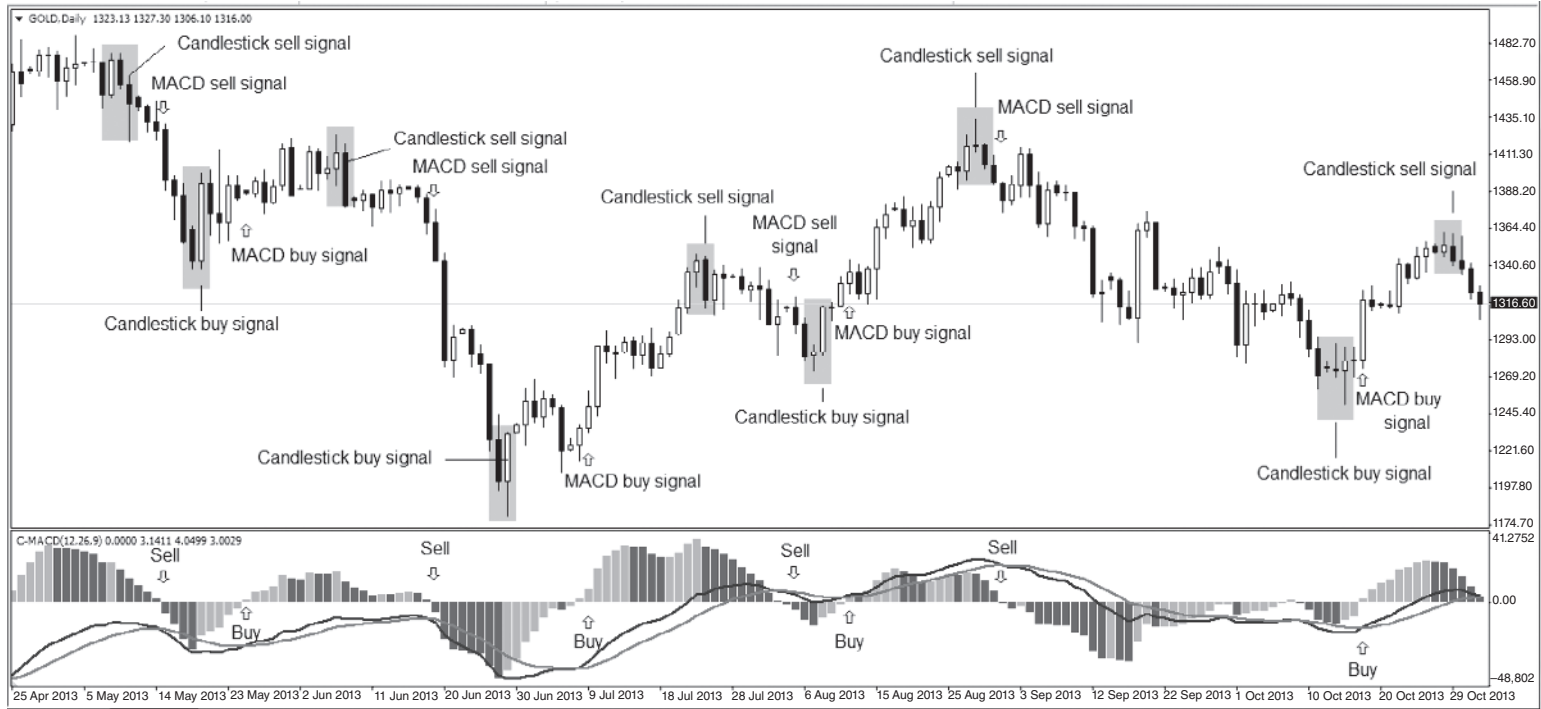
FIGURE 1.1 Gold Daily (2013)—An example of how candlesticks lead MACD in timing entry and exit

trading through the use of intra-day charts like the 1-minute, 5-minute, 15-minute, 30-minute, and 1-hour charts. They can also be applied for longer-term forecasting through the use of daily, weekly, and monthly charts.

5. **Flexibility and adaptability:** Candlestick charts can be applied to follow as many markets as desired—be they stocks, futures, currency, or commodities. In other words, a trader can apply candlestick principles to analyse or trade Malaysian stocks, index futures, or crude palm oil futures. If traders wish to diversify their portfolio, they can trade, for example, U.S. stocks, U.S. futures, foreign currency, Japanese or U.S. Treasury bonds, and for that matter any commodity in any market around the world.

6. **Time-tested, dependable, and useful:** The candlestick charting technique is time-tested and had been refined by generations of use in Japan. The fact that it is still very much in use today after more than 300 years since its discovery is testimony to its usefulness.

■ Construction of the Candlestick Chart

The word *candlestick* is a Western term coined by Steve Nison. In Japan it is called *Ashi*, which means "leg" or "foot." A daily chart is called *Hi Ashi*, a weekly chart *shu ashi*, and a monthly chart *tsuki ashi*. The word for *foot* is used by the Japanese to describe a chart probably because, while the foot reveals a person's past records, a chart reveals the activities of market players. *Ashi* can also mean "footprint," and the Japanese could have used it to describe the candle chart, because footprints left behind in the sand will offer clues as to where a person is heading.

Drawing a candlestick chart requires four elements of price data:

1. The open
2. The high
3. The low
4. The close

Here are the four simple steps to draw a candlestick chart.

Step 1: Mark the open and the close.
Step 2: Box up the open and the close. This boxed up rectangle is called the "real body." The real body represents the range between the open and close of the session. If the close is higher than the open, the real body is coloured red (or white in some software). If the close is lower than the open, the real body is coloured black.
Step 3: Mark the high and join this to the top of the box (real body). This thin line above the box is called the "upper shadow." Shadows represent the session's price extreme. The peak of the shadow is thus the high of the session.
Step 4: Mark the low and join this to the bottom of the box (real body). This thin line below the box is called the lower shadow. The trough of the shadow is thus the low of the session.

If a candlestick line has no upper shadow, it is said to have a shaven head. A candlestick with no lower shadow has a shaven bottom. A candlestick line where the open and close are at the same or nearly the same price level is called a doji (pronounced *do-gee*). A doji implies indecision and reflects a market where the bulls and bears are in equilibrium. A doji has no box (real body).
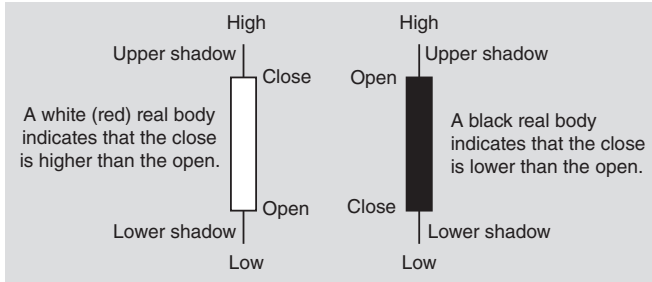
The Real Body

The box that is joined by the open and the close is called the real body of the candlestick. If the close is higher than the open, the real body is coloured white (or red in some software). Conversely, if the close is lower than the open, the real body is coloured black. A white real body depicts an up-day or a strong day, that is, a day where the bulls are victorious over the bears, while a black real body depicts a down-day or weak day, a day where the bears are victorious. The length of the real body measures the strength of the move.

The Shadow

The lines above and below the real body are called shadows. The line above the real body is called the upper shadow, and the line below the real body is called the lower shadow. The upper and lower shadows reflect price fluctuations during the session. The high of the upper shadow represents the high price reached during the session while the low of the lower shadow represents the low price reached during the session.

■ Construction of a Bar Chart

Drawing a Western bar chart requires only three elements of price data.

1. The high
2. The low
3. The close

Sometimes the open is also drawn into the chart, in which case the open will be represented by a slash to the left of the high-low range.
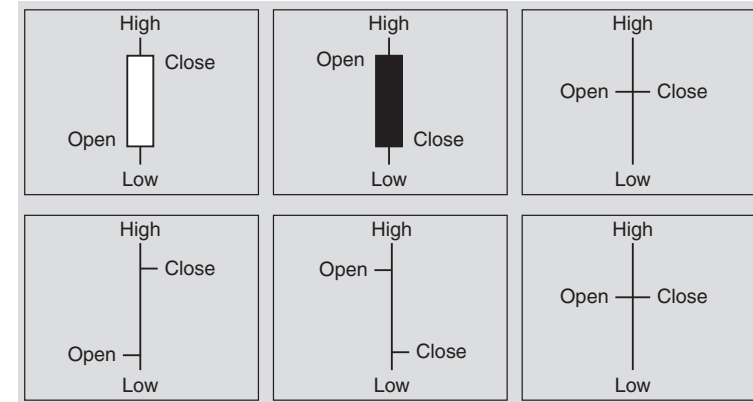
Comparison between a Candlestick and a Bar Chart

Figure 1.2 and Figure 1.3 show examples of a candle chart and a bar chart for S&P 500 Hourly (2013).
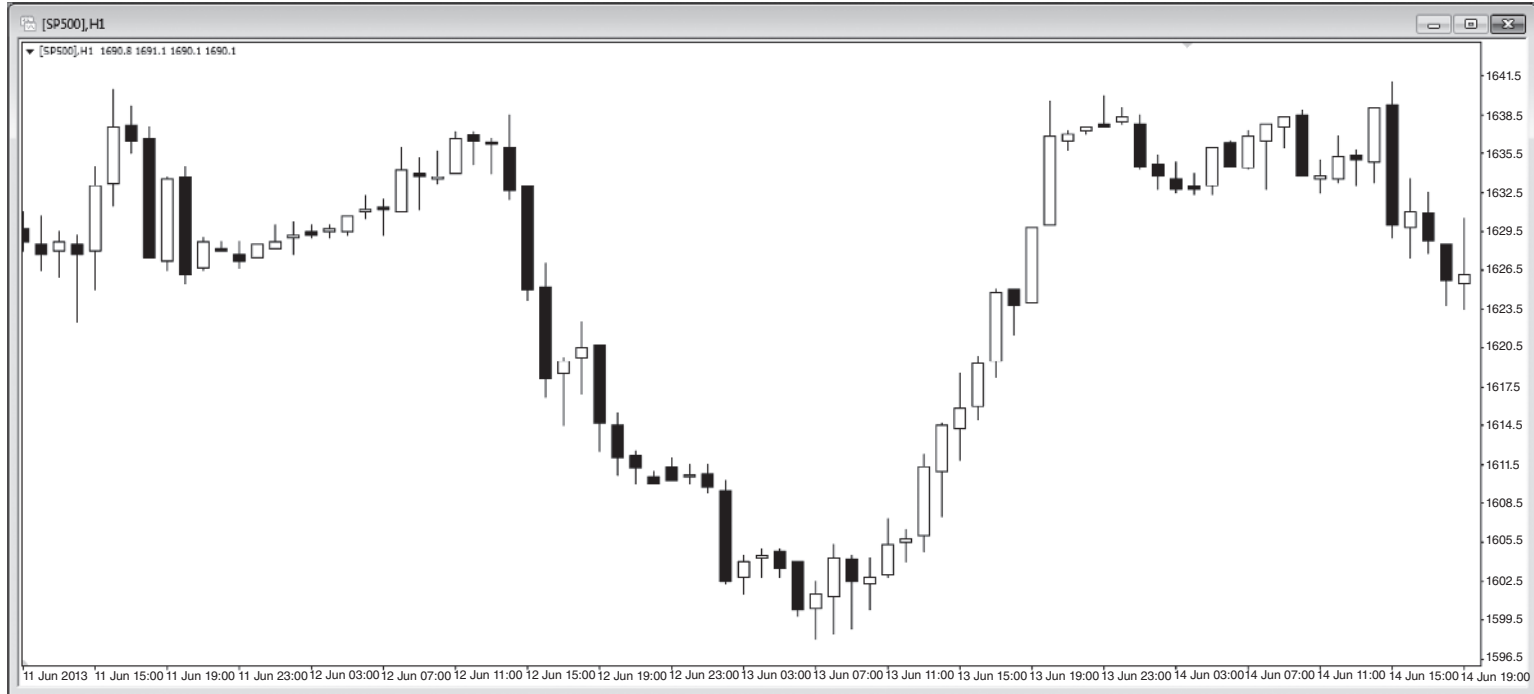
FIGURE 1.2   S&P 500 Hourly (2013)—A candle chart describes the state of players' psychology much better than a bar chart
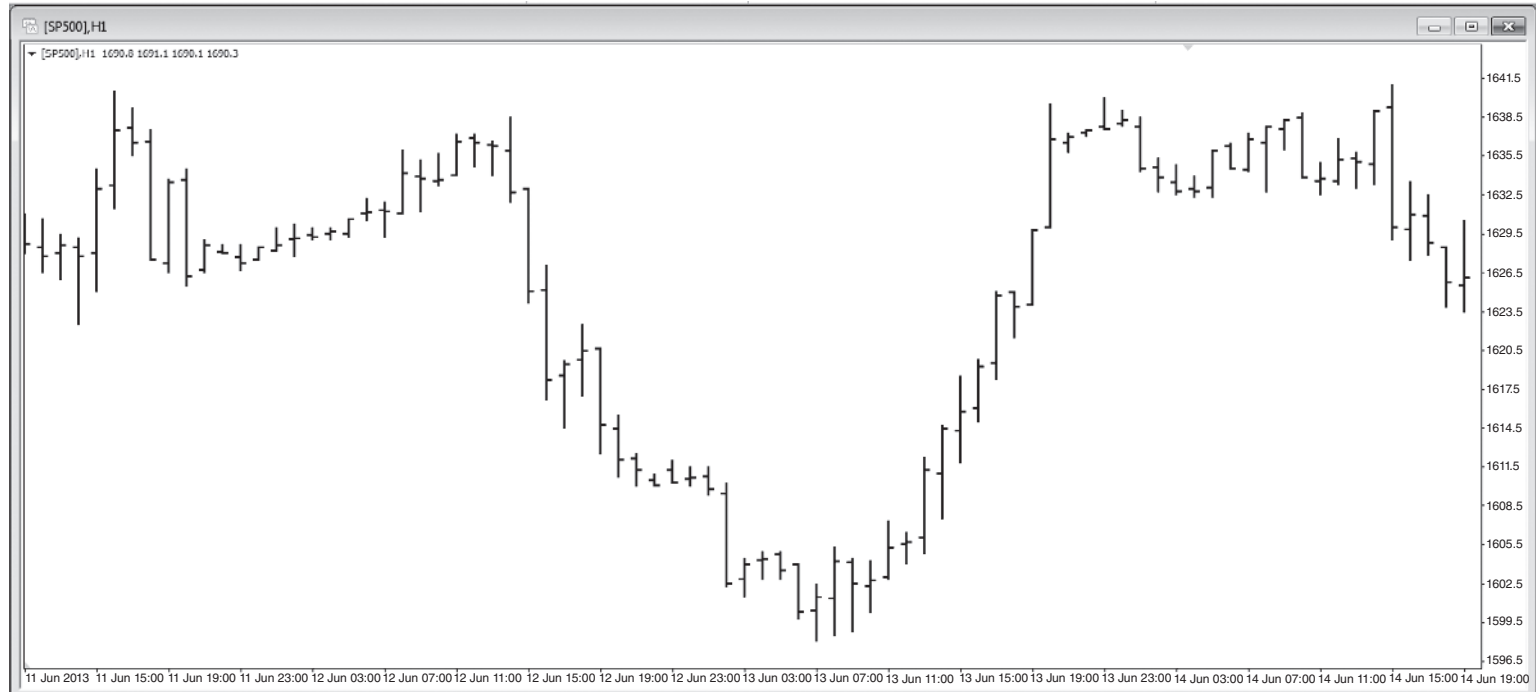
FIGURE 1.3 S&P 500 Hourly (2013)—A bar chart is flat and makes it difficult to spot changes in players' psychology