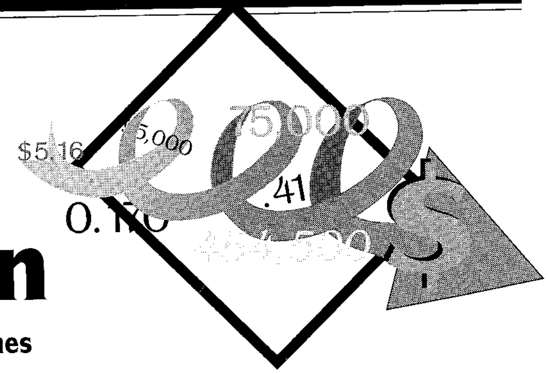


Statistics in action

In the last installment of a three-part series, Cynthia Kase combines the four new indicators she previously introduced in a cohesive, low-risk trading plan.

By Cynthia Kase

Statistically sound trading methods applied to multiple time frames can help nondiversified traders who focus on a narrow family of correlated markets.

To illustrate, we'll combine our statistically based Peak Oscillator, KaseCD (KCD), Permission Screen and the Dev-Stop indicators in the silver market. We'll use three charts: a daily chart, a one-fifth to one-eighth of a day chart (the "monitor" chart) and a chart one-third the length of the monitor ("timing") chart. The simplified trade rules used for the example are shown in "Walking through a trade" (page 34); in practice, we would use a more complex entry signal for timing and would normally drop down to a tick chart to finesse the entry.

Hi-ho silver Using the March 1996 silver contract, the monitor chart is one-sixth of a day (60 minutes), while the timing chart is one-third the monitor chart (20 minutes).

There are five major points on the daily chart (see "Day by day," below), all warning signs. Point D1 shows a bullish PeakOut; at D2 a bullish PeakOscillator divergence occurs, confirmed by a KCD divergence. D3 shows a bearish PeakOut, followed by a bearish PeakOscillator and KCD divergences at D4. Finally, D5 indicates a KCD divergence.

For brevity, we will walk through the early and later portions of the trade, that is, from D1 to D3 and following D4, and evaluate the trade between D3 and D4 in detail.

Following the warning sign generated at D2, we dropped down to the monitor chart (see "Monitoring the market," right), identified a PeakOut on the morning of Dec. 14 (not shown), then dropped to a timing chart (see "Timing the trade," right). A long trade was entered Dec. 15 at 8:45 a.m. at $5.145, and additional long positions were added Dec. 18 at 9:05 a.m. at $5.185 (not shown). A valid entry signal was confirmed on the monitor chart later on the 18th that held above the stop levels until a valid entry was confirmed at point e1 on the daily chart.

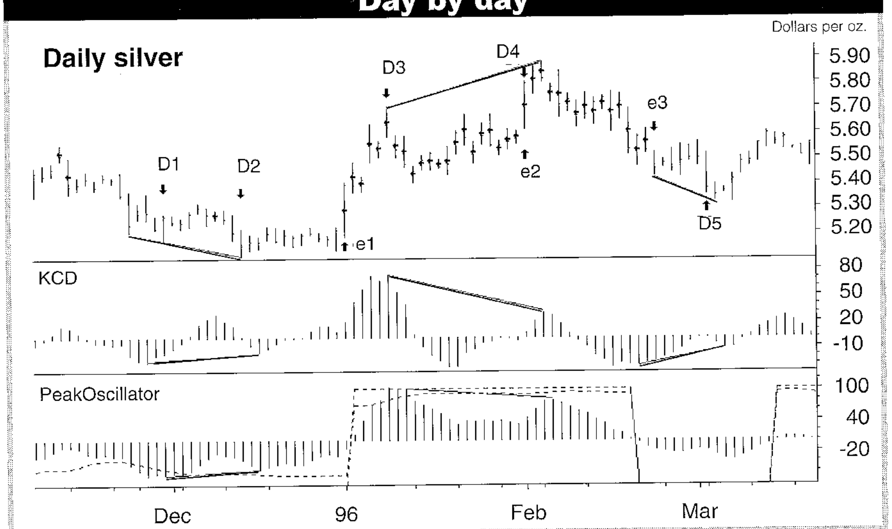
Trade summary

#	Entry	Price ($)	Exit	Price ($)	Gross ($)	Net ($)	Profit ($)
1	buy	5.165	sell	5.575	0.410	0.390	195,000
2	sell	5.553	buy	5.468	0.085	0.065	32,500
3	buy	5.483	stop	5.484	0.001	-0.019	-9,500
4	buy	5.600	sell	5.782	0.182	0.162	81,000
5	sell	5.753	buy	5.391	0.362	0.342	181,100
				Average	0.212	0.192	96,000
				Total	1.06	0.96	480,000

As we proceed, the long trade continues to be profitable and entry system rule one kicks in at D3 with a PeakOut. Early on the morning of Jan. 10, 1996, we drop down to the monitor chart, following entry system rule two. Point M1 shows a valid PeakOut followed by divergence of both the PeakOscillator and KCD at M2. This confirming warning signal on the monitor chart fulfills entry system rule three.

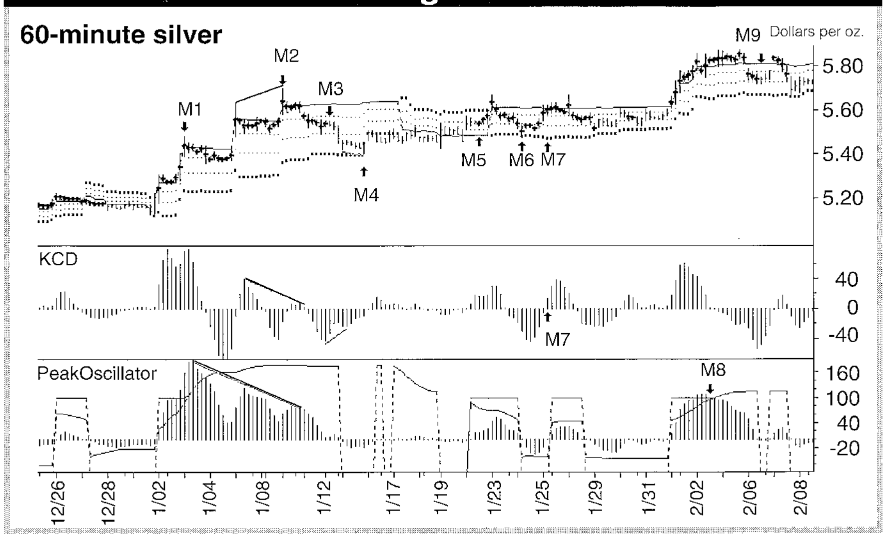
Following rule four, we watch both the monitor and timing charts and look for a suitable entry. At point T1 on the timing chart the KaseCD crosses from above zero to below zero, while at T2 the Kase Permission Screen changes from long to short, generating a valid entry trigger. (The Permission Screen displays long mode with a black cross in the middle of the bar, and short mode with no cross.) According to rule five we

Day by day



The big picture, as shown by the daily silver chart. D1-D5 and e1-e3 mark important warning signals and trade opportunities generated by the KCD and PeakOscillator.

Monitoring the market



Diversifying in time: Looking at the market on a time scale one-sixth of the daily chart, this 60-minute chart includes the application of the Kase Permission Screen and Dev-Stop.

exit the long trade and enter half of the short trade on the first bar of Jan. 11, at $5.575, for a net profit on the long trade of 41¢.

Now we'll increase the trade to full size on either the next timing chart signal or the next monitor chart signal, whichever comes first, according to rule six. On the 11th on the timing chart, the KCD, which has again crossed back above zero, crosses back below zero around 2:25 p.m. at T3 at $5.53, where we become short 100% of the position size at $5.553.

At M3 on the monitor chart, the signal is confirmed and we now manage the contra-trend trade at the monitor level. The daily chart is still in a long mode; with the exception of spikes, PeakOuts usually are coincident with penultimate extremes. Therefore, it's probable the down move is corrective, and the market will turn back up one last time.

Using rule three, we look for warning signs: If the daily chart generates a valid entry signal prior to a warning sign on the monitor chart, we would watch the daily. However, M4 shows a valid warning sign, a KCD divergence, while the daily never generates a short signal. Accordingly, we take half profit on our trade based on exit system rule three at $5.45 for 10.3¢ profit. We will exit the second half of the trade either on a valid entry signal in the opposite direction or by hitting Dev-Stop 1 per the exit rules (note how well the Dev-Stops contain the trends). The timing chart generates a KCD divergence at T5 preceded by a local PeakOut at T4.

At the open on Jan. 16, the KCD crosses to the upside, followed on the next bar by a confirmed buy signal at T6. We then exit the remaining half of the trade at $5.485, for a 6.8¢ profit on this half of the trade (8.5¢ overall) and enter half a long trade. Following a pull back and penetration of the KCD to the upside at T7 that precedes the monitor chart signal, we enter the remaining contracts at $5.48, for an average price of $5.483 on our long position.

The following Monday, Jan. 22, a valid buy entry is confirmed on the monitor chart (M5), directing us to follow the trade on the monitor chart. Before we can move up to the daily chart, Dev-Stop 3 is hit at M6 on Jan. 24 and the trade is stopped out at just above break even at $5.484.

Dropping down to the timing chart after being stopped out, there is a KCD divergence at 9:45 on the 24th (T8). Because the major trend is up, rule seven of the entry system is in effect. The next day at 9:45, a valid buy signal is generated and we buy half the trade volume at $5.59 (T9). Later that morning a second valid buy signal is generated on the monitor chart, ahead of a second entry signal on the timing chart. The trade is increased to full size at $5.61 (M7), for an average long price of $5.60.

Six days later a buy signal is generated on the daily chart (e2) as the KCD crosses to the upside while the Permission Screen is already "long." Now the trade is monitored on the daily chart.

By the close, the market makes a new high (D4) while the KCD and PeakOscillator do not — a divergence setup. Using exit rule three, we take half profit at $5.795, and once again drop down to the monitor chart in accordance with entry rule two. Midday on Feb. 2, a PeakOut is confirmed on the monitor chart (M8). Now we drop to the timing chart per rule four, looking to exit the remainder of the long position and go short.

The timing chart shows a PeakOut had been generated Feb. 1 (T10). The market makes higher highs while the PeakOscillator and KCD do not. At T11 the Permission Screen ➠

Timing the trade

On the smallest time frame, trade opportunities are identified on the 20-minute chart. Some or all of a position on the lower-risk, shorter time period can be moved up to the next larger time frame.

allows short trades; on the open of Feb. 6, the KCD crosses below zero, generating a valid short signal. We exit the long trade and reverse to half short at around $5.77 (T12) for an 18.2¢ gain on the long trade.

That afternoon a valid sell entry is generated on the monitor chart (M9), the second sell signal calling for the second half of volumes to be shorted, increasing the trade to full size at $5.735. The trade, with an average entry price of $5.753 will now be tracked on the monitor chart.

As the trade continues to be profitable, a valid sell entry signal is generated on the daily chart on Feb. 23 (e3) as the Permission Screen turns "short," confirming a KCD cross below zero. From that point on the trade is monitored on the daily chart.

We will end this example by taking half profit at $5.373 on the short trade on March 4 on a daily KCD divergence and liquidating the remainder at $5.41 on the first valid entry signal on the timing chart coincident with the divergence (on the close) three days later. The profit on the short trade is 36.2¢.

We took a total of five trades. If we assume a trade size of 100 contracts and roundturn fees of 2¢ an oz., or $100, profits are shown in "Trade summary" (page 32). **FM**

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Walking through a trade

Valid entry trigger

1 **Buy entry:** KCD has crossed or crosses from below zero to above zero and Kase Permission Screen is "long."
2 **Sell entry:** KCD has crossed or crosses from above zero to below zero and Kase Permission Screen is "short."

Warning signs

1 PeakOscillator PeakOut
2 PeakOscillator Divergence
3 KCD Divergence
4 Setups for the above
5 Combinations of the above

Entry system

1 A warning sign is generated on the daily chart.
2 Drop down to monitor chart.
3 A confirming warning sign has been generated or is generated on the monitor chart.
4 Follow both monitor and timing charts.
5 Enter first half of trade volume on valid entry trigger on either monitor or timing chart, whichever comes first.
6 If trade is still intact (not stopped out), enter second half volume on next valid entry trigger on either monitor or timing chart, whichever comes first.
7 If stopped out, cycle back to rule five for trades in the direction of the trend; wait for rule six for trades against the trend, i.e., take second signals.
8 Upon a confirmed entry on the monitor level, follow trade on the monitor chart.
9 Upon a confirmed entry on the daily, follow trade on the daily chart.

Exit system

1 In the absence of warning signals, use Dev-Stop 3 to exit entire volume.
2 On confirmed PeakOut, use Dev-Stop 1, 2 and 3 to exit 30, 40 and 30% of the trade.
3 On divergence setups for the PeakOscillator or KCD, exit half the trade and use Dev-Stop 1 for the remainder.