

CURRENCY TRADER



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- **THE RELATIVE STRENGTH INDEX:**
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Here's the May issue at a glance:

Market analysis and commentary:

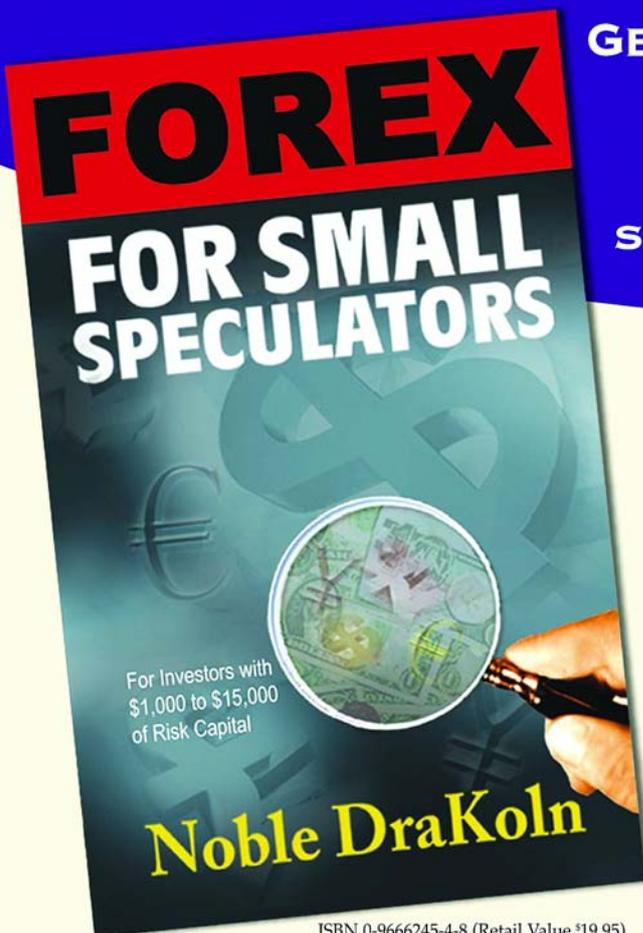
- Markets have a real knack for proving as many people wrong as possible. Case in point — the U.S. dollar hasn't collapsed or rebounded the way its detractors and boosters early this year predicted it would. Instead, the buck has played things right up the middle, wandering in a trading range. "Will central banks dump the U.S. dollar?" analyzes the most recent doomsday dollar worry scenario — currency reserve diversification, or the likelihood that international central banks will move away from the greenback as their monetary ace in the hole.
- Barbara Rockefeller offers an insider's perspective on one of the big issues hanging over the forex world in "Chinese Revaluation: Better never than late?"
- The Global Economy section takes a look at what's on the horizon for the Swiss franc and the British pound, while Spot Check analyzes the Canadian dollar from two vantage points — vs. the Australian dollar and vs. the U.S. dollar.

Trading systems and strategies:

- "The Euro FX vs. the E-Mini S&P and 10-year T-note" provides a blueprint traders can apply to any market to determine its most important tendencies and characteristics.
- This month's Currency System Analysis tests a trend-following system adapted from an indicator first introduced in Active Trader magazine. It offers useful insights into how trend systems function and how to get the most out of them.
- The relative strength index (RSI) appears in two stories the Indicator Basics feature, which provides a detailed introduction to this indicator, as well as "Teaching the RSI new tricks," which reviews three RSI-based trading techniques. The Forex Diary offers a snapshot of a trade plan in action in the Euro/U.S. dollar rate.

News and Resources:

- The Currency Futures page gives the latest trading statistics and news from the world of exchange-traded futures. The Global Economic Calendar provides a roundup of the most important trading dates this month. Also, be sure to check out the latest industry news and currency resources.



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June, 23 and 24

Congress :: 06/23 ::

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Registration

08:30-09:00 Welcome
Coffee

09:00-10:00 Flávio
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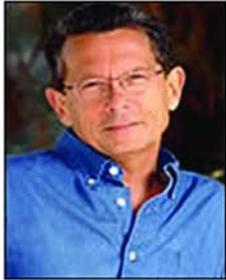
10:05-11:30 Márcio
Ferracini, CMT - Inter
market analysis

11:35-13:00 Felipe
Brandão, MBA -
Emerging Markets and
Bonds

14:30-16:00 John
Bollinger, CFA, CMT -
Bollinger Bands

16:05-17:00 John
O'Donnel - Live trading

17:05-18:00 Russell
Sands, CTA - Turtle
trading method - trend
following for 21st century



Larry Williams, is one of the best-known trading authorities in the world today. He has traded the markets for nearly 40 years, and in the process has pioneered revolutionary trading techniques and indicators that have been used by literally thousands of traders. His breakthrough Williams %R Indicator is now an accepted technical indicator that is incorporated into numerous software charting packages and financial web sites, and is published in financial newspapers internationally. Larry is perhaps most famous for winning the world's most prestigious real-money trading championship.



John Bollinger - CFA, CMT is probably best known for his Bollinger Bands, which have been widely accepted and integrated into most of the analytical software currently in use. His book "Bollinger on Bollinger Bands" was published in 2001 by McGraw Hill. He is the president and founder of Bollinger Capital Management, Inc., an investment management company that provides technically driven money management services.

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09:00-10:00
Fundamental Analysis -
Round table

10:05-11:30 Alexandre
Póvoa, MBA - Valuation

11:35-13:00 Invited
Analysts - Market tour

14:30-16:00 Larry
Williams, professional
trader - How to succeed
Day trading futures

16:05-17:00 Frank
Tirado, Trading SPDRs
Options

17:05-18:00 Álvaro
Bandeira, economista -
How to build a stock
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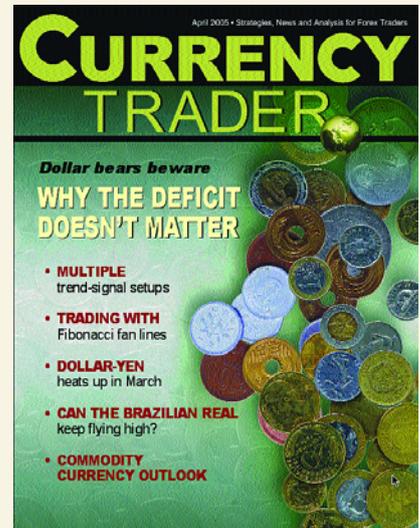


Correction

In the April 2005 issue, *Currency Trader* mistakenly ran a story — “CFTC alleges FX fraud” — about a February 2004 incident involving Gibraltar Monetary Corp (which was associated with forex dealer Forex Capital Markets, FXCM) as if it occurred in February 2005. There have been no regulatory or legal findings against FXCM related to this incident in the 15 months since the initial complaint against Gibraltar, and FXCM is bringing a motion to dismiss the case because the CFTC has not pursued it.

FXCM points out it was one of the first forex dealers to become regulated in 2001 and that it has been a vocal advocate of increasing the financial requirements of Forex Dealer Members to ensure traders deal with only solid institutions. FXCM’s regulatory record can be viewed at www.nfa.futures.org/basicnet/Details.aspx?entityid=0308179&rn=Y. The firm’s Web site is www.fxcm.com.

Currency Trader regrets the error.



Forex conferences?

I’m looking for FX seminars in NYC in the coming months. Do you know of any in the coming one to four months?

The only FX conference we’re aware of right now is the one in Las Vegas in November:

FOREX Trading Expo
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www.intershow.com

The other conferences this group puts on every year in New York (February) and Chicago (July) have added a great deal of forex content, though.

It’s so cold I just saw a penguin check into a motel

I’ve just been introduced to *Currency Trader* magazine and I’m frozen in amazement! I’ve been studying forex trading for a year, and your magazine contains all of the information I spent all year accumulating.

—M. Adams

Getting started

This my first look at your magazine. I am looking for a mentor or training for forex. Do you have any suggestions? How should I get started? What software do you recom-

mend? What about brokers, etc? Your reply would be greatly appreciated.

—Overwhelmed

One bit of advice: Let the market be your first mentor. Do as much research on your own as you can — analyze the markets, develop your own trading ideas, test them, and so on. When you’ve gathered enough knowledge, it will be easier to find helpful mentoring or training. You might want to track or follow the performance of online advisors or potential mentors to determine if they have any real value. We don’t review trading classes or workshops. But if you read an article or book you find compelling, contact the author and ask questions.

You can “test drive” many analysis programs and trading platforms by downloading free trial versions to your computer. Also, check brokerages to determine whether or not they’re registered as futures clearing merchants (FCMs) with the Commodity Futures Trading Commission (CFTC) and National Futures Association (NFA). Although spot forex is not part of the listed futures market (and there’s debate over who, if anyone, regulates forex), many spot forex firms have voluntarily registered with these regulatory bodies because of the credibility it confers. Find out how long they’ve been in business, how large their capital reserves are, and whether they charge a flat commission or make their money off the bid-ask spread. And don’t trade until you’re ready — the market will still be there when you are.

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Future or not?

Court case brings CFTC's authority into question

BY JEFF PONCZAK

For years, the currency industry had a reputation as the "Wild West" of trading, and much of it was deserved. Fly-by-night operators made fraudulent business transaction by day, then skipped town by night before anybody could catch them.

Since 2000, when the Commodities Futures Modernization Act (CFMA) gave the Commodity Futures Trading Commission (CFTC) more power in controlling fraud, the forex industry has been cleaned up.

However, fraud still exists, and a recent court ruling has several industry participants wondering how much power the CFTC actually has and asking Congress for help in increasing it.

In *CFTC vs. Zelener*, a federal court ruled that spot forex transactions that called for delivery of a commodity within two days were cash contracts and therefore not under the jurisdiction of the CFTC, even though the contracts were often "rolled over" like a typical futures contract and were bought on margin. This, obviously, opens a potential can of worms when it comes to spot, or cash, forex trades.

"The CFMA clarified that the CFTC has jurisdiction over retail foreign currency futures and option contracts, whether transacted on exchanges or over-the-counter, as long as they are not otherwise regulated by another agency," says Sharon Brown Hruska, CFTC chairwoman. "However, as demonstrated in the recent adverse Zelener decision, the CFTC continues to face challenges to its jurisdiction based on how retail forex transactions are characterized.

"It has been the subject of much discussion within the industry as to how to respond to the Zelener decision — whether we need additional authority or clarity in our jurisdiction, or whether we simply need to prove our cases better."

However, Brown Hruska points out that since the CFMA was passed in 2000, the CFTC has filed 70 cases — losing

only three — on behalf of more than 20,000 customers and prosecuted more than 265 companies. Those cases have resulted in more than \$240 million in fines and restitution.

According to Chuck Carey, chairman of the Chicago Board of Trade, the court's ruling in the Zelener case goes beyond the forex market.

"The contracts at issue case were nothing more than speculation in foreign exchange," Carey says. "The effect of the decision, however, cannot be limited to foreign exchange speculation. It provides a roadmap for unscrupulous persons to engage in over-the-counter contracts involving agricultural and other commodities, with no government supervision whatsoever, and entirely free of the anti-fraud jurisdiction of the CFTC."

Terry Duffy, chairman of the Chicago Mercantile Exchange, says the defendants in the Zelener case took advantage of a loophole in the rules. The loophole allowed them to place a disclaimer on their Web site notifying counterparties that the dealer is not absolutely obligated to enter into an opposite, offsetting transaction, or that under some circumstances an opposite transaction will not offset existing positions.

This, Duffy says, made the contracts outside the realm of the CFTC, and it points out the need for both the futures industry and Congress to consider changing the rules.

"The sharp operators and bucket shops have already figured out that the rationale of the Zelener opinion can apply to commodities other than FX," Duffy says. "How soon will it be before the CFTC's jurisdiction and its retail consumer protections are reduced to irrelevance?"

John Damgard, president of the Futures Industry Association, says the CFTC has been essentially fighting a lone battle against foreign currency fraud, with a little help from the Department of Justice.

However, the original text of the CFMA was purposely written to avoid giving the CFTC too much jurisdiction in certain over-the-counter transactions. While he's not against new legislation that would help the CFTC in situations such as the Zelener case, he cautions that any new laws would need to avoid going too far.

"Any legislation must be carefully tailored," Damgard says. "We are concerned that the temptation would be to draft legislation that is broad in scope in order to address all OTC transactions in all commodities where a retail participant is a counterparty. That could inadvertently interfere with legitimate risk-management transactions entered into by commercial parties."

The National Futures Association (NFA) also agrees that new legislation must be carefully worded, and it has a suggestion — Congress should specifically address the loophole mentioned by Duffy that allowed the Zelener defendants to avoid CFTC scrutiny. That, says, NFA president Daniel Roth, would also help address another issue of great concern to the forex industry.

"A number of firms that do not engage in any other regulated business have nonetheless registered as FCMs to qualify to be an otherwise regulated entity for the sole purpose of acting as counterparties in (OTC) transactions," Roth says.

According to Roth, on June 23, 14 firms were registered by the NFA as Forex Dealer Members, accounting for about \$170 million in retail customer funds. As of March, there were 28 firms with more than \$520 million under account. And, the growth has not come without its problems.

"Though relatively few in number, forex dealers have accounted for 50 percent of our emergency enforcement actions and more than 20 percent of our arbitration docket," Roth says.

Several retail brokers contacted for this story declined to comment. ☐

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Pound watchers eye May election outcome

Some analysts believe the UK may hike rates in May.

But will the Bank of England choose to take a hands-off approach during an important election month?

BY CURRENCY TRADER STAFF

Early May ushers in several big events for the British pound. First and foremost, traders will be eyeing election results on May 5 as a key factor for the pound going forward. While the Labour Party had retained a lead in the polls through mid April, their advantage had been narrowing.

"The election is foremost in a lot of people's minds," says Andy Busch, global foreign exchange strategist at Harris/Nesbitt in Chicago.

For now, most market watchers

believe that Labour Party leader Tony Blair will retain power. However, the key issue will be whether or not they lose parliamentary majority seats, and if so, how many. Currently, Labour controls 161.

"If Labour loses a significant number of their seats — more than 10 to 15 — it will be bad for the pound as it will create political uncertainty," Busch says.

Tom Rogers, senior currency analyst at Thomson Financial adds, "I tend to believe Blair will get re-elected, [but] you've seen some guys getting out of

pound assets [as of mid-April]. If the Tories win, people think the pound would go down a little bit."

Monetary policy on hold

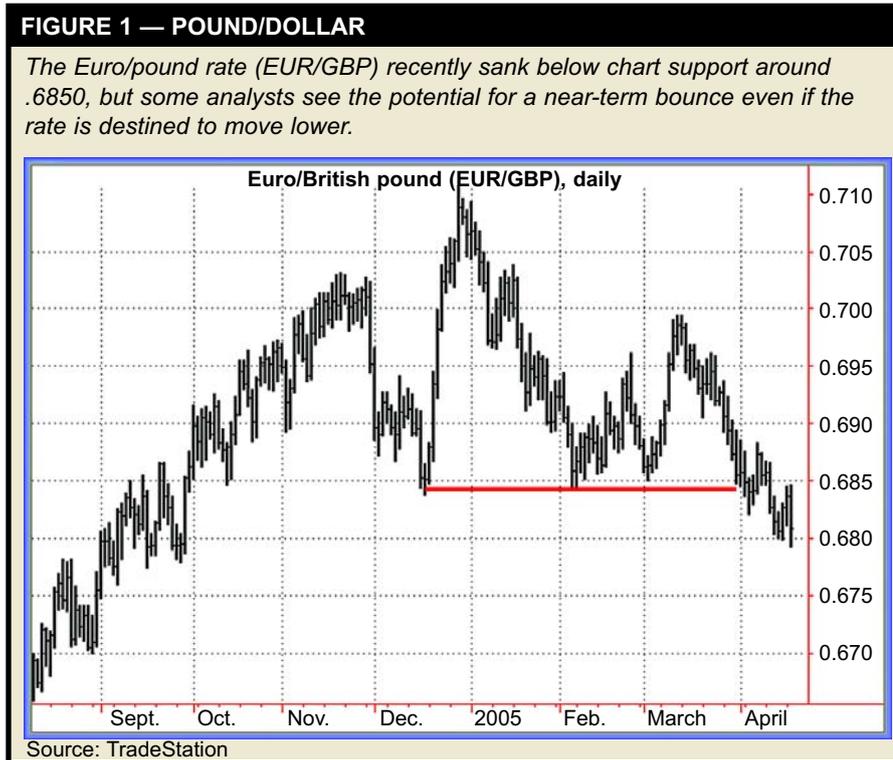
Once the election is out of the way, the Bank of England (BOE) is set to meet between May 6 and 9. The Monetary Policy Committee (MPC) meeting was delayed by several days because of the election.

Given the proximity to the election and signs a previously overheated housing market had begun cooling, most market watchers believe the BOE will keep rates intact at 4.75 percent at the May gathering. The pound is still a high-yielding currency, boasting positive interest rate differentials vs. many countries, including the U.S., Canada, the Euro zone, Switzerland, and Japan.

While it's been nine months since the BOE pulled the trigger on a rate hike, some analysts have speculated there is still one more tightening in this cycle. The BOE last raised rates by 25 basis points in August 2004.

"The risk is the possibility of one more tightening," Rogers says. "I think the housing market has started to slow, but there are still some people who say inflation is a bugaboo."

Analysts who believe another rate hike is still in the pipeline point to two dissenting MPC members who voted for a rate hike at the April meeting. Concerns that low unemployment could add upward pressure to wages and overall prices was cited as the main reason for a hike.



"There is definitely some pressure within the BOE to increase interest rates," notes Sean Callow, currency strategist at Ideaglobal. "There are price pressures relating to oil."

Tightening later this year?

Others believe that although May might not be the right time for a BOE rate hike, the second half of 2005 could still produce another nudge higher in British rates.

"There is the possibility of a rate hike in the second half," says Kathleen Stephansen, director of global economic research at Credit Suisse First Boston. "We believe the target will be at 5 percent by year-end."

Analysts at 4Cast Inc. are in the rate-hike camp.

"We still expect one more tightening in this cycle," says Ray Attrill, director of research at 4Cast Inc. "But, it remains a close call whether it comes as early as May or perhaps August. Recent data is offering enough of a mixed picture about the health of consumer spending and the extent of spare capacity or labor market slack to leave the 'wait-and-see' faction of the MPC in the driving seat. But that could quickly change with a couple of strong numbers."

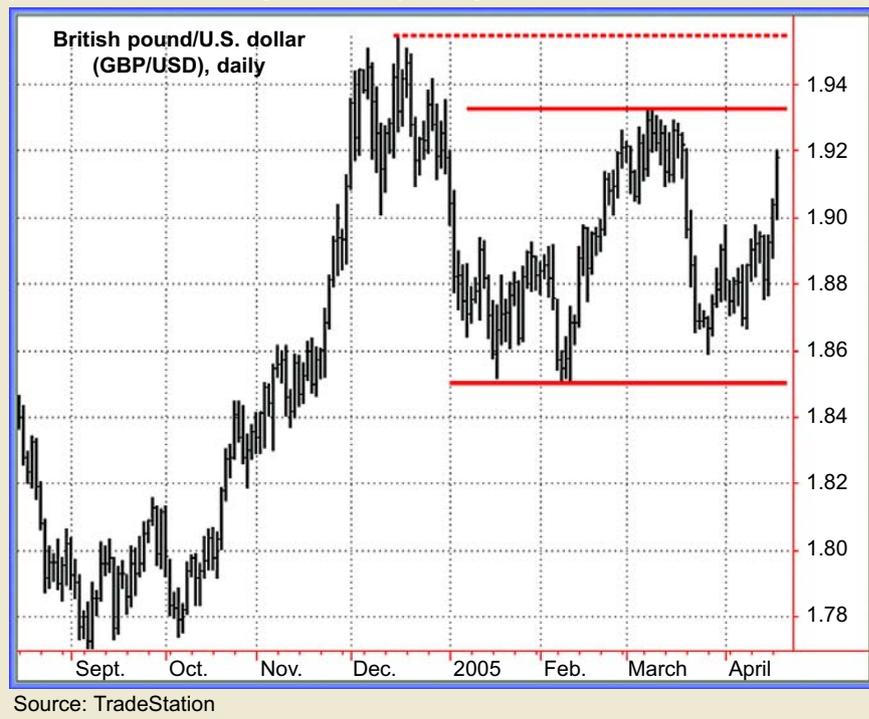
The economic numbers

Overall, most analysts expect gross domestic product in Britain to come in around 2.7 to 2.8 percent in 2005, which would be a decline from 3.1-percent growth in 2004.

The most recent UK industrial production data available revealed a weaker-than-expected 0.4 percent decline in February. Analysts say a 0.5-percent drop in manufacturing production was the main driver of the unexpected weakness. Also, UK labor market data released in February revealed additional economic contraction: Employment rose by 148,000 in the three months to February. Looking at the inflation numbers, UK PPI input prices gained 1.8 percent month-over-month in March, following a 0.1-percent increase in February.

FIGURE 2 — EURO/POUND

The pound/dollar rate (GBP/USD) has been confined to a broad trading range so far in 2005. The dollar's outlook will be critical in determining whether the pound makes a challenge to the 12-year high set in December 2004.



Looking ahead, traders will need to watch if industrial production figures and consumer spending data begin to soften in the wake of higher oil prices.

Pound/dollar

For most of early 2005, the pound/U.S. dollar rate (GBP/USD) has been confined to a large sideways range, trading between roughly 1.85 and 1.93 (Figure 1). A rally would have to push through the 1.93 ceiling to open the door to a challenge of the major resistance (and a roughly 12-year high) around 1.95. GBP/USD last traded in late December.

To a large extent, which way the pound breaks out of this sideways range will depend on action in the U.S. dollar. If the greenback were to resume its longer-term downtrend, it could send the pound back toward the 1.95/1.96 resistance area, analysts say.

"We think on a resumption of broad weakening in the U.S. dollar, the pound will be one of the favorite vehicles to play that, because it has a better

yield than the Euro or the Swiss franc," says Ideaglobal's Callow.

The Euro/pound picture

Looking at the pound on the crosses, EUR/GBP has seen a downtrend for much of 2005, falling from roughly the .7100 level to the 0.6800 area in early April.

"The pound is starting to get a little expensive against the Euro," Callow says. "We are probably close to a point where there will be a little bit of a reversal."

Callow thinks the .6950 area is a likely spot for EUR/GBP to gravitate toward in the short-term.

However, once a corrective move has occurred, potential for additional near-term selling in the EUR/GBP is possible.

"EUR/GBP is still essentially a EUR/USD trade," Attrill says. "We would expect to see EUR/GBP below 0.6800 in the context of higher rates and continued short-term cyclical dollar strength." ☺



Swiss miss

The Swiss National Bank moved to the sidelines and left interest rates steady at its March meeting. What's behind Switzerland's poor economic outlook, why have recent growth forecasts been downgraded, and what will this mean for the Swiss franc?

BY CURRENCY TRADER STAFF

The U.S. dollar/Swiss franc (USD/CHF) has improved modestly since the beginning of 2005, but analysts primarily consider that strength a dollar story, not a Swiss story. Overall, the Swiss economy has churned out weak economic performance in recent quarters, and the outlook has not brightened a great deal, which should weigh on the currency outlook in the months ahead.

In January and February, the Swiss franc rallied from 1.1200 to the 1.2260 area (Figure 1). After selling off, the

currency pair rallied again, only to stall around 1.2200 in mid-April. Most analysts expect a renewed weaker trend in the U.S. dollar to pressure the dollar/Swiss rate moderately lower in the weeks and months ahead.

Weak exports and business prospects

A big part of the problem is sluggish economic data continues to emerge from Switzerland, with weak exports the primary culprit. About 60 percent of total Swiss exports head for Europe, with roughly 20 percent going to

Germany.

"The Swiss economy is very export driven," says Henrik Gullberg, an analyst at 4cast Inc. "The poor economic development in the Euro zone economy, and in particular Germany, is holding Switzerland back."

With 2005 gross domestic product (GDP) forecasts for the Euro zone limping around the 1.6 percent area (down from earlier estimates of a 1.9 percent growth) the outlook continues to deteriorate for the Swiss export market.

"Switzerland has suffered from particularly dismal economic performance in recent months," adds Melanie Averall, associate economist at Economy.com. "The Swiss economy contracted 0.1 percent in the fourth quarter of 2004, down from a modest 0.4 percent expansion in the previous quarter."

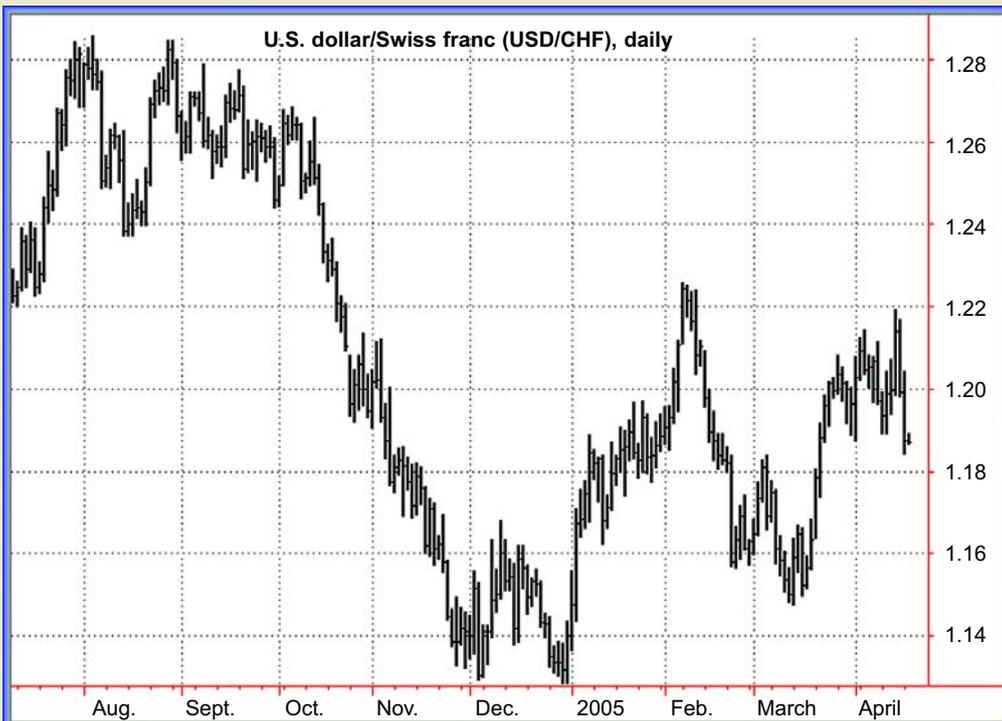
Averall points to weak business investment as another factor, which will likely keep the Swiss economy in a downward trajectory in the months ahead.

Swiss GDP growth forecasts for 2005 are in the 1.4 to 1.5 percent range. Analysts say an upturn in the economy is dependent on recovery and faster growth in the Euro zone as a whole.

The widely watched KOF, released by the Swiss institute for Business Cycle Research, is the leading Swiss economic indicator for business expectations and sentiment.

FIGURE 1 — U.S. DOLLAR/SWISS FRANC, DAILY

Despite a bounce earlier in 2005, the Swiss franc faces several fundamental economic hurdles, including prolonged low interest rates and weak Swiss exports.



Source: TradeStation

"This key gauge of the Swiss economy has lost roughly half of its value since mid 2004 and is well off the three-and-a-half year high recorded in July last year," Averall notes. "The latest reading stands at 0.44 as of March, down from the 2004 high at 0.94."

Sean Callow, currency strategist at Ideaglobal, says the economic weakness "means we are a bit light on reasons for buying the Swiss franc." Nonetheless, Callow notes, "They do have a large trade surplus, which is an underlying positive. But the franc is not likely to attract many investment flows. Their interest rates are so low and will stay low."

Interest rates: SNB holding steady

At 0.75 percent, the official three-month target Swiss interest rate remains on the low side for the industrialized world, with only Japan coming in lower. Many analysts believe monetary policy from the Swiss National Bank (SNB) is on hold for now, with its next meeting coming up June 16. The bank last adjusted rates in September 2004 with a 25 basis point rate hike.

The weak interest rate environment ultimately is a negative factor for the currency.

"As long as a steady policy is sustained, a softer franc trend [vs. the dollar] is likely to continue as a reflection of the real economy," says Kathleen Stephansen, director of global economic research at Credit Suisse First Boston.

Some analysts point to fall 2005 as the first likely time for a potential rate hike, with Stephansen forecasting the potential for the Swiss rate to climb to 1.25 percent by year-end.

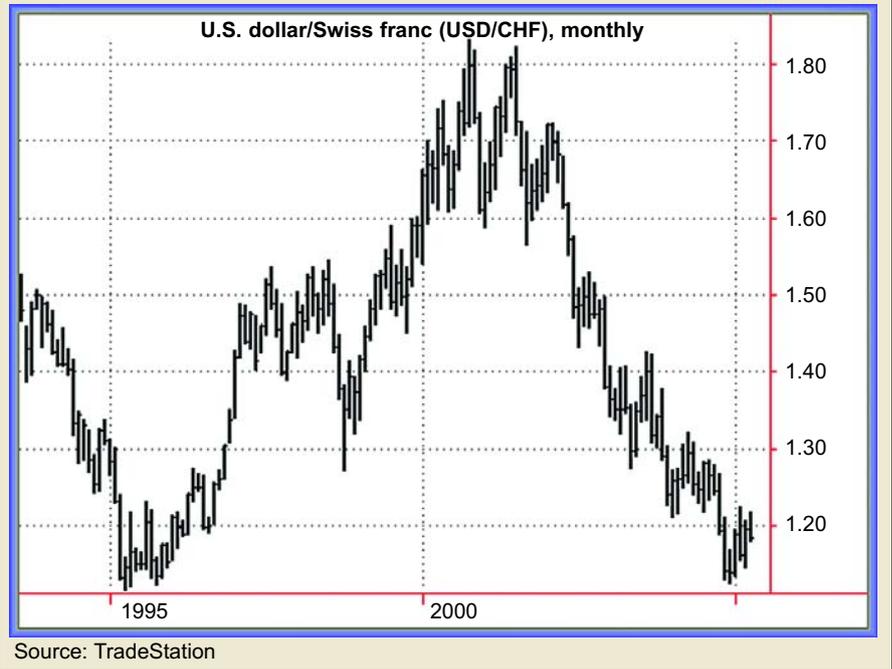
Risk appetites seen now

The Swiss franc is traditionally thought of as a safe-haven currency — during times of international uncertainty or tension, buyers tend to flock to the currency. However, in recent months global investors have had more of an appetite for risk.

"When risk appetite wanes and people are worried, people often buy the

FIGURE 2 — U.S. DOLLAR/SWISS FRANC, MONTHLY

The dollar/Swiss rate recently approached levels not seen since the mid-90s. Some analysts forecast renewed weakness that could send the currency pair back to test the 1.11 area.



Swiss franc," Callow says. "It is seen as a port in the storm, a safety play. After the Sept. 11 attacks, the Swiss franc was one of the strongest currencies."

However, in the current environ-

bias for the dollar.

That level roughly coincides with daily chart support around the 1.14 area from mid-March. A more important floor on the daily chart is seen at the 1.12/1.13 area, the lows from December

The Swiss franc is traditionally thought of a safe-haven currency – during uncertain times buyers tend to flock to the currency. However, in recent months global investors have had more of an appetite for risk.

ment, "when there is quite a bit of risk appetite, the Swiss franc is not as appealing. There are no great panics in the market," he adds.

Key levels to watch

Looking ahead, analysts say to a large extent the trend in the U.S. dollar will be the key determinant of dollar/Swiss action. Callow forecasts renewed declines in the USD/CHF rate toward the 1.15 area over the next several months, assuming a negative

and January. The 1.13/1.11 zone represents major long-term support evident on the monthly chart (Figure 2).

"If the U.S. dollar resumes its weakening trend, as we expect later in the year, the big level to watch is the 1.11 area, the 1995-96 base from the last major cyclical dollar downtrend," says 4Cast's Gullberg.

If declines were seen below that zone in dollar/Swiss "we get into the realms of dollar crisis territory with EUR/USD 1.40 and rising," Gullberg concludes. 📍



Will central banks dump the U.S. dollar?

The U.S. dollar no longer enjoys the same supremacy it possessed in the past, but that doesn't mean global traders or central bankers are ready to scrap the greenback as the no. 1 reserve currency.

BY EARL JOHNSON

The \$11-trillion American economy accounts for nearly 30 percent of global economic output and the U.S. dollar has dominated global commerce and finance throughout the second half of the 20th century. The greenback is involved in more than 80 percent of foreign exchange transactions, and dollars account for more than 60 percent of central bank reserve holdings.

The dollar's position has hardly been unassailable, though. Financial headlines warning of a potential dollar crisis because of escalating balance of payment deficits have become commonplace over the past six months. In February, however, the dollar was undermined by a new looming threat — central bank reserve diversification. Is it a real problem?

The managed floating rate system

Global commerce among nations can only be conducted by converting national currencies into other curren-

cies, and these currency conversions take place at prevailing exchange rates. Obviously, global trade and finance can't grow unless there is an

cial officials from 45 countries met at the resort town of Bretton Woods, N.H. to establish a global financial system that would promote expanded world trade and finance.



efficient, established system for exchanging national currencies.

Historically, nations have experimented with financial systems based on fixed exchange rates as well as flexible rate systems. In July 1944, finan-

The Bretton Woods conference created a multilateral institution known as the International Monetary Fund that would oversee a monetary system based on fixed exchange rates with global currencies pegged to the dollar, which was tied to the price of gold. The Bretton Woods system of fixed exchange rates fostered global economic prosperity in the early post-WWII decades, but the unduly rigid system collapsed in the early 70s, and a more flexible exchange rate system took its place.

The current global monetary system is most accurately described as a "managed floating rate" system, because currency values are allowed to change freely, but central banks periodically intervene to correct disorderly market conditions and prevent excessive rate fluctuations.

To facilitate such intervention activ-

ity, central banks maintain a supply of reserve currencies. The vast majority of reserve currency holdings consist of dollars, but global monetary authorities also hold (relatively) small amounts of Japanese yen, British pounds, and Euros.

South Korea diversifies

In late February, the foreign exchange market was shocked by the release of a South Korean report that its central bank might begin adding Australian dollars and Canadian dollars to its pre-

sizeable amounts of U.S. Treasuries — might be contemplating similar diversification programs in response to a softening dollar.

Japan, whose dollar reserves exceed \$700 billion, quickly attempted to reassure the financial community that it had no intention of shrinking the dollar percentage of its reserve holdings. For decades, Japanese authorities have faithfully channeled dollars acquired through currency intervention activities into U.S. Treasuries, and there is no reason to believe they won't continue

about 30 percent on a trade-weighted basis in the past three years, but central bankers aren't contemplating substantial reserve diversification programs, simply because there aren't many attractive non-dollar instruments available at the present time. U.S. interest rates are nearly 1 percent above rates in Europe and Asia, while rapid U.S. economic growth and sluggish growth in the Eurozone and in Japan doesn't encourage central banks to avoid dollar assets.

The Euro alternative?

The Euro currently accounts for about 10 percent of international global reserves and is probably considered (by monetary authorities wishing to diversify their reserve holdings) the most attractive alternative to the dollar.

The ultimate source of strength of any currency is the economy supporting that currency, and the sluggish performance of the Eurozone economies in 2004 and 2005 raise serious doubts about the willingness of global monetary authorities to enlarge their Euro reserve holdings.

In 2004 the 12 Eurozone economies experienced average economic growth of only 2 percent. A similar or slightly stronger growth performance was anticipated this year but in early April, European officials lowered their estimate of average real GDP growth this year to 1.6 percent. Even this modest growth objective may not be achieved if the European Central Bank decides to react to accelerating money supply growth and potential inflationary pressures by raising the refinancing rate from a two-year low of 2 percent this fall.

The future of the Euro as a reserve currency could also be significantly influenced by a critical late-May refer-

continued on p. 20

The dollar has slipped about 30 percent on a trade-weighted basis in the past three years, but central bankers aren't contemplating substantial reserve diversification program because there aren't many attractive non-dollar instruments available.

dominantly U.S.-dollar reserve holdings. Not surprisingly, this unexpected report triggered knee-jerk dollar sales in trading centers around the globe as traders contemplated a widespread diversification away from dollar reserves by monetary authorities.

Fortunately, such action is highly unlikely, and South Korean authorities quickly attempted to quell market fears by indicating they had no intention of sharply reducing their dollar holdings. South Korea's dollar holdings of \$70 billion account for only about 4 percent of global dollar reserves. Nevertheless, the dollar dropped about 1.5 percent when the South Korean report hit the newswires as investors and dealers speculated that countries like Japan, China, and the United Kingdom — which hold

to do so despite modest dollar weakness in recent years.

The Bank of China, whose dollar reserves exceed \$200 billion, actively purchased Treasuries last year as it intervened to defuse revaluation pressures. The Bush Administration has recently stepped up pressure on Chinese authorities to allow the yuan to appreciate. A revaluation this year is possible but not probable, so Treasury purchases by the Bank of China should continue. The Bush Administration believes Chinese trade surpluses with the U.S. will decline once the undervalued yuan is revalued, but the U.S. could also suffer some undesirable consequences if dollar-supportive Chinese purchases of Treasuries dwindle in the wake of a yuan revaluation this year.

The dollar has admittedly slipped



endum in France on a new constitution for the European Union. Public opinion polls suggest French voters might reject the new constitution, which clearly would undermine the Euro and possibly jeopardize the future political stability of the EU.

Diversification is the traditional response to financial risks associated with any portfolio of assets, so it would not be surprising if global mon-

gradually add Euros to their reserves, but it is unlikely central banks will aggressively build up their holdings of Euros unless European politicians are willing to undertake unpopular structural reforms designed to improve the growth performances of the major European economies.

The American dollar no longer enjoys the widespread confidence and appeal it possessed in the immediate

sustained dollar upturn seems unlikely as long as U.S. trade deficits continue to widen. Traders and investors have temporarily shifted their attention to the supportive benefits of U.S. rate increases, but in the medium-term, dollar selling pressures will likely resume, especially if Fed policy shifts from a restrictive to a neutral posture as the pace of U.S. economic expansion slackens. As in 2004, the dollar will likely slump in the closing months of 2005, dropping 3 to 5 percent on a trade-weighted basis.

The Euro seems destined to play a greater role in the global financial system, but recent economic and political problems within the Eurozone suggest it may be some time before the Euro gains widespread acceptance and wins the confidence of the global community

etary authorities diversify their existing reserve holdings to compensate for the risks associated with a three-year dollar downtrend. The critical questions for future dollar stability are the scope of diversification programs and how quickly they are implemented.

Given questionable growth prospects in Europe and Japan and the lack of attractive non-dollar investments, reserve diversification by global monetary authorities will likely proceed at a gradual pace, and annual shrinkage in the percentage of dollar assets in central bank reserves should decline by only one or two percent over the next several years. Central banks will not sell their existing dollar assets but will purchase additional Treasuries at a slower pace.

Within the next five years, it would not be surprising to see the percentage of dollars held by monetary authorities decline by 4 or 5 percent to slightly less than 60 percent of total reserves. Prudent monetary authorities may

postwar period but that doesn't mean that global traders, investors, or central bankers are ready to dethrone the greenback as the pre-eminent international currency.

The Euro seems destined to play a greater role in the global financial system, but recent economic and political problems within the Eurozone suggest it may be some time before the Euro gains widespread acceptance and wins the confidence of the global community. Recent dollar weakness is undoubtedly a concern to central bankers but the greenback is not necessarily experiencing a major crisis of confidence at the present time — especially given the largely unanticipated strength of the dollar so far this year.

Bearish dollar sentiment recently dissipated as the greenback edged upward against the Euro and the yen, prompting some currency analysts to speculate the dollar is bottoming out after a three-year downslide and may be poised to trend upward. However, a

Reports of death premature

For the foreseeable future, the U.S. dollar will remain the world's most attractive investment currency. U.S. financial markets will continue to attract foreign capital since they are the largest and most liquid markets in the world. Over the past several years, U.S. economic growth has been much stronger than growth in Japan or the major European economies. Rising U.S. interest rates provide foreign investors with higher returns than can be obtained elsewhere.

The U.S. dollar should remain the global monetary standard for many years, reflecting the dominant strength of the innovative, U.S. economy as well as well-regulated, smooth-functioning financial markets that are significantly more efficient than capital markets prevailing in Europe or Asia. Net foreign purchases of U.S. securities in January were the second largest monthly total in history. From November 2004 to January 2005, net monthly foreign capital inflows averaged \$77 billion, easily enough to cover monthly trade deficits averaging about \$60 billion. Obviously the global investment community retains a solid appetite for dollar-denominated assets, which suggests dollar-crisis fears are exaggerated. 📌

For information on the author see p. 8.
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Chinese revaluation: Better never than late?

China has been under enormous pressure — spearheaded by the U.S. — to let its currency float freely. But perhaps we should be careful of what we wish for.



BY BARBARA ROCKEFELLER

The foreign exchange market is in a tizzy over whether China will revalue its currency, the renminbi, sometime soon — meaning, before the end of this year, or maybe even during the first week of May, which is a holiday week in China and Japan.

The current situation is a rich stew of economic, financial, and political factors, with a dash of history and a dollop of gamesmanship thrown in. U.S. and European politicians are screaming for measures to punish China for excessive exports. For a few weeks in April, Chinese citizens — prompted in part by Japan's bid for a

permanent seat on the U.N. security council — staged mass protests of Japan's refusal to take responsibility for war crimes and vandalized

Chinese currency revaluation is a political event, not a financial or economic one.

Japanese businesses and embassies.

How likely is a renminbi revaluation? In the end, the revaluation decision is a Chinese one, and we may not be able to incorporate all the factors

they do.

In a nutshell, the Chinese would be ill advised to revalue their currency by a meaningful amount, now or later, let alone move from a fixed rate to a truly floating one. Doing so doesn't serve their immediate self-interests, although it is a truism of economics that an artificially fixed currency rate results in misallocation of resources and various inefficiencies.

In fact, recent words from Federal Reserve Chairman Alan Greenspan are what set off the latest round of speculation about the timing of a revaluation. In late April, Greenspan said the fixed renminbi is detrimental to China because it causes imbalances in

China's economy, and should be relaxed "sooner rather than later." The same day, Treasury Secretary John Snow said "the time has come" to let the renminbi revalue.

These comments seem mild, but in the world of international diplomacy they are dynamite — and they induced a staggering response.

Two days later, Zhou Xiaochuan, head of the Chinese central bank, said, "If there is more pressure from outside, it may force us to speed up our reform. I always think that pressure is not a bad thing. It is often a driving force that pushes you to do your work better."

This was a shocking about-face from China's previous attitude toward outside pressure. Zhou added, "We have a very clear target in this regard, but we have our own sequence. We are doing some preparation, for example the reform of the financial sector, to enlarge the role of the foreign-exchange market."

Finally, Zhou said "there were no serious political or technical obstacles to revaluing the yuan."

No serious obstacles? This assertion is simply not true. By examining why, we can more readily understand why the probability of a large and meaningful renminbi revaluation any time soon is very remote.

Backgrounder

The Chinese "currency" is actually two currencies. The first, the yuan (which refers to a 13th century royal dynasty), is for domestic use by Chinese citizens. The yuan is non-convertible. A Chinese person can't take 100 yuan banknotes into a bank and buy U.S. dollars, British pounds, or Japanese yen.

The second, the renminbi (abbreviation: Rmb), replaced Chinese Foreign Exchange Certificates in 1992 and could originally be owned only by foreigners for transactions inside China.

Now Chinese citizens are allowed to exchange yuan for renminbi, renminbi

for dollars, and take as much as \$750 outside China. Under Chinese exchange rate rules, foreigners must use renminbi inside China for all commercial and financial purposes, and they all get the same fixed exchange rate.

The renminbi is convertible into the

Any limitation on currency convertibility has an obvious purpose — not only to prevent capital flight in the event of problems such as social upheaval or inflation, but also to guard against a flood of cash entering a country and upsetting the money supply appletart.

U.S. dollar at an exchange rate of 8.28, or about \$0.1200. Through the dollar rate, the renminbi is also convertible into other major currencies. Technically, the rate is not fixed or "pegged" to the dollar; China prefers to consider it a "managed float" in a range of 0.03 percent, which is an International Monetary Fund (IMF) classification. From the beginning of 2004, the renminbi has fluctuated between 8.2775 and 8.2763, a range so narrow that it is, for all practical purposes, a "peg."

But it's important to keep in mind the concept of a managed float,

because China can allow the renminbi to change by some small amount against the dollar and have it perceived as an important event — evidence that China can use to claim it was using a version of a floating currency all along.

A pegged currency or a strictly managed float is always accompanied by exchange controls that stipulate when, where, and how citizens can get foreign currency and foreigners can get the domestic currency. Any limitation on convertibility has an obvious purpose — not only to prevent capital flight in the event of problems such as social upheaval or inflation, but also to guard against a flood of cash entering a country and upsetting the money supply appletart.

Money flows into a country when it offers a higher interest rate or the possibility of a currency revaluation — as in China. And China has indeed experienced an influx of foreign money, on the order of some \$60 billion over the past year. China "sterilizes" the cash by issuing its own short-term debt instruments, akin to 90-day Treasury bills in the U.S., to soak up the excess liquidity so the banks can't lend it out, increasing domestic activity further.

Where the renminbi meets the road

The need for money inflow sterilization brings up the key subject of how a command economy works compared to a free-market economy. No one doubts China's commitment to reform its institutions and practices to the free-market model, but it certainly is not "there" yet.

In a command economy, the government tells the banks the interest rate that can be paid on deposits and what interest rate can be charged for loans. Because nearly all businesses are state-owned, including the banks, this has the effect of allocating capital in an arbitrary manner instead of according to competitive advantages. On a prac-

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tical level, command interest rates do not reflect true supply and demand for funds. If you are a money-market trader with a global reach, you are indifferent between depositing your funds in Country A (the home country) at 5 percent, or Country B at a 10 percent with a 5 percent discount on the forward exchange rate back to Country A's currency. The "covered interest arbitrage" is perfect — the trader has no monetary advantage in "swapping" his funds to Country B.

But if Country B offers 10.5-percent interest and the same 5-percent discount on the forward exchange rate, the trader will obviously prefer Country B. Similarly, if Country B offers 10 percent but only a 4.5 percent discount on the forward exchange rate to get back into the home country currency, he gets a 0.5-percent advantage in placing the money there.

In practice, the 0.5-percent advantage never exists. If it did, it would be arbitrated away in minutes. Forward exchange rates always reflect, almost to the penny, the interest-rate differential between the two countries competing for deposits.

When the forward foreign exchange rate is off by a bit, like the 0.5 percent in the preceding example, cash will flow into the country with the higher interest rate or "deficient" forward rate. This is exactly what is happening in China, albeit in a limited way. The official forward rate is limited to about 4- to 7-percent discount off the pegged rate. It is not a true market-set forward rate (although it has many participants) because not all parties have true access to the deposit market. In the absence of access to the deposit market, the forward rate is artificial. In fact, the renminbi forward rate is "non-deliverable," in the sense that when the forward contract matures, you do not take actual delivery of the currency in your checking account. Instead, you get the difference in dollars between the spot price and the forward price.

To have a true floating exchange

rate, China would need true floating deposit rates that reflect supply and demand. However, China is unwilling to institute floating interest rates because its banking sector is overwhelmed with bad loans to state enterprises (possibly as much as 50 percent of their total asset base, according to the ratings agencies), not to mention bank-management incompetence and corruption.

To have a true floating exchange rate, China would need true floating deposit rates that reflect supply and demand. However, China is unwilling to institute floating interest rates because its banking sector is overwhelmed with bad loans to state enterprises.

China raised the official one-year lending rate by 0.27 percent to 5.58 percent on Oct. 29, 2004, and it was heralded as embracing market mechanisms. However, this was the first rate change in a decade, and one rate change per decade is hardly an embrace.

Also, in early 2005, China announced a small number of foreign banks and brokers would be allowed to trade the major currency pairs,

excluding the renminbi, starting in May 2005. This is supposed to give the Chinese practice in trading freely floating currencies, like dollar/yen, Euro/dollar, and so on.

This is disingenuous, too, because throughout history the Chinese have been accomplished traders. It's hardly likely that they need any practice, although perhaps it might come in handy to know the current back office and bookkeeping practices, including the arithmetic of covered interest arbitrage, or swaps.

According to the March 2005 Bank for International Settlements Quarterly Review ("Trading Asian Currencies," by Corrinne Ho, Guonan Ma, and Robert N. McCauley; www.bis.org/publ/qtrpdf/r_qt0503e.pdf), average daily trading volume in the renminbi in April 2004 was \$992 million. Trading in the non-deliverable forwards was \$811 million, while FX swaps accounted for a measly \$9 million. ("Swap" refers to the deposit plus forward rate in each country that equilibrates the total return in both countries.)

So how, exactly, would China be able to move to a fully floating exchange rate? It literally cannot. From this we can deduce a floating rate in nowhere in China's future, and the most we can expect is a change in the "managed float" by some small amount — say, 5 to 10 percent.

Where do analysts get this number? Well, it comes from common sense — small changes work best in command economies, as we learned from big changes that backfired so tragically in Russia — and from the non-deliverable renminbi forward rates. This is bad reasoning, however, because the renminbi forward discount bears no relationship to financial reality and is itself a command-economy number. During the height of the revaluation talk in April, the one-year non-deliverable renminbi-dollar forward rate widened by 550 points to 4,600 — the largest spread since January, implying a rate of 7.818 Rmb to the dollar in 12

months (a 5.6-percent revaluation from the 8.278 peg).

And what about the timing? Bank of New York's Michael Woolfolk thinks such a move is not likely until the third quarter at the earliest (when the next Group of Seven [G7] meeting convenes), or possibly ahead of that if it looks as if the U.S. Congress will pass a law imposing punitive tariffs on Chinese exports to the U.S.

In other words, the Chinese revaluation is a political event, not a financial or economic one.

How it all started

The question of a Chinese revaluation was first raised in the G7 meeting in September 2003 in Dubai. A communiqué from the conference was widely interpreted as a challenge to countries with fixed exchange rates, China in particular.

The initial Chinese response was to reject foreign pressure and interference in sovereign decision-making. After all, China's balance of trade is roughly in balance. That they have a high and rising surplus with the U.S. is not their problem — it's the U.S.'s problem for overspending on consumption goods and not saving enough. Because China uses the U.S. dollar as a reserve currency, to revalue the renminbi by 10 percent automatically reduces their reserves of about \$650 billion by the same proportion, or \$65 billion. This is about 10 percent of one year's GDP, and it's a one-time reduction in the national wealth.

Some people want China to revalue by the 40 to 50 percent necessary to make an actual dent in the surplus with the U.S., which is running at a rate of \$13 to 15 billion per month. In the absence of real progress on the revaluation, the U.S. Congress recently passed a proposal to consider a 27.5-percent tariff on all Chinese exports to the U.S., since the fixed rate renminbi constitutes "currency manipulation" to the detriment of a trading partner.

The Treasury hasn't named China as a manipulator since 1994, and clearly

doesn't want to do it today, either, considering the U.S. is in some form of "negotiation" with China on the issue. Congress thinks the Treasury is being hoodwinked by the Chinese and led down the garden path — and it may be right.

But restraints on free trade are always and everywhere a bad thing. A pegged currency may result in misal-

A revaluation is not likely until the third quarter at the earliest — unless it looks as if the U.S. Congress will pass a law imposing punitive tariffs on Chinese exports to the U.S.

location of resources, but so does an economy whose businesses are insulated from competition. The same result — a reduction in Chinese exports to the U.S. — can be achieved by the imposition of an export tax within China, which is a market-based solution and has the added benefit of generating tax revenue in a poor country.

Money and politics

In the end, it will be a political resolution, not a financial one, since the financial one is impossible. That means the related price actions may not be what are expected today, either. The reasoning is that when China revalues, Japan will immediately benefit. China has replaced the U.S. as Japan's top trading partner and export destination. Japan will now be able to compete with the U.S. even better than before, and exports to China will rise.

So why, out of the blue, were there mass demonstrations and street protests against the Japanese in Chinese cities? The Chinese refused to offer an official apology, and were suspected of having engineered the whole thing. After three weeks, the Chinese were able to shut down the protests by forbidding them and also forbidding text messaging and e-mails related to anti-Japanese gatherings. Most recently, the Chinese government accused the protesters of fomenting an evil plot against the Chinese government with the protests.

Some observers point out Japan has the world's second largest economy but China has the world's largest population. Once China modernizes and adopts more of the free-market institutions and practices that lead to sustainable growth and social stability, it aims to be the powerhouse leader in the region, if not the world. If China engineered the protests against Japan — which caused the Nikkei stock index and the yen to crash for several days — it was to demonstrate an already awe-inspiring power that is still in its infancy. We imagine the message was not lost in Washington, either.

The Chinese revaluation won't mean much in its own right. It won't reflect relative purchasing power or change the overall structural imbalance represented by the U.S. current account deficit, but the other events surrounding the revaluation will reveal China's real long-term agenda in the economic power hierarchy.

One commentator said China has the potential to replace the U.S. as the global superpower, and its currency could become the world's reserve currency. Well, not until China adopts and observes the rule of law and the immutable principles of covered interest arbitrage. However, the reserve currency in your grandchildren's day may be the renminbi. 📍

For information on the author see p. 8.

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Canadian dollar

Falling commodity prices won't work in the Canadian dollar's favor vs. the U.S. buck, but interest rate differentials and other fundamentals make it more attractive relative to the Aussie dollar.

BY DAVE FLOYD

USD/CAD. After nearly taking out highs not seen since 1979, the recent technical breakdown in the Reuters-CRB Futures Index (CRB) spells trouble for "commodity-based" currencies such as the Canadian dollar (CAD), Australian dollar (AUD), and New Zealand dollar (NZD).

Industrial production in Japan is decelerating, which is

dollar/Canadian dollar (USD/CAD) and the CRB Energy Index is quite striking (Figure 1), and provides the foundation for a long USD/CAD position for longer-term traders if the CRB Index remains under pressure.

On the U.S. dollar side, the tug-of-war between the positive cyclical forces and negative structural backdrop for the

U.S. dollar continues. Cyclical forces, such as stronger growth in the U.S. and Federal Reserve tightening, will push the dollar higher in the intermediate term, but the technical pattern emerging is complex and will likely continue to frustrate both dollar bears and bulls (Figure 2).

Medium-term players are still holding short positions in the U.S. dollar, which will accelerate an up move in the currency if they are forced to liquidate these trades. Although sentiment toward the dollar has turned up in recent weeks, it has not reached the same level as in previous corrections, which supports a view that medium-term traders have not yet capitulated.

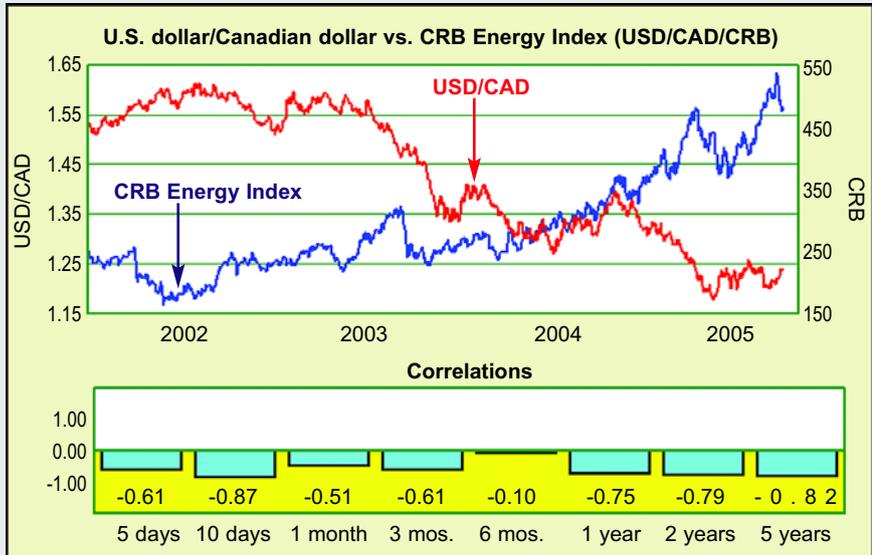
AUD/CAD. A bearish position in the Australian dollar/Canadian dollar (AUD/CAD) can be based on several macroeconomic factors (coupled with a potential break of key support that would expose support around .9200 —

see Figure 3). In March, consumer confidence in Australia made its largest-ever monthly drop. Consumer spending is also weak. The recent setback to confidence and spending is troubling, given the unemployment rate in Australia is so low (just more than 5 percent) and the Australian stock market has been rising nicely for some time. With this backdrop, a rate hike at the April 28 Australian central bank meeting is not a sure thing.

Conversely, Canada, with its strong economic ties to the

FIGURE 1 — USD/CAD VS. ENERGY

If oil prices continue to fall, the Canadian dollar should suffer, justifying a long position in the USD/CAD rate.



Source: 4Cast

usually bearish for commodity prices. Also, China's leading economic indicator hasn't shown signs of rebounding, which could depress commodity prices in the intermediate term.

Falling crude oil prices should depress the Canadian dollar. Speculative positions in oil are very high. A more pronounced setback to the price of oil, which supports Canada's energy-loaded equity market, is negative for the CAD. The negative correlation between the U.S.

U.S., continues to show signs of economic expansion. Canada runs a current account surplus, while Australia has one of the worst current account deficits in the Group of Ten (G10).

New manufacturing orders and unfilled orders have been very strong. Canadian manufacturing shipments are highly correlated with retail sales in the U.S., which are rising at the present time.

The Bank of Canada (BOC) could begin to raise interest rates sooner and at a faster pace than most traders and money managers are expecting. However, the BOC is notoriously difficult to forecast in terms of their monetary policies.

David Dodge, a Governor of the BOC, has said a 200- to 300-point interest rate increase is possible because even at that level the country would still have debt service ratios well below the 20-year national average.

The divergence developing between these two economies/countries is clear. A contraction in their rate differential and weaker commodity prices will impact Australia more than Canada.

Technically, however, traders might need to wait a bit longer before deciding to commit capital. It would be beneficial to see a break of weekly support around .9425-.9450; at

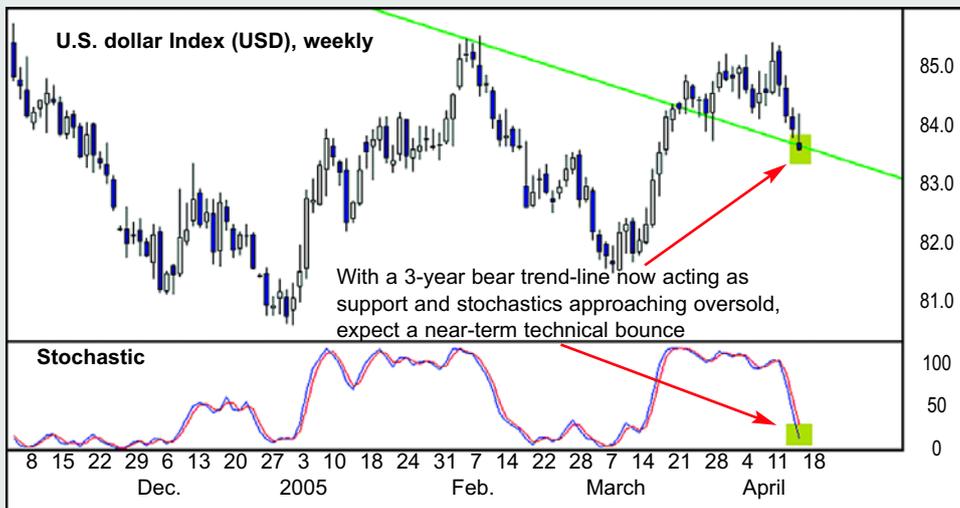
that point there will be more confidence that the marketplace shares in this view of the currency pair. ☺

For information on the author see p. 8.

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FIGURE 2 — U.S. DOLLAR INDEX

The dollar could be poised for a technical bounce.



Source: eSignal

FIGURE 3 — AUD/CAD

Fundamental factors point to a potential decline in the AUD/CAD rate, and a few technical signposts are lined up to coincide with a down move.



Source: eSignal



The Euro FX vs. the E-Mini S&P and 10-year T-note

To put the trend and volatility characteristics of the Euro FX futures into perspective,
try comparing it to other actively traded markets.



BY THOM HARTLE

Many people talk about the tendency for the currencies to trend, which should make it easier for traders to profit. Is this really the case?

One way to help answer this question, at least in part, is to compare the price behavior of currencies to other markets. The study that follows analyzes the Euro FX (EC) futures alongside two popular stock index and interest rate futures contracts — the E-Mini S&P 500 (ES) and the 10-year T-note futures (TY), respectively. The analysis period spanned April 1, 2004 to March 31, 2005.

Figure 1 shows the three markets on a closing basis; the price of the Euro has been multiplied by 100 to put it on the same scale as the T-note on the left axis, while the E-Mini S&P price appears on the right axis. Figure 2 shows the markets in terms of their daily percentage changes, which makes it easier to compare their relative performance.

Figures 1 and 2 show the Euro and the E-Mini S&P 500 finished the twelve-month analysis higher than they began, while the 10-year T-note had dropped slightly. The chart also shows what appears to be a strong relationship between the Euro and the E-Mini S&P, and less noticeable connection between the Euro and the T-note.

Performing a few statistical calculations
continued on p. 30

FIGURE 1 — THREE MARKETS: CURRENCY, STOCK INDEX, AND INTEREST RATE

The Euro FX and the E-mini S&P 500 futures trended together from September 2004 through the end of the year. The 10-year T-note peaked in late October and again in February. (All prices are continuous futures series. The Euro's price has been multiplied by 100 to scale it with the price of the 10-year T-note on the left Y-axis.)

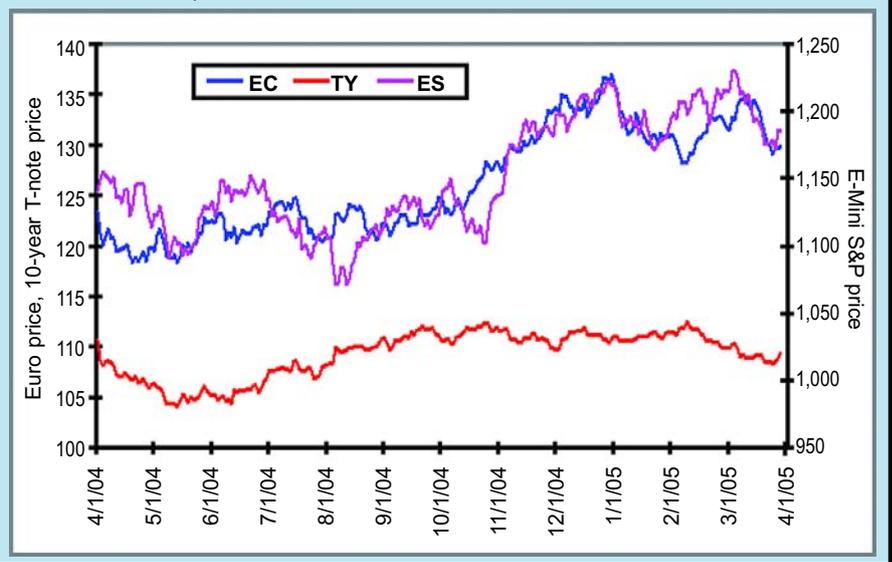


FIGURE 2 — PERCENTAGE PRICE CHANGES

Charting the three markets in terms of their daily percentage changes makes their relative performance more apparent. The Euro and the E-mini S&P 500 ended the period with positive returns, while the T-note lost ground.

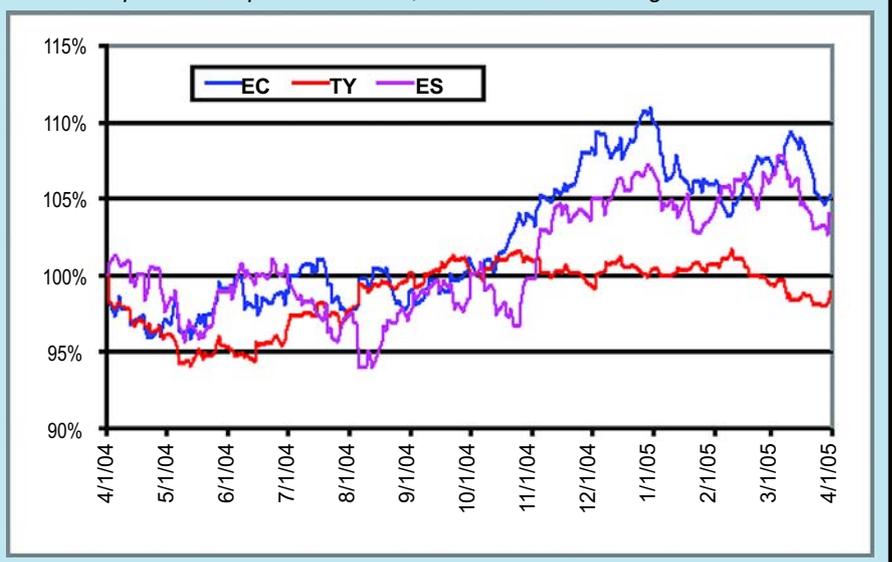




FIGURE 3 — ROLLING FIVE-DAY CORRELATIONS: EURO VS. E-MINI S&P 500

Measuring the Euro/E-Mini correlation for every five-day period in the analysis window shows the two markets moved together numerous times (high positive readings), inversely (low negative readings), or moved with no discernible relationship (readings near zero).

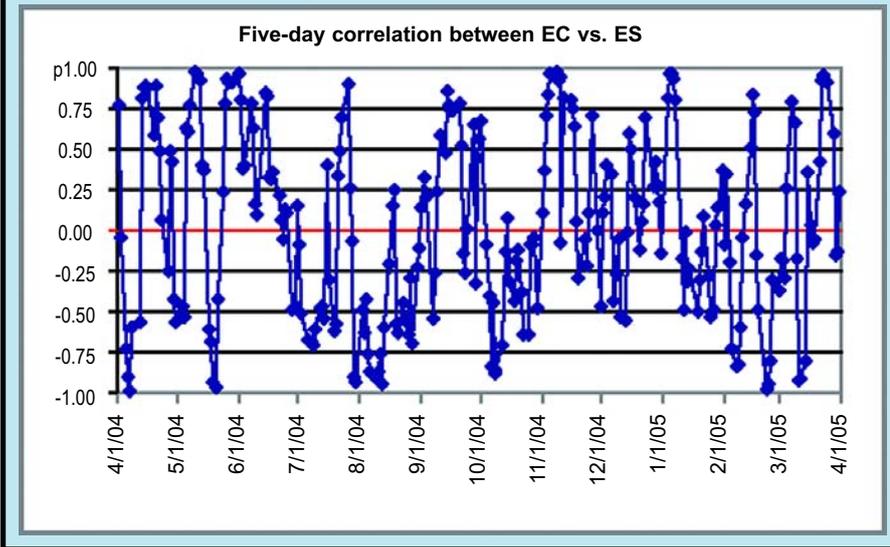
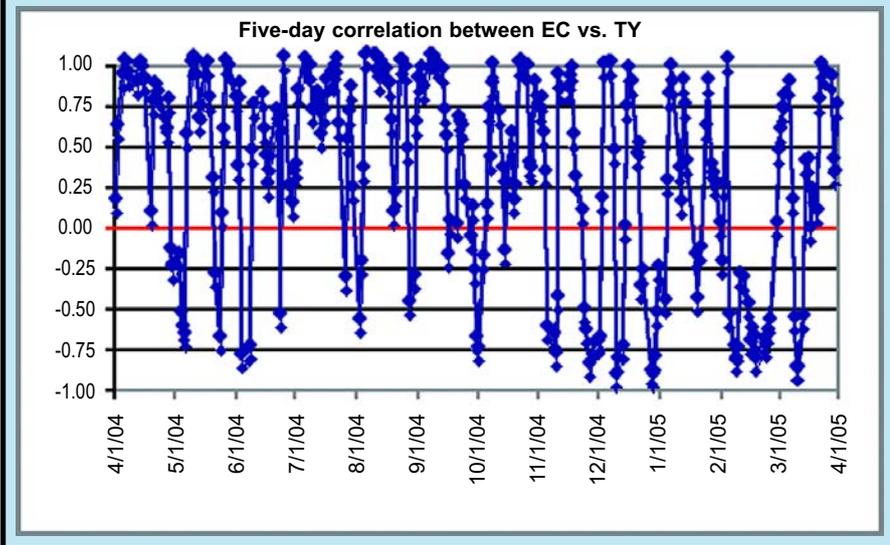


FIGURE 4 — ROLLING FIVE-DAY CORRELATIONS: EURO VS. T-NOTE

Like the Euro/S&P relationship, the rolling five-day Euro/T-note correlations also showed a wide range of readings between +1 and -1.



tions will help determine if these appearances are just superficial or if they do, in fact, reflect real relationships between these markets.

Exploring intermarket relationships

A calculation called the correlation coefficient can tell us the type and strength of the relationship between two data series. The correlation coefficient

ranges from +1, which indicates perfect, positive correlation between two data sets (i.e., they move in the same direction, in tandem) and -1, which indicates the sets are directly inverted; zero indicates no discernible relationship between the two data sets.

The correlation coefficient for the Euro vs. the E-Mini S&P was 0.85; for the Euro vs. the 10-year T-note, it was 0.61. A correlation coefficient of 0.85 is

high, which implies the Euro and the E-Mini S&P 500 track each other very closely. (This does *not* mean there is a cause-and-effect relationship between the two markets; only that the two have similar behavior.) Overall, both markets gained ground over the review period, which might be the reason for the high correlation coefficient. However, a statistic that considers the entire review period's data is not helpful in this case. What's needed is a shorter-term view.

Figure 3 is a rolling five-day calculation of the Euro/E-Mini S&P correlation coefficient. The readings spread over a wide range. There are many occurrences of correlation coefficient readings near 1, but there also are a number of readings near -1, which means the two markets were moving in opposite directions. Many other readings fall somewhere between.

Figure 4 is a rolling five-day calculation of the Euro/T-note correlation coefficient. Again, there are many readings near +1, but also plenty around -1 and in between.

To better understand these correlation coefficient readings, Figure 5 shows how often the different readings from Figures 3 and 4 occurred. The X-axis shows the range of coefficient readings from -1 to +1 in 0.10 increments, and the Y-axis shows the number of occurrences.

For example, the pair of bars to the farthest right represents the number of correlation coefficient readings between +0.90 and +1. In this case, the five-day rolling Euro/E-Mini S&P correlation coefficient was +0.90 or greater 18 times out of 251 observations. The five-day rolling Euro/T-note correlation coefficient was greater than +0.90 forty-six of 251 times. In fact, there are more Euro/T-note correlation readings on the right side of the chart, indicating a positive correlation between the two.

FIGURE 5 — WHAT CORRELATIONS OCCURRED MOST OFTEN?

The two sets of correlations from Figures 3 and 4 are analyzed in terms of the number of occurrences in different ranges. There were seven times the Euro/E-Mini S&P 500 correlation coefficient was between .50 and .59. The Euro/T-note correlation coefficient was between .50 and .59 sixteen times.

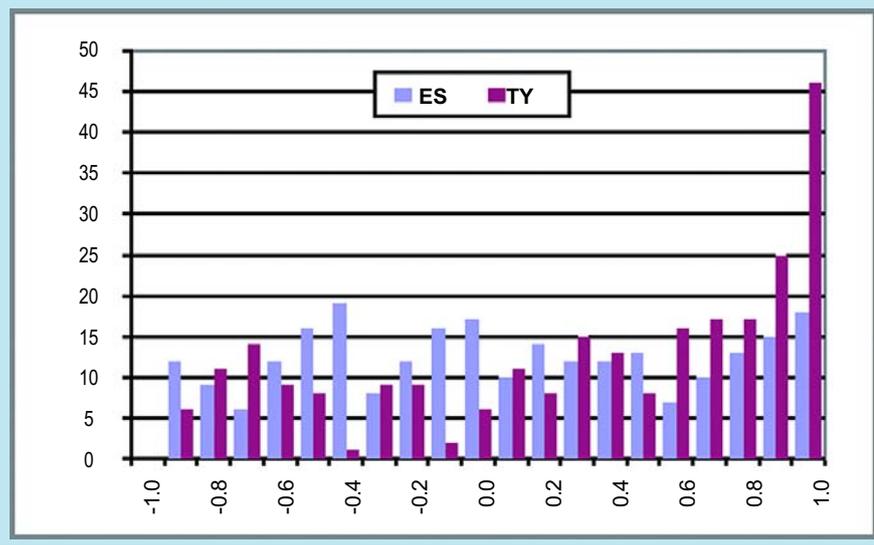
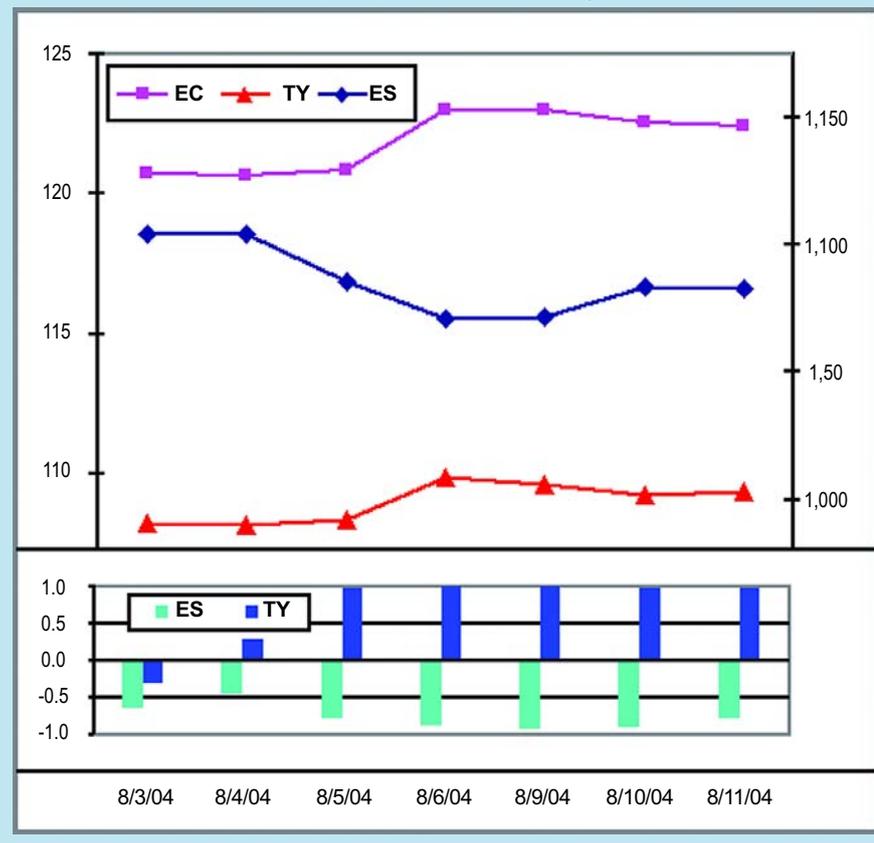


FIGURE 6 — SHORT-TERM SNAPSHOT

In these seven days in August 2004, the Euro and the T-note moved together, while the E-Mini S&P 500 moved in the opposite direction. The bars below the price chart, which are the five-day correlation coefficients for the Euro/E-Mini S&P 500 and the Euro/T-note, reflect these relationships.



About the markets

Chicago Mercantile Exchange (CME) launched the Euro FX futures contract on Jan. 4, 1999 and began offering the contract through its electronic trading system (Globex) in 2001. The Euro futures contract calls for the delivery of 125,000 Euros and is traded in U.S. dollars.

The E-Mini S&P 500 trades on the CME's Globex system and is priced at 50 times the S&P 500 stock index value. The 10-year T-note contracts trade on the E-CBOT, the Chicago Board of Trade's electronic trading system. The contract calls for the delivery of one 10-year T-note with a face value of \$100,000 at maturity.

Interest has expanded in all three markets, with trading in the Euro showing the greatest percentage growth. The average daily volume for the Euro contract for April 2004 was 63,173 contracts. The average daily volume for March 2005 was 126,039 contracts. By comparison, the average daily volume for the E-Mini S&P in April 2004 was 713,936 contracts, vs. 839,889 contracts in March 2005. The average daily volume in April 2004 for the 10-year T-note contract was 686,500, vs. 833,773 contracts in March 2005.

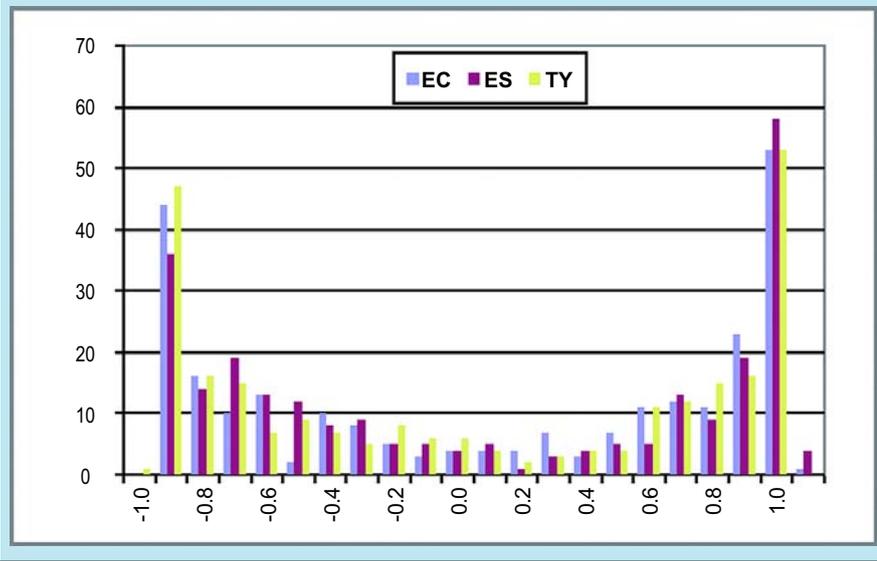
Overall, the Euro/E-Mini S&P correlation coefficient was between -0.10 and zero on 17 occasions. The Euro/E-Mini S&P coefficient was below -0.10 one hundred and ten times, and positive 124 times. This indicates there is very little consistency between the Euro and the E-Mini S&P 500 on a five-day basis. (That's not to say there

continued on p. 32



FIGURE 7 — SHORT-TERM TRENDINESS: THREE-DAY CORRELATION

High positive correlations reflect uptrends and low negative correlations reflect downtrends. Three up days in a row will produce a correlation coefficient at or near +1. If a market is trending down for three days in a row, the correlation coefficient will be at or near -1. All three markets tended to show similar correlations over three-day windows.



won't be a relationship over the short-term, but it was not a *consistent* relationship over this review period.)

Now, looking at the Euro/T-note relationship: Six times the correlation

coefficient was between zero and +0.10. There was a negative correlation coefficient (below zero) 69 times, and a positive correlation coefficient 176 times — nearly 70 percent of the time.

FIGURE 8 — EXTENDING THE TIME FRAME: 10-DAY TRENDINESS CORRELATION

The Euro had the highest number of correlation coefficients readings in the 0.89 to +1 range. The T-note had some downtrending periods, which is reflected by the higher number of negative correlation coefficient readings.

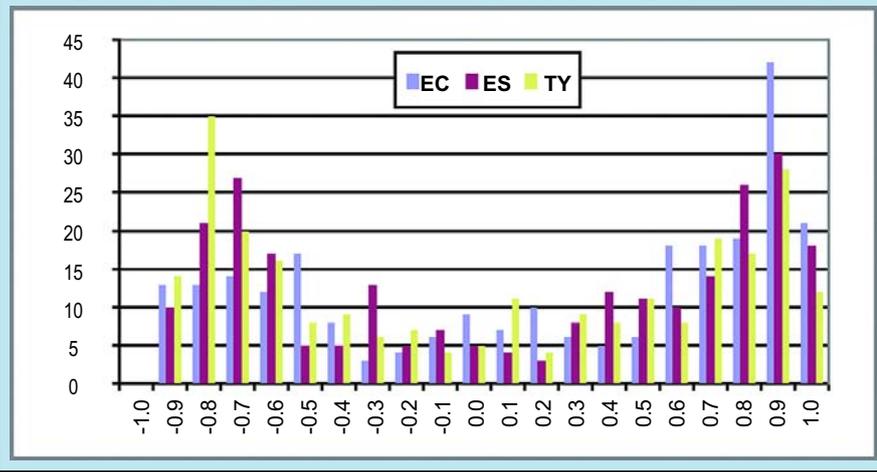


Figure 6 shows a seven-day period during which the Euro and T-note moved in almost lockstep, nearing a +1 correlation coefficient reading, while the E-Mini S&P 500 moved in the opposite direction. (As in Figure 1, the price of the Euro is multiplied by 100 to scale it with the 10-year T-note on the left Y-axis, and the right Y-axis is for the E-Mini S&P 500.) Below the price chart are bars that represent the five-day correlation coefficient for that day. Between the Euro and the 10-year T-note, the correlation coefficient is nearly one, while the Euro and the E-Mini S&P 500 display negative correlation.

Trend characteristics

To measure the degree of trend for each of the three markets we will measure the correlation coefficient for the closing price of each market over rolling three-day windows. For example, if a market rises by nearly equal amounts for three days in a row, the correlation coefficient reading will be near or equal to +1 (indicating positive trendiness over that period). If a market falls for three days in a row, the correlation coefficient will be near or equal to -1 (indicating negative trendiness).

Figure 7 shows the three-day rolling correlation coefficients vs. time for all three markets. For example, the far left of Figure 7 shows the T-note had a -1 correlation coefficient over three days only one time. The highest number of T-note correlation coefficient readings (47) fell in the -.90 to -1 range.

On the right hand side of the chart the E-Mini S&P 500 appears to dominate the degree of trendiness: Its correlation coefficient was between 0.90 and +1 on 58 occasions, and was +1 four times. The Euro's correlation coefficient was between 0.90 and +1 fifty-

three times, and +1 just once.

Overall, using a three-day rolling window it appears the Euro does not behave significantly differently than the other two markets. Let's expand the length of the look-back period and see what happens.

Figure 8 shows the results of using the same correlation analysis on a rolling window of 10 trading days. Now, we see a different picture. Looking to the right, the Euro dominates the readings greater than 0.89. The Euro had a positive correlation between -0.89 and +1 on 63 occasions. The E-Mini S&P and T-note had correlations in the same only 48 and 40 times, respectively.

The downtrend the 10-year T-note was in during the review period is reflected in Figure 8 by the higher number of negative correlation coefficients. If a market is trending down, then it will display an inverse relationship to time.

Comparing volatility

Since the stock market peak in March 2000, by various measures intraday volatility has decreased in equities. Let's look at the daily ranges for the three markets and use regression analysis to determine if and how intraday volatility has been changing.

Figure 9 shows the daily ranges for the Euro over the review period. It is difficult to see any trend in the size of the ranges themselves. Therefore, a [second-order polynomial regression line](#) has been added to the chart. This is a line that curves (unlike a straight regression line) to best fit the data. The saucer shape to this line indicates the volatility in the Euro contract is starting to climb after bottoming in late 2004.

Figure 10, which is the same analysis for the E-Mini S&P 500, is similar to

FIGURE 9 — DAILY RANGE: EURO

The curved line highlights the trend of daily ranges in the Euro. Ranges bottomed in the latter part of 2004 and have since been expanding.

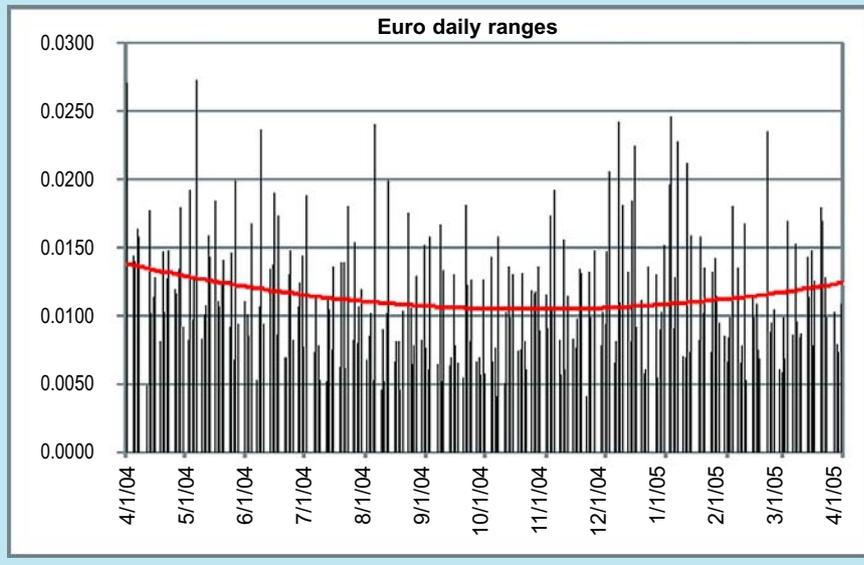


FIGURE 10 — DAILY RANGE: E-MINI

Like the Euro, the E-Mini S&P 500's daily range has expanded since late 2004.

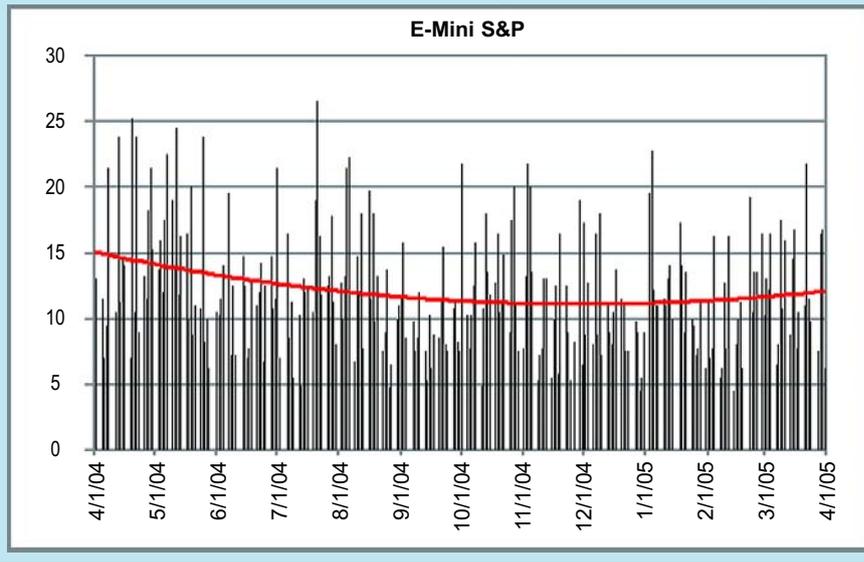


Figure 9. The E-Mini S&P volatility (in terms of daily range) appears to be climbing.

Figure 11 is the 10-year T-note contract. The best-fit line is nearly straight and slopes downwards, which means the daily range in the 10-year T-note

has been contracting.

What you learn by comparing markets

Interest in trading in the Euro has grown substantially. One reason is the

continued on p. 34



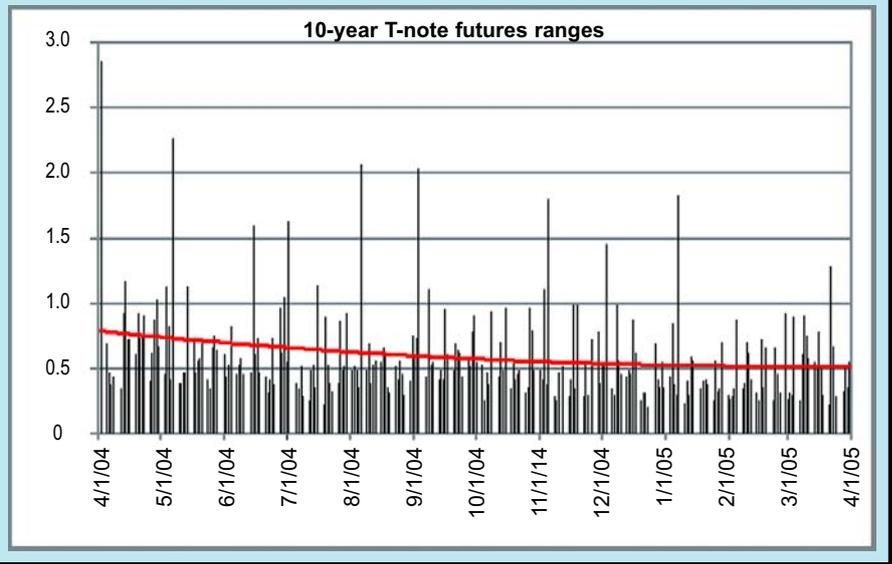
Euro tends to trend, as explained here, over 10-day periods, which makes it an attractive instrument for money managers. However, the Euro doesn't offer any more opportunities for a trend than the other two markets using a three-day view.

The high correlation between the direction of interest rates (as reflected in 10-year T-note prices) and the direction of the Euro is worth considering in terms of developing a trading strategy. Traders could test strategies based on confirmation from both markets as possibly producing better returns. (There might be a more consistent correlation between the Euro and the E-Mini S&P 500 if a lag is introduced.) Finally, intraday volatility is climbing in both the Euro and the E-Mini S&P 500. Traders should consider this to manage both the risk and targets for their trades.

Obviously, this analysis can be performed on other time frames and time

FIGURE 11 — DAILY RANGE: 10-YEAR T-NOTE

In contrast to Figures 9 and 10, the polynomial best-fit line for T-note daily ranges slopes down and is nearly straight, indicating shrinking daily ranges.



periods. Understanding the trend and volatility characteristics over, say, 20-day periods will broaden your understanding of the market and possibly bring

other trading opportunities to light. 📍

For information on the author see p. 8. Questions or comments? [Click here.](#)

Related reading

Other articles by Thom Hartle:

“Familiarity breeds profitability,”

Active Trader, September 2002.

Hartle analyzes price patterns to determine the odds that different kinds of price moves will occur.

“Short-term T-bond trading,”

Active Trader, October 2002.

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“Following through in the S&Ps,”

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Strong closes and large ranges are often interpreted as signs of potential follow-through. This study unveils another way to find out what today's market action says about tomorrow's by analyzing the NYSE up-down volume statistics at the close of the day to see if there is any consistent follow-through price action in the E-Mini S&P 500 futures the next day.

“Getting in on follow-through days,”

Active Trader, January 2004.

In a follow-up to the previous article's discussion of the odd of next-day follow-through in the S&P futures, the author looks at the realities of basing entries on this price behavior.

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Active Trader, July 2003.

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Teaching the RSI new tricks

This counterintuitive analysis reveals new uses for an old technical indicator.

BY CURRENCY TRADER STAFF

The relative strength index (RSI) is best known for identifying short-term overbought and oversold levels, but it has some uses that go beyond the textbook explanations of this indicator's role.

The RSI's calculation is similar to that of other oscillators. The indicator measures the difference between closing

prices over a given period (say, 10 days) and compares the sum of the day-to-day gains to the sum of the day-to-day losses (see [Indicator Basics](#) for more detail).

Whenever an indicator calculates the difference between or divides two prices over time, it mathematically "detrrends" the data — that is, it removes or minimizes the trend influ-

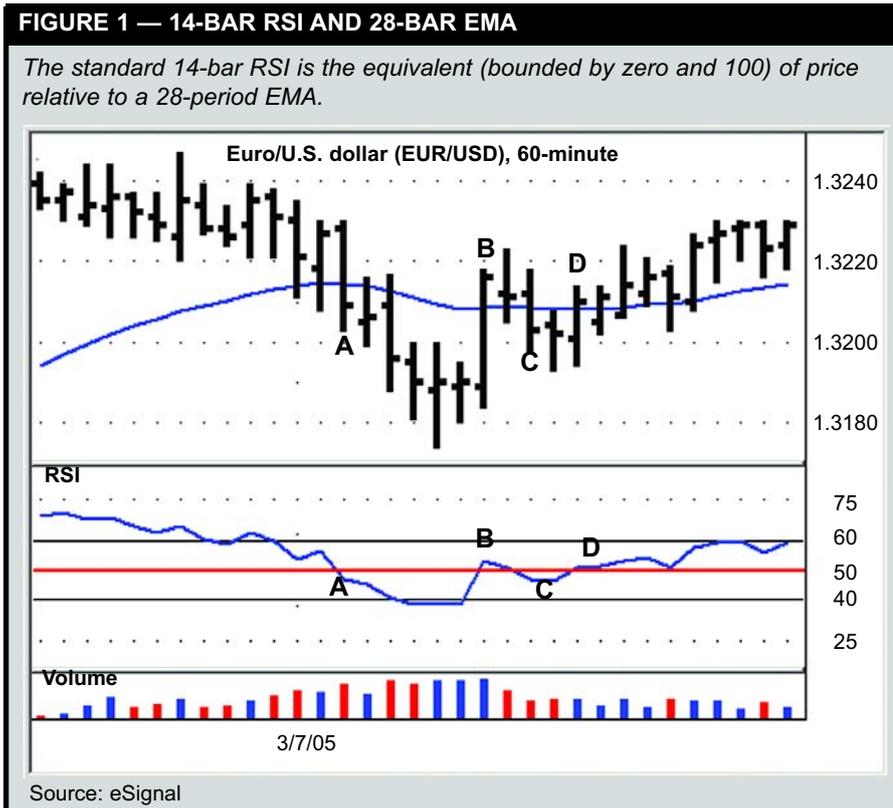
ence that may exist from time periods longer than the indicator's look-back period.

This detrrending process creates an indicator that fluctuates above and below a horizontal midpoint or "equilibrium" line (such as zero or one) that represents the price trend; the indicator may also be bounded by absolute upper and lower limits (e.g., zero and 100, or -100 and +100).

The RSI's default look-back period is 14 bars. Figure 1 is a 60-minute chart of the Euro/U.S. dollar currency pair (EUR/USD) with a 14-bar RSI and a 28-bar exponential moving average (EMA). Notice that whenever the RSI crosses its midpoint of 50 (points A, B, C, and D) price also crosses the 28-bar EMA. The 14-bar RSI is, in fact, the equivalent of the market price relative to a 28-period EMA bounded by zero and 100. This implies a function of the RSI that is often overlooked in textbook explanations of the indicator's standard uses.

General principles

The standard interpretation of the RSI is that it identifies overbought conditions whenever it is above 70 (or 80) and oversold conditions when it is below 30 (or 20). High RSI values often accompany market tops and low RSI readings coincide with market bottoms. However, the problem is a trend is actually a persistent overbought or



oversold state.

For example, an uptrend, which would be characterized by persistent closes above the 28-period EMA, will be accompanied by RSI readings above 50, and the RSI will never drop below 20 and signal an oversold condition. The strength of the trend shifts the RSI readings upward, well above the textbook definition for oversold. Similarly, when a market is in a downtrend, price will be below its 28-period EMA and the RSI will be below 50, and possibly below 20. The prevailing weak market trend lowers the RSI readings.

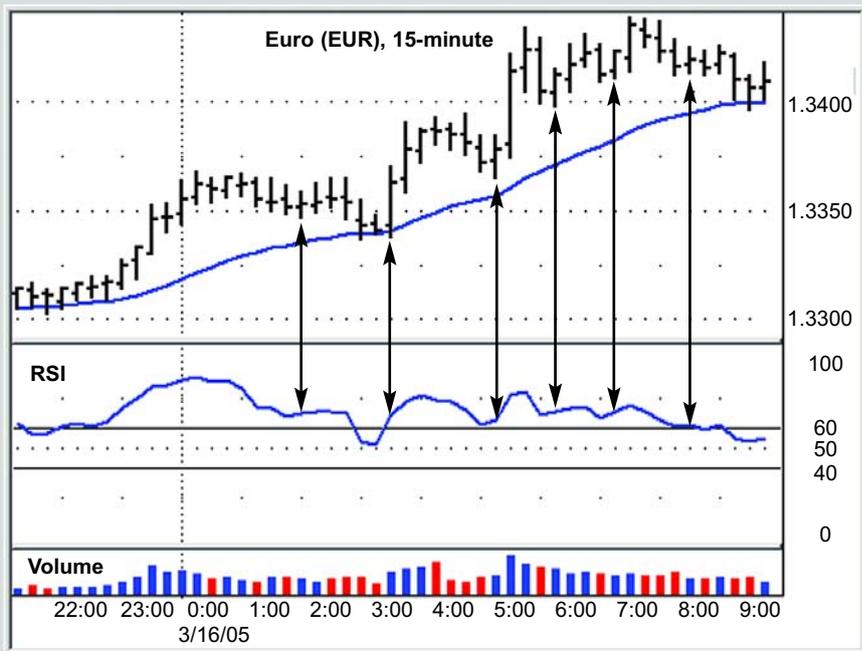
The range of RSI readings provides a clue about the condition of the market. In a very stable trading-range period the RSI would be expected to oscillate fairly equally between its upper and lower boundaries. On the other hand, the indicator's readings will be pushed higher or lower depending on the prevailing trend. Because an uptrend is a persistently overbought state, the range of RSI readings will be shifted upward in such a way that you should consider 40 as oversold. During a downtrend, the range of RSI readings are pushed down so that 60 should be considered overbought.

If market action has caused the RSI to flash a reading of 30 (indicating a weak market), and later the market rallies and the RSI rises above 50, it means price has crossed above the 28-bar EMA. Some traders would consider a crossover above a moving average to be an indication of a change to an uptrend. However, moving average crossover techniques are subject to many small "whipsaws losses," as price will often just edge through the moving average, then reverse. The concept described above takes into account this tendency.

As a general rule, then, if RSI read-
continued on p. 38

FIGURE 2 — RSI UPTURNS

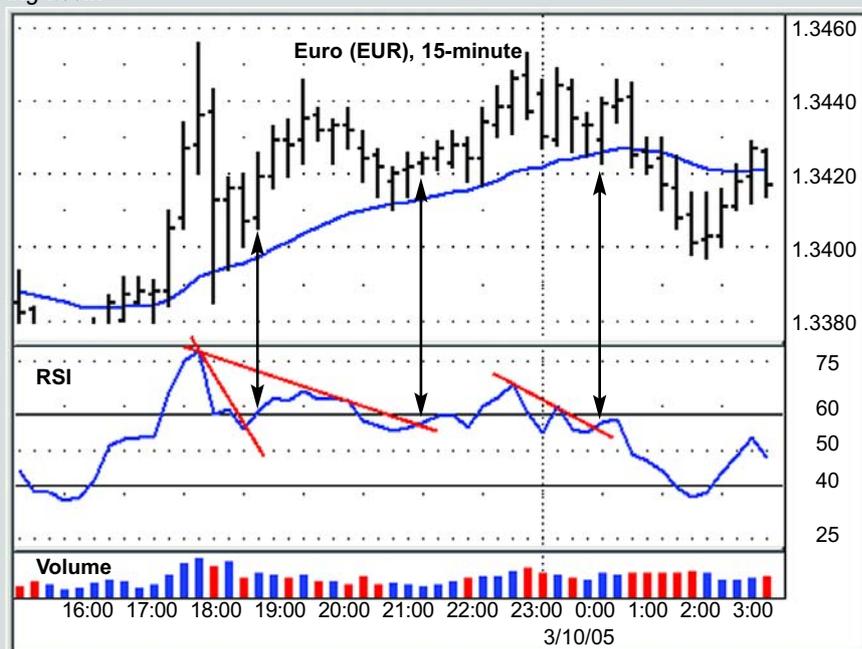
When the market is in an uptrend, any time the RSI turns higher, upside momentum is turning up and price should rise.



Source: eSignal

FIGURE 3 — RSI TRENDLINE PENETRATION

If the RSI has peaked above 60 (signaling an uptrend) but the market falters and the RSI makes a second, lower peak, draw a trendline along the two RSI peaks. When the RSI closes above the trendline, the up momentum is reasserting itself.

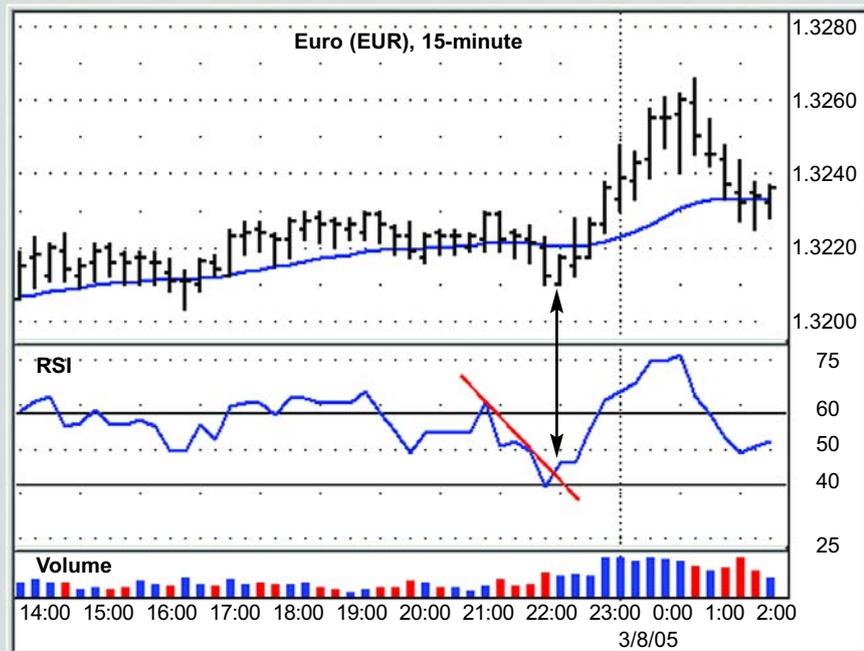


Source: eSignal



FIGURE 4 — RSI TRENDLINE PENETRATION WHEN OVERSOLD

The final entry technique consists of finding entry points when the RSI turns up while it's between 50 and 40 (oversold). Use the same trendline penetration technique described in the second approach.



Source: eSignal

ings shift upward, look to take buy signals. If the RSI has a downward bias, you should be bearish. This is counter to the way the indicator is typically used — that overbought or oversold conditions should be faded. The fact is, trends tend to last longer than people expect, so it pays to have a mindset to exploit the trend, not trade against it.

Trading techniques

Here are some simple patterns to look for. To start, if the 14-bar RSI readings are above 60, an uptrend is assumed to be in effect as long as the RSI does not drop below 40. To take advantage of the uptrend, you can apply three strategies.

The first is more of a scalping strategy because the follow-through can be very short-term and the risk of a loss is highest. If the market is in an uptrend, any time the RSI turns higher, upside momentum is turning up and price should rise (Figure 2). Because there are times when the first RSI upturn does not result in price follow-through, traders can wait for the second RSI upturn.

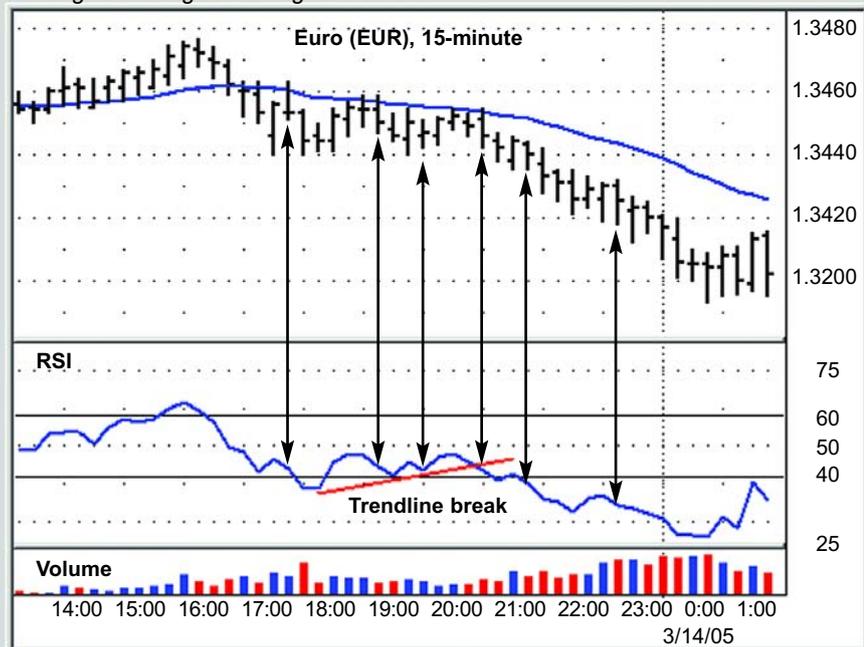
This leads to the second technique: Using a trendline to signal the market is about to resume the uptrend. For example, say the RSI has peaked above 60, signaling an uptrend, but the market falters and the RSI has traced out a second, lower peak. Draw a trendline along the two RSI peaks. When the RSI closes above the trendline, the up momentum is reasserting itself (Figure 3).

The final technique is to look for entry points when the RSI turns up while it's between 50 and 40, which represents an oversold condition. Use the same trendline penetration technique to signal the trade: The RSI turning up from this oversold condition during an uptrend would signal the momentum is turning up. From here, the market has the greatest potential (Figure 4).

For sell signals, reverse the guidelines for buys: When the RSI moves

FIGURE 5 — SELL SIGNALS

Sell signals reverse the guidelines for buys. Here, the first and second entry techniques are shown: a short-term sell signal triggered by an RSI downturn (the scalp technique) and the sell signaled by a penetration of a trendline connecting two rising RSI troughs.



Source: eSignal

below 40 and fails to move above 60, the trend is down. Figure 5 displays the first and second techniques: short-term sell signals triggered by RSI downturns (the scalp technique) and the sell signaled by a penetration of a trendline connecting two rising RSI troughs. Figure 6 shows the third method: Waiting for the RSI to penetrate 50 and then turn down from below 60, breaking a trendline plotted along the rising RSI troughs.

Trading ranges

Trading ranges can be identified by the RSI readings becoming range bound between 40 and 60. However, it's a good idea to consider the trading range to have a bias based on the most recent high or low RSI reading. For example, if the RSI peaked above 60, indicating an upward trend, and is now crisscrossing between 40 and 60, the range should be considered to have a bullish bias (Figure 7). If the recent extreme RSI reading was below 40 and was now locked in a range between 40 and 60, consider the congestion phase to have a bearish bias.

Getting specific

Professional traders take vague statements about the status of the market and translate them into precise definitions that can be the basis for a trading strategy.

Go beyond fuzzy descriptions such as "uptrend," "downtrend," "trading range," or "overbought and oversold." Use mathematical rules to precisely define the condition of the market and then develop strategies based on those conditions.

Analyzing the RSI and understanding how it defines and interacts with trends reveals additional uses for the indicator. Because the RSI is bounded in a fixed range, you can experiment with specific indicator levels and test the outcome of different market scenarios. ⓘ

Questions or comments? [Click here.](#)

FIGURE 6 — TRENDLINE BREAK IN DOWNTREND

In this case, we wait for the RSI to penetrate 50 and then turn down from below 60, breaking a trendline plotted along the rising RSI troughs.

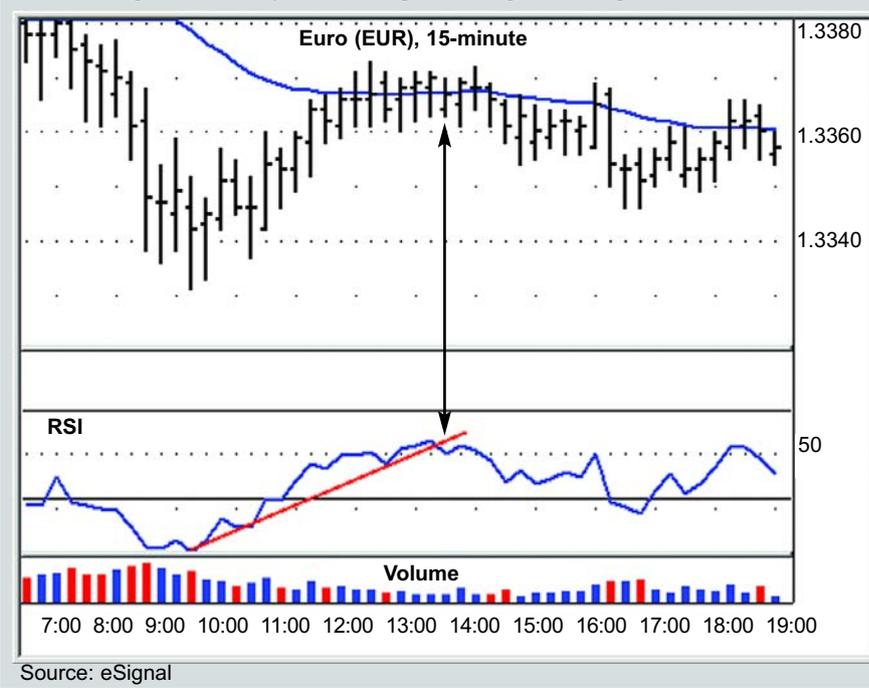
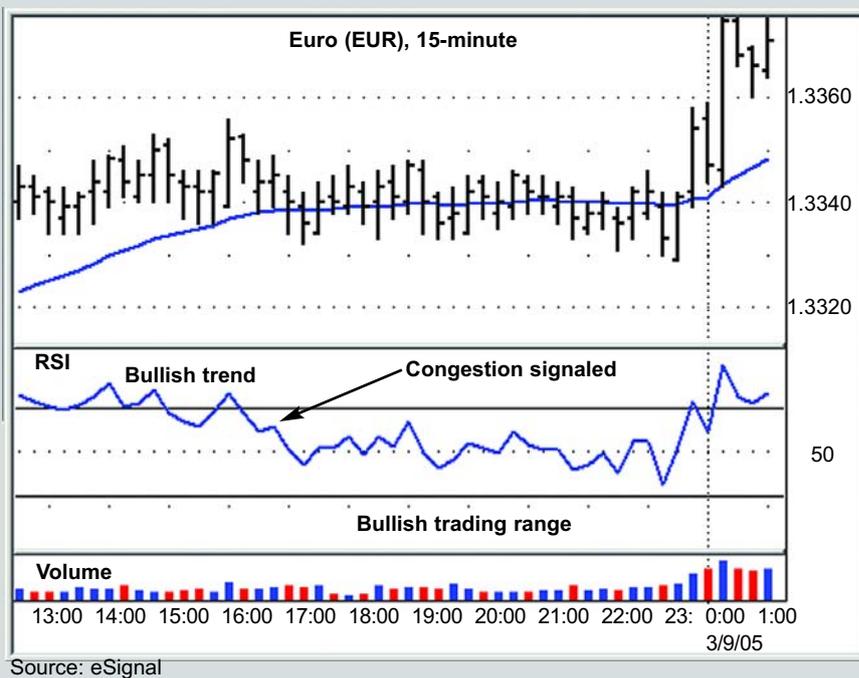


FIGURE 7 — TRADING RANGE

Although a market can be defined as range-bound when the RSI remains between 40 and 60, it's a good idea to consider the trading range to have a bias based on the most recent high or low RSI reading. For example, if the RSI peaked above 60, indicating an upward trend, and is now crisscrossing between 40 and 60, the range should be considered to have a bullish bias.





VK Bands for FX

System concept: VK Bands were developed by Volker Knapp and introduced in the Trading System Labs of the February 2005 issue of *Active Trader*. The object of the following test is to determine whether longer-term VK Bands make useful trend-following tools in the FX market.

This system uses the following VK Band calculations: 1) divide a 104-day look-back period into two segments of 52 days; 2) determine the highest high and the lowest low of each 52-day period; 3) calculate a two-period weighted moving average of both the highest highs and lowest lows.

These calculations create upper and lower bands intended to identify long-term price extremes. When a market exceeds these extremes, the system assumes there will be a higher chance of catching a continuation trend move than a correction or reversal. After a band is penetrated and a trade is entered, the opposite band acts as the exit point. However, the system does not simultaneously reverse position when a stop is hit; it waits for a "fresh" signal to enter the market again. Figure 1 shows sample trades.

Trade rules:

1. **Go long** tomorrow at the open if price closes above upper VK Band.
2. **Go short** tomorrow at the open if price closes below the lower VK Band.
3. **Sell** (exit long) if price closes below the lower VK Band.
4. **Buy to cover** (exit short) if price closes above the upper VK Band.

FIGURE 1 — SAMPLE TRADES

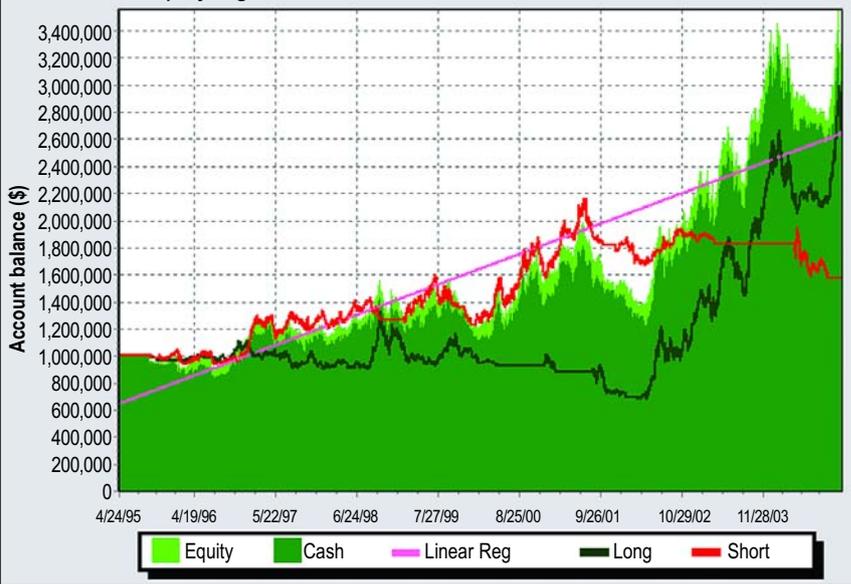
The system goes long on a move above the upper VK Band and short on a move below the lower VK Band.



Source for all figures: Wealth-Lab Inc. (www.wealth-lab.com)

FIGURE 2 — EQUITY CURVE

The system produced an annual profit of more than 13 percent, but it also had long stagnant (flat) periods, during which no new equity highs were established.



Money management and risk control:

1. **Stop-loss:** Exit with a loss when a position is down 2 percent.
2. **Risk 2 percent** of total capital per trade. This approach results in steadily growing positions when the system is profitable and scaling back when it is not.

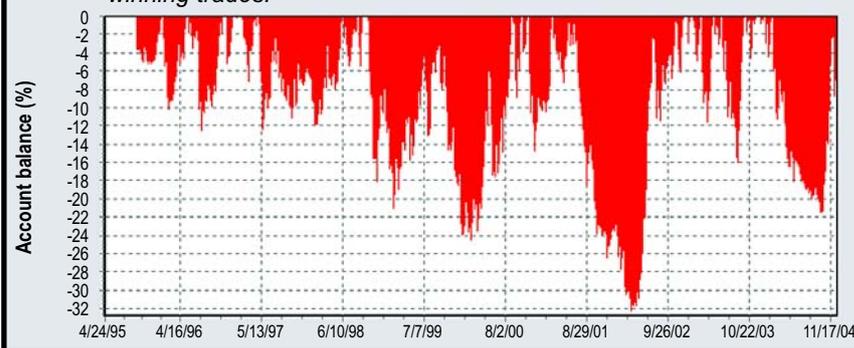
Test data: 10 years of daily FX data in the following currency pairs: Australian dollar/U.S. dollar (AUD/USD), Euro/U.S. dollar (EUR/USD), British pound /U.S. dollar (GBP/USD), U.S. dollar/Swiss franc (USD/CHF), U.S. dollar/Japanese yen (USD/JPY), and U.S. dollar/Brazilian real (USD/BRL). Note: Currency pairs for which the U.S. dollar is the base currency (e.g. USD/JPY) were inverted (e.g. JPY/USD) to enable portfolio testing in terms of dollars. Data source Comstock/FXtrek (www.fxtrk.com).

Test period: December 1994 to December 2004 (except the Brazilian Real, which was tested from December 1999 to December 2004).

Starting equity: 1,000,000 USD.

FIGURE 3 — DRAWDOWN

The fairly large maximum drawdown is typical of trend-following systems in that it is the natural result of having a low percentage of winning trades.



Deduct a round-turn commission of 4 pips per every 100,000 units traded in the base currency and 1 pip for slippage. Interest rate (rollover) fees were not calculated.

Test results: The system's accumulated profit during the test period was \$2,399,267.78 (see Figure 2), which translates into an annual profit of 13.49 percent. This figure is not as bad as some other trend-following systems we have tested in the past. The largest drawdown during the test period was 32.82 percent (see Figure 3).

The system was low maintenance: Only 84 trades were executed during the 10-year test period. However, there

continued on p. 42

STRATEGY SUMMARY (DAILY)

Profitability		Trade statistics	
Net profit (\$):	2,399,267.78	No. trades:	84
Net profit (%):	239.93	Win/loss (%):	33.33
Exposure (%):	6.89	Avg. gain/loss (%):	2.64
Profit factor:	2.72	Avg. hold time (days):	125.55
Payoff ratio:	5.91	Avg. winner (%):	11.96
Recovery factor:	3.13	Avg. hold time (winners):	316.25
Drawdown		Avg. loser (%):	-2.02
Max. DD (%):	-32.82	Avg. hold time (losers):	30.2
Longest flat days:	497	Avg. consec. win/loss:	5/16

LEGEND: Net profit — Profit at end of test period, less commission • Exposure — The area of the equity curve exposed to long or short positions, as opposed to cash • Profit factor — Gross profit divided by gross loss • Payoff ratio — Average profit of winning trades divided by average loss of losing trades • Recovery factor — Net profit divided by max. drawdown • Max. DD (%) — Largest percentage decline in equity • Longest flat days — Longest period, in days, the system is between two equity highs • No. trades — Number of trades generated by the system • Win/loss (%) — the percentage of trades that were profitable • Avg. trade — The average profit/loss for all trades • Avg. winner — The average profit for winning trades • Avg. loser — The average loss for losing trades • Avg. hold time — The average holding period for all trades • Avg. hold time (winners) — The average holding time for winning trades • Avg. hold time (losers) — The average holding time for losing trades • Avg. consec. win/loss — The maximum number of consecutive winning and losing trades

PERIODIC RETURNS

	% Avg. return	% Sharpe ratio	% Best return	% Worst return	% Profitable periods	Max. consec. profitable	Max. consec. unprofitable
Weekly	0.28	0.73	10.05	-8.95	54.46	10	26
Monthly	1.21	0.73	22.46	-12.14	54.70	6	7
Quarterly	3.65	0.73	29.40	-14.37	61.54	8	3
Yearly	14.26	0.78	46.14	-7.87	70.00	3	1

LEGEND: Avg. return — The average percentage for the period • Sharpe ratio — Average return divided by standard deviation of returns (annualized) • Best return — Best return for the period • Worst return — Worst return for the period • Percentage profitable periods — The percentage of periods that were profitable • Max. consec. profitable — The largest number of consecutive profitable periods • Max. consec. unprofitable — The largest number of consecutive unprofitable periods

Currency System Analysis strategies are tested on a portfolio basis (unless otherwise noted) using Wealth-Lab Inc.'s testing platform. If you have a system you'd like to see tested, please send the trading and money-management rules to editorial@currencytradermag.com.

Disclaimer: Currency System Analysis is intended for educational purposes only to provide a perspective on different market concepts. It is not meant to recommend or promote any trading system or approach. Traders are advised to do their own research and testing to determine the validity of a trading idea. Past performance does not guarantee future results; historical testing may not reflect a system's behavior in real-time trading.



were three long flat periods — i.e., when it took longer than 300 days for the system to achieve new equity highs.

The VK Band system is a typical trend following system that rides profitable trends as long as possible. This is illustrated by comparing the average holding period of profitable trades (316 days) to the average holding period of losing trades (30 days). The system's character is also displayed by the profit distribution chart (see Figure 4), which shows a high number of small losing trades and a low number of big winning trades.

Finally, the system's 33.33-percent winning percentage is textbook trend-following performance. The system exits losers automatically with a 2-percent loss, and is thus able to achieve big profits with its few winners. The maximum adverse excursion (MAE) chart in Figure 5 shows the 2-percent stop-loss at work — the 52 trades that ended at -2 percent are a result of this stop. (The single trade loss larger than -2 percent was the result of a gap.) Also, winning trades seldom entered deep in negative territory.

That's not to say everything about the system is peaches and cream. The maximum favorable excursion (MFE) analysis shows many trades (51 at the 5-percent level and 5 at the 10-percent level) that first entered positive territory (up to a 10-percent profit) but eventually ended up as losers. Overall, this means you will often suffer through the experience of giving back profits — sometimes substantial profits.

Bottom line: Although this system's rules seem quite simple, it produced solid profits and the losing trades never ate up much of the starting capital. On the other hand, the system generates only one winner per three trades, which means a streak of losing trades with a commensurately high drawdown is quite likely. The system's tendency to give back open profits is perhaps a topic for further analysis. If you can find a technique that prevents this without diminishing the big winning trades, the system could be improved substantially.

—Michael Schneider of Wealth-Lab

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FIGURE 4 — PROFIT DISTRIBUTION

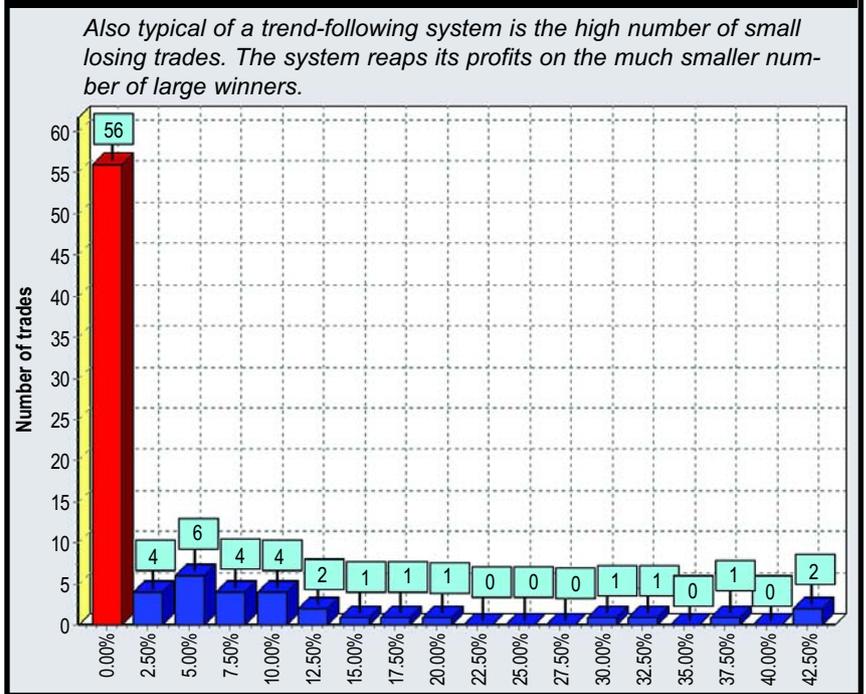


FIGURE 5 — MAXIMUM ADVERSE EXCURSION (MAE)

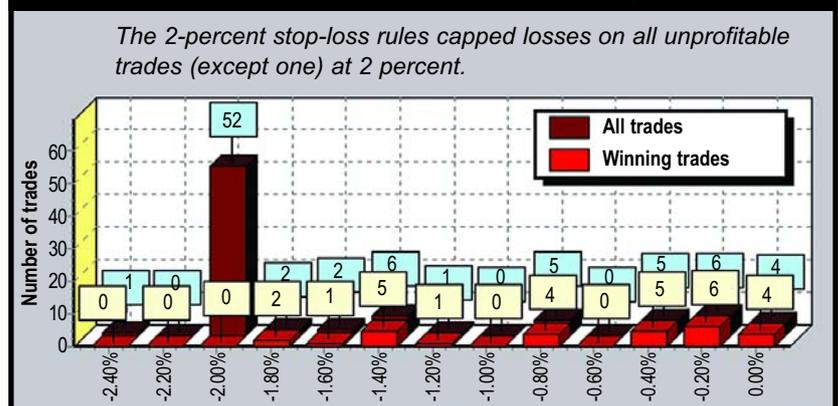
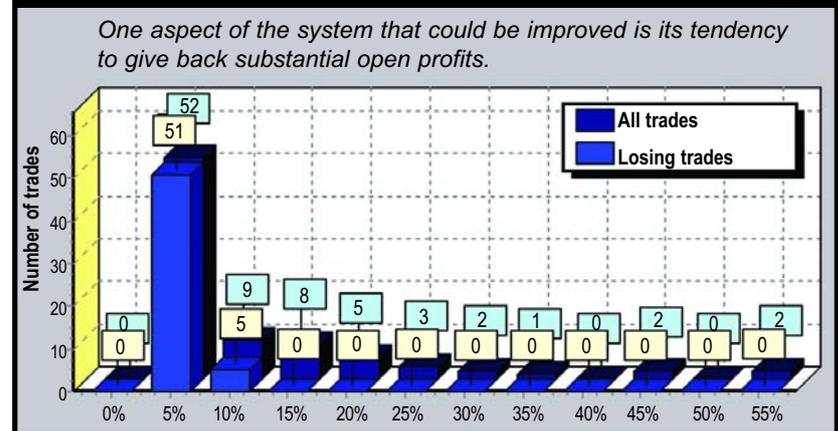


FIGURE 6 — MAXIMUM FAVORABLE EXCURSION (MFE)





Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
2 U.S.: ISM Japan: Account balances Australia: Index of commodity prices	3 U.S.: FOMC meeting	4 ECB: Governing council meeting Great Britain: Monetary Policy Committee meeting	5 Great Britain: Monetary Policy Committee meeting	6 U.S.: Employment Japan: Monetary base Germany: Orders received and manufacturing turnover Australia: Official reserve assets; Statement on monetary policy	
9 U.S.: Wholesale inventories Germany: Production index Great Britain: PPI	10 Germany: Foreign trade	11 U.S.: Trade balance	12 U.S.: Retail sales	13 Canada: Manufacturing survey Italy: Balance of payments	14
16 Japan: Balance of payments; Corporate goods price index	17 U.S.: PPI Great Britain: CPI	18 U.S.: CPI Japan: Monetary survey Canada: Wholesale trade Great Britain: Employment	19 U.S.: Leading indicators ECB: Governing council meeting Germany: Employment; PPI	20 Canada: CPI; Retail trade Germany: Bankruptcies Great Britain: Capital issuance	21
23	24 Canada: National accounts Germany: PPI	25 U.S.: Durable goods Germany: CPI	26 U.S.: GDP Japan: Corporate service price index Canada: Employment	27	28
30 Canada: Balance of international payments Italy: International reserves and foreign currency liquidity	31 Canada: GDP Australia: International reserves and foreign currency liquidity	Legend <hr/> CPI: Consumer Price Index Committee ECB: European Central Bank ISM: Institute for Supply Management GDP: Gross Domestic Product PPI: Producer Price Index FOMC: Federal Open Market			

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FX-option trading on the rise

Merc posts record Euro FX volume

On April 12, the Chicago Mercantile Exchange (CME) set a new volume record in its Euro FX futures (EC) of 211,929 contracts, representing a notional value of \$34.3 billion. The previous record for Euro FX futures was 210,094 contracts, set on Dec. 8, 2004. The portion of Euro FX futures traded on the exchange's Globex electronic trading platform was also a record at 199,201 contracts.

In addition, traders showed some interest in the CME's new European-

style Euro FX and Japanese yen options, which were launched earlier this month. Open interest in the yen options was 1,537 contracts and 467 for the Euro FX options. (Open interest reflects the number of contracts that have not yet been offset.)

Global futures and options trading reached 8.89 billion contracts in 2004, according to data gathered by the Futures Industry Association from 61 exchanges worldwide. Total volume in 2004 increased 8.9 percent

(728.2 million contracts) from the previous year.

Volume rose in all sectors of the market, but the category with the greatest percentage increase was trading in foreign currencies. In 2004, volume in this category surged 35.4 percent to 105.4 million contracts worldwide. The largest contract in this category was the Bolsa de Mercadorias & Futuros' U.S. dollar futures contract, which was up 42.7 percent to 23.9 million contracts for the year. The CME's Euro FX future almost doubled, up 82.7 percent to 20.5 million contracts. 



CURRENCY FUTURES SNAPSHOT

as of 4/25/05

The information does NOT constitute trade signals. It is intended only to provide a brief synopsis of each market's liquidity, direction, and levels of momentum and volatility. See the legend for explanations of the different fields.

Contract	Pit sym	Elec sym	Exch	Vol	OI	10-day move	% rank	20-day move	% rank	60-day move	% rank	Volatility ratio/% rank
EuroFX	EC	6E	CME	130.2	121.3	0.02%	0%	0.81%	24%	-0.30%	9%	.38 / 72%
Japanese yen	JY	6J	CME	39.5	121.9	1.83%	83%	1.22%	64%	-2.33%	46%	.43 / 73%
Canadian dollar	CD	6C	CME	25.8	75.2	-0.27%	0%	-1.33%	42%	0.11%	1%	.25 / 38%
Swiss franc	SF	6S	CME	25.7	41.9	0.27%	33%	1.22%	28%	-0.24%	2%	.43 / 73%
British pound	BP	6B	CME	22.1	75.9	1.07%	45%	2.58%	84%	1.17%	24%	.54 / 82%
Australian dollar	AD	6A	CME	14.6	88.9	0.69%	44%	1.93%	45%	0.47%	5%	.43 / 87%
Mexican peso	MP	6M	CME	11.3	72.2	0.53%	24%	2.93%	100%	2.05%	62%	.26 / 17%
U.S. dollar index	DX		NYBOT	3.0	16.9	-0.39%	0%	-0.97%	30%	0.38%	11%	.42 / 77%
Euro / Japanese yen	EJ		NYBOT	0.9	18.0	-1.82%	100%	-0.42%	26%	2.08%	51%	.40 / 70%
Euro / Swiss franc	RZ		NYBOT	0.4	12.7	-0.23%	33%	-0.40%	32%	-0.05%	0%	.56 / 98%

Note: Average volume and open interest data includes both pit and side-by-side electronic contracts (where applicable). Price activity is based on pit-traded contracts

LEGEND:

Sym: Ticker symbol.

Vol: 30-day average daily volume, in thousands.

OI: Open interest, in thousands.

10-day move: The percentage price move from the close 10 days ago to today's close.

20-day move: The percentage price move from the close 20 days ago to today's close.

60-day move: The percentage price move from the close 60 days ago to today's close.

The "% Rank" fields for each time window (10-day moves, 20-day moves, etc.) show the percentile rank of the most recent move to a certain number of the previous moves of the same size and in the same direction. For example, the "% Rank" for 10-day move shows how the most recent 10-day move compares to the past twenty 10-day moves; for the 20-day move, the "% Rank" field shows how the most recent 20-day move compares to the past sixty 20-day moves; for the 60-day move, the "% Rank" field shows how the most recent 60-day move compares to the past one-hundred-twenty 60-day moves. A reading of 100% means the

current reading is larger than all the past readings, while a reading of 0% means the current reading is lower than the previous readings. These figures provide perspective for determining how relatively large or small the most recent price move is compared to past price moves.

Volatility ratio/rank: The ratio is the short-term volatility (10-day standard deviation of prices) divided by the long-term volatility (100-day standard deviation of prices). The rank is the percentile rank of the volatility ratio over the past 60 days.

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CME to hold global FX summit in London in May

The Chicago Mercantile Exchange has announced it will hold its first global FX summit in London on Thursday, May 12, 2005.

The half-day summit, which will be held at Ironmongers Hall, will feature FX industry leaders including Mark Spanbroek, director of strategic development, Getco LLC; Francesca Taylor, principal, Taylor Associates and author

NYBOT looking into co-op

The New York Board of Trade has hired an investment bank to help assess its strategic options, with the most likely one being a transition to a cooperative structure, the exchange's top executive said April 12.

The commodity and financial futures exchange, which now operates as a not-for-profit organization, has retained New York investment bank Brown Brothers Harriman & Co.

If adopted, the NYBOT would be the first exchange to take on a co-op structure, which would allow it to dole out payments to equity members based on how much revenue they generate for the exchange.

Co-op disbursements would be tax deductible for the exchange and shield exchange members from the double taxation dividends bring, NYBOT Chief Executive Harry Falk said in a press release. For now, the co-op idea is being given greater weight than other options, such as a merger or an initial public offering of common stock, according to NYBOT executives.

Talk circulated in the past year of a possible merger of the NYBOT and the New York Mercantile Exchange, which share a building in downtown New York, but the NYBOT has downplayed that notion. 📍

of *Mastering Foreign Exchange and Currency Options*; Cyril Cottu, vice president and co-head of FX Asset Sales, Europe, Goldman Sachs; and Colin Lambert, editor, *Profit & Loss* magazine.

The CME will follow roughly the same format as the summit held in Chicago in February.

"Given the importance of London in the FX world, we are pleased to be hosting our first summit outside of Chicago there," says Rick Sears, Managing Director and head of CME's foreign exchange product group. "We see strong growth potential in Europe and long-term in Asia."

The summit will begin at 3:00 p.m. with a one-hour educational seminar geared to those who are new to FX trading. After a keynote speaker, two

concurrent sessions will follow, one for the proprietary firms, trading arcades, and individuals, moderated by Keith Andrew, executive director, FX, Morgan Stanley, which will cover trading platforms, cash markets, futures, and options.

A session for hedge funds, CTAs, and investment managers will be led by David Allanson, risk manager, TT International Investment Management. The session will examine electronic platforms, trading strategies, and risk management issues. The event will conclude with a roundtable discussion followed by a 6:30-8:00 p.m. cocktail reception.

The CME Global FX Summit is free and open to all interested participants. 📍

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Indicator insight: Relative Strength Index

The relative strength index (RSI) is a momentum oscillator designed to identify short-term momentum extremes (so-called “overbought” and “oversold” points). J. Welles Wilder, developer of the RSI, provides step-by-step instructions for calculating and interpreting the indicator in his book, *New Concepts in Technical Trading Systems* (Trend Research, 1978). Wilder described the indicator in terms of daily price bars, but the RSI can be used on any time frame.

The relative strength index should

not be confused with the concept of relative strength, which is a comparison of the price action of one instrument to another — most commonly, an individual stock to its group, sector, or the overall market. Other well-known indicators similar to the RSI include stochastics, momentum and rate of change, and the Commodity Channel Index (CCI).

Calculation

The basic RSI calculation is a ratio of the average up closes (those bars that closed higher than the previous close)

to the average down closes (those bars that closed lower than the previous close) over a certain period. The ratio is then normalized to have a range of values between 0 and 100 using the following formula:

$$RSI = 100 - (100/[1+(U/D)])$$

where

U is the average of the up closes over a given period;

D is the average of the down closes over a given period.

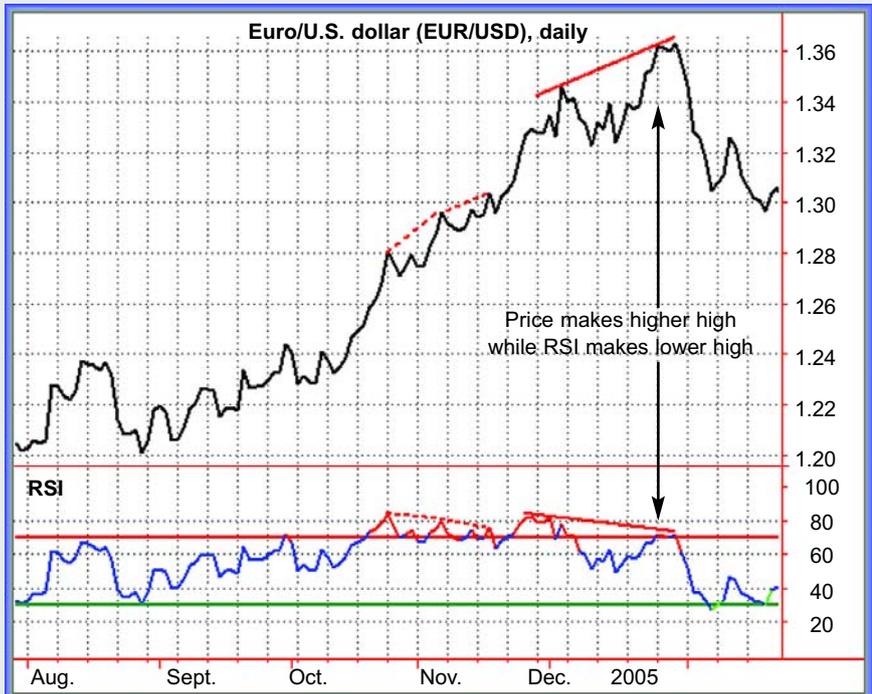
For example, to start the calculation of a 10-day RSI, the close-to-close price changes of all the up closes over the most recent 10 days would be summed and divided by 10, resulting in U in the formula. Similarly, the close-to-close price changes of all the down closes over the most recent 10 days would be summed and divided by 10, resulting in D. (Wilder actually used a modified exponential smoothing calculation to simplify calculation from day to day.)

The RSI measures price momentum by measuring the strength of up days (or bars) to the weakness of down days (or bars) over a given period. If there are more (or larger) up days than down days over a given period, the RSI will rise; if there are more (or larger) down days than up days, the indicator will fall.

Wilder’s default “look-back” period for the RSI is 14 days, although no time period is better than any other — it depends on the market conditions and the trader’s time frame. The fewer days or bars used to calculate the indicator, the more sensitive it will be to shorter-term price fluctuations.

FIGURE 1 — DIVERGENCE

In December, price made a higher high while the RSI made a lower high, indicating the new high was established on diminished upside momentum. The trend soon reversed. However, similar divergences in October-November were followed by additional price gains rather than reversals.



Source: TradeStation

Interpretation and use

Overbought and oversold. The RSI's most common use is to indicate overbought and oversold conditions — when a market has theoretically exhausted itself in the short-term and is presumably due for a correction or reversal. For the 14-day RSI, Wilder proposed readings of 70 or higher to indicate an overbought condition and readings below 30 to reflect an oversold situation (50, the midpoint of the indicator's range, represents an equilibrium level).

However, overbought and oversold levels will vary relative to the number of days used in the RSI calculation. A very short-term RSI — say, five days — will fluctuate more than a 14-day RSI. As a result, the overbought and oversold levels for the shorter-term indicator would need to be higher and lower, respectively — perhaps 85 and 15.

Divergence. Another use of the RSI is to look for divergences between price and the indicator. A divergence occurs when the market makes a higher high (or lower low) but the RSI fails to confirm the new price high by making a lower high or higher low. This is commonly interpreted as an indication the most recent price high or low is being established on weaker momentum — a potential reversal signal.

Some analysts prefer to combine overbought/oversold signals and divergences. For example, some traders might wait for the RSI to move to an overbought level (say, above 70) and post a divergence before taking profits on a long position or selling short.

Figure 1 illustrates an overbought condition with a bearish divergence (one that implies a price decline) in December 2004. The EUR/USD made a higher high at the end of December, but the 10-day RSI made a lower high (while still above 70); the market sold off and the RSI soon moved below 30.

Key points

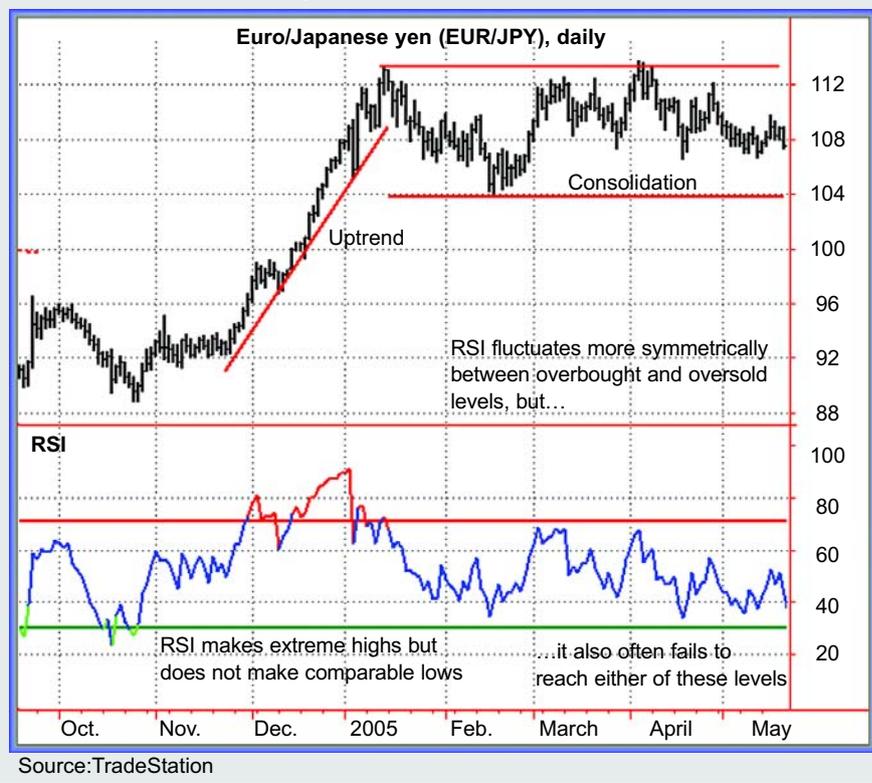
For any momentum indicator such as the RSI to continue to rise, price gains from period to period must continue to increase. If the price increases remain static (for example, gaining two points each day) the momentum

behavior can result in the momentum indicator “leading” (for example, concluding an uptrend and turning down) before price.

However, in an extended trend, this characteristic can result in many false divergences. For example, a market

FIGURE 2 — TREND AND TRADING RANGES

During the uptrend, the RSI readings were pushed uniformly higher. During the consolidation, the indicator moved up and down more regularly, but it also failed to reach either the overbought or oversold levels.



indicator will move sideways, reflecting steady, but not increasing, momentum.

If the price increases are smaller from day to day (say, three points one day, two the next, one the next) the momentum indicator will fall — even though prices are still rising. Because price gains can shrink when a market pauses within a trend move (a natural contraction of volatility after a high-volatility price move), this kind of

may continue to make higher highs in an uptrend and the RSI may make successive lower highs — diverging from price. These divergences may be followed by temporary corrections, but the market will still reverse back in the direction of the prevailing trend. Notice in Figure 1 before the divergence that accompanied the top of the uptrend in December, there were two smaller bearish divergences in October

continued on p. 48



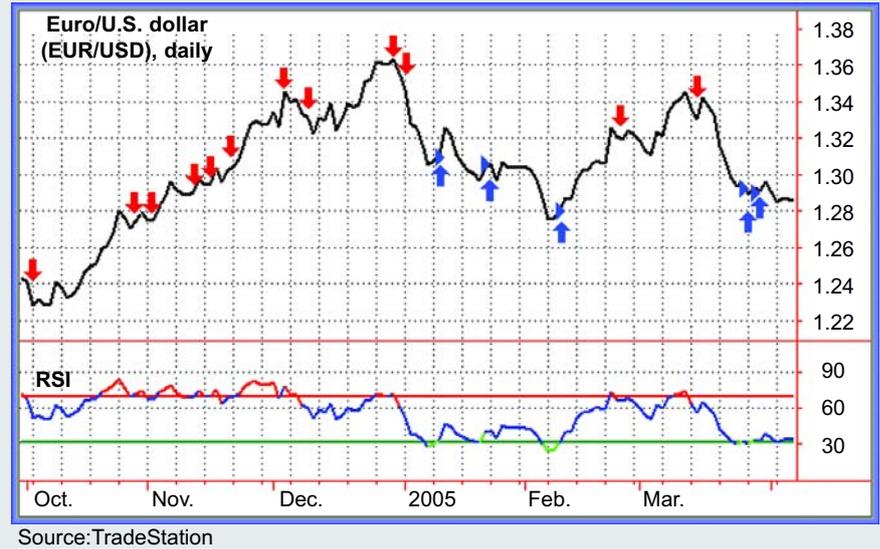
and November that were followed by increased price gains. Although price was still moving higher during this period, the day-to-day gains were shrinking, so the RSI declined.

Trend, therefore, is the enemy of any momentum indicator and the reason so many traders advise using indicators such as the RSI in trading-range markets rather than trending ones. (The catch is that it's impossible to know when a market will switch from one mode to the other.) In an uptrend, the RSI may generate repeated overbought signals and bearish divergences (which would trigger sell orders) and few, if any, oversold signals. This would result in a trader repeatedly selling into an ongoing uptrend.

Figure 2 illustrates this. The indicator was skewed higher during the uptrend period. During the sideways consolidation, or trading range, that followed, the indicator oscillated between the overbought and oversold levels more evenly. However, the consolidation highlights another sticky point with the RSI: The indicator is

FIGURE 3 — TRADE SIGNALS

The arrows mark buy and sell signals for a 10-day RSI with overbought and oversold levels of 70 and 30, respectively. Although some of the signals appear useful, the chart highlights the repeated sell signals and absence of buy signals that would have occurred during the uptrend.



prone to contract during low-volatility periods to the extent that it rarely reaches the overbought or oversold levels. (See “Related reading” for information about an article that addressed this topic.)

As a result, the RSI and similar indicators are sometimes used as secondary tools to “alert” traders to potential reversal points; trades are taken only when specific price action confirms a particular move.

Figure 3 shows the results of buying when a 10-day RSI declines to 30 and selling when it reaches 70. Over a five-year period (April 2000–April 2005), 80 percent of the buy signals were profitable, but only 39 percent of the sell signals were — and the losses on the short trades were far larger than the profits on the long trades.

Bottom line

The RSI is one of a number of popular oscillators used by technicians to determine overbought and oversold states in the market, as well as changes in the trend of momentum.

The RSI is not a systematic tool that can be used to generate automatic buy or sell signals independent of other factors. You should not buy or sell simply because the RSI indicates a market is oversold or overbought. 📌

See “Teaching the RSI new tricks” for RSI-based trading ideas.

Related reading

The following articles discuss, among other things, how to improve the RSI by combining it with the stochastic oscillator.

“When two oscillators are better than one,” by Thom Hartle (*Active Trader*, May 2002). Oscillators such as the relative strength index (RSI) and stochastics can identify overbought and oversold signals in static, range-bound markets, but they don’t fare as well in dynamic, trending markets. Combining the two indicators creates a new tool with more favorable characteristics.

“Trading System Lab: CMO StochRSI,” by Dion Kurczek (*Active Trader*, December 2003). A detailed analysis of a trading system that uses two indicators created by Tushar Chande (the Chande Momentum Oscillator and the StochRSI) to identify buying opportunities at oversold levels. Also, the system scales into a position by purchasing more shares when an additional buy signal occurs after a price decline.

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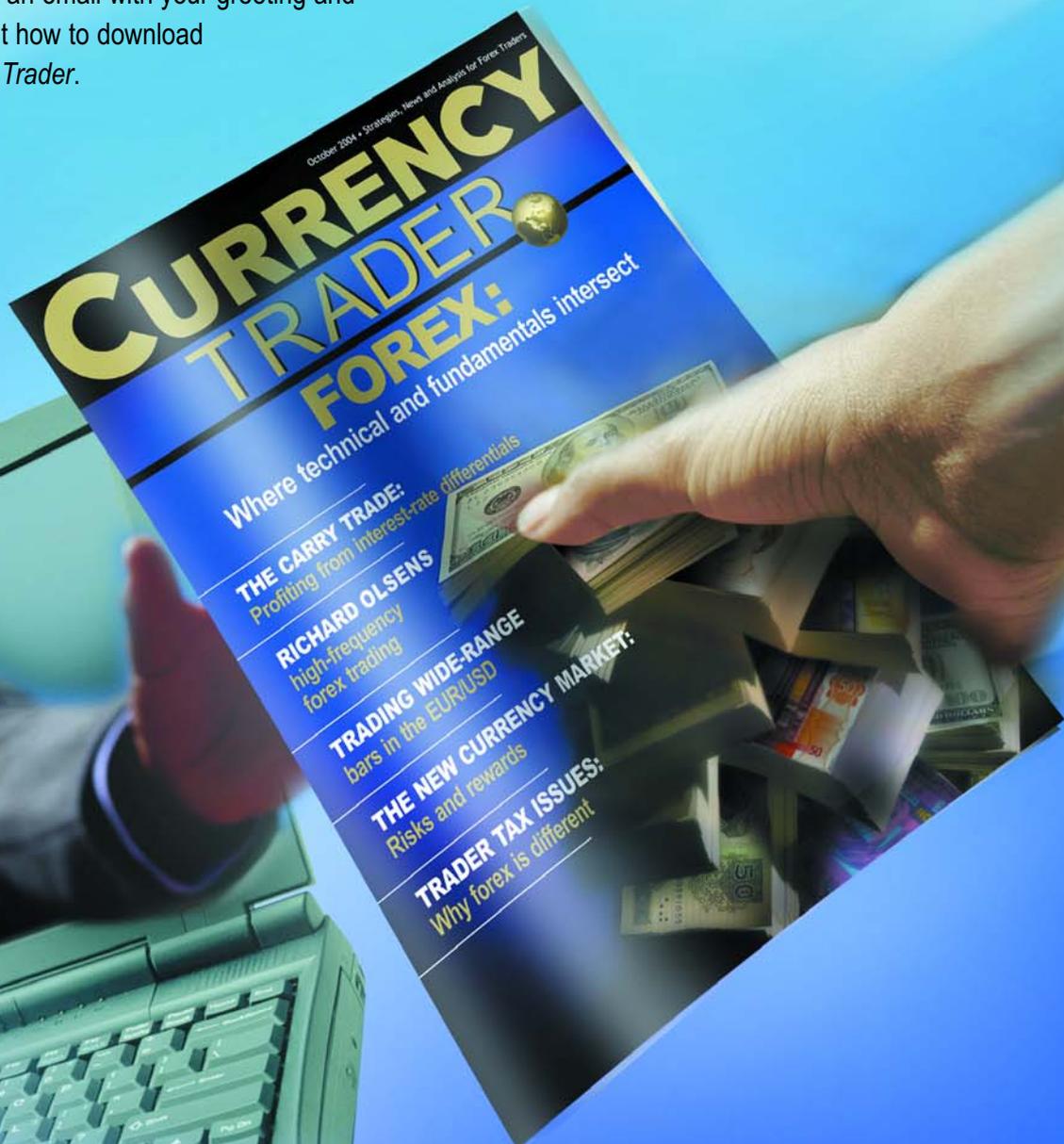
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INTERNATIONAL MARKET SUMMARY

FOREX (vs. U.S. DOLLAR)

Rank*	Country	Currency	Current price vs. U.S. dollar	1-month gain/loss	3-month gain/loss	6-month gain/loss	52-week high	52-week low	Previous rank
1		Brazilian real	0.3946	7.40%	4.82%	11.48%	0.3966	0.3103	15
2		British pound	1.9059	1.84%	1.23%	3.69%	1.955	1.7479	12
3		South African rand	0.1639	1.40%	-3.05%	2.44%	0.1783	0.1388	16
4		New Zealand dollar	0.7236	1.27%	1.06%	3.65%	0.7464	0.591	9
5		Swiss franc	0.8422	1.03%	-0.33%	1.15%	0.8879	0.7559	14
6		Australian dollar	0.7785	0.87%	0.45%	4.12%	0.7988	0.6773	10
7		Taiwanese dollar	0.03197	0.53%	1.91%	7.16%	0.03253	0.02801	6
8		Japanese yen	0.00944	0.38%	-2.83%	0.68%	0.00983	0.0087	8
9		Euro	1.2981	0.17%	-0.73%	1.65%	1.3667	1.1758	11
10		Hong Kong dollar	0.1282	0.00%	0.00%	-0.23%	0.1288	0.1281	3
11		Indian rupee	0.0229	-0.04%	0.00%	4.32%	0.02306	0.02145	4
12		Swedish krona	0.142	-0.14%	-1.48%	0.35%	0.152	0.1283	13
13		Russian rouble	0.03605	-0.17%	1.08%	3.41%	0.03643	0.03414	2
14		Singapore dollar	0.6073	-0.21%	-0.86%	0.96%	0.6186	0.5775	5
15		Thai baht	0.02531	-2.09%	-2.73%	3.60%	0.02621	0.0239	7
16		Canadian dollar	0.8033	-2.27%	-0.90%	-1.56%	0.8532	0.7138	1

As of April 27, 2005 *based on one-month gain/loss

INTEREST RATES

Rank	Country	Rate	April 27	1-month	3-month	6-month	Previous
1	Japan	Government Bond	140.25	0.96%	0.83%	1.89%	1
2	Germany	BUND	120.58	2.35%	1.69%	4.35%	2
3	UK	Short sterling	95.11	0.17%	0.00%	0.00%	3
4	Australia	3-year bonds	94.59	0.37%	0.23%	N/A	4
5	U.S.	10-year T-note	111.064	2.63%	-0.16%	-1.77%	5

NON-U.S. DOLLAR FOREX CROSS RATES

Rank	Currency pair	Symbol	April 27	1-month gain/loss	3-month gain/loss	6-month gain/loss	52-week high	52-week low	Previous
1	Real/Canada \$	BRL/CAD	0.4917	9.48%	5.71%	12.85%	0.4917	0.4212	20
2	Real/Euro	BRL/EUR	0.304	7.20%	5.49%	9.97%	0.3052	0.2575	13
3	Real/Yen	BRL/JPY	41.8255	7.06%	7.45%	10.90%	42.0039	34.3301	17
4	Real/Aussie \$	BRL/AUD	0.5072	6.60%	4.40%	7.67%	0.509	0.4389	15
5	Real/Pound	BRL/GBP	0.2071	5.65%	3.62%	8.06%	0.2076	0.1714	11
6	Franc/Canada \$	CHF/CAD	1.0493	3.24%	0.01%	2.66%	1.1054	0.9952	19
7	Aussie \$/Canada \$	AUD/CAD	0.9699	3.08%	1.37%	5.59%	1.0083	0.8863	18
8	Pound/Euro	GBP/EUR	1.4689	1.76%	1.96%	2.09%	1.5279	1.4057	8
9	Pound/Yen	GBP/JPY	202	1.54%	3.97%	3.76%	205.94	189.5	14
10	Franc/Euro	CHF/EUR	0.6488	0.76%	0.40%	-0.52%	0.665	0.6394	10
11	Aussie \$/Euro	AUD/EUR	0.5998	0.70%	1.15%	2.50%	0.6187	0.5643	6
12	Franc/Yen	CHF/JPY	89.2623	0.67%	2.44%	0.49%	91.6645	83.267	16
13	Aussie \$/Yen	AUD/JPY	82.506	0.48%	3.17%	3.50%	83.9	74.28	9
14	Aussie \$/Franc	AUD/CHF	0.9247	-0.15%	0.77%	3.01%	0.9593	0.8547	4
15	Euro/Yen	EUR/JPY	137.56	-0.17%	2.06%	1.01%	141.59	128.24	12
16	Franc/Pound	CHF/GBP	0.4419	-0.86%	-1.58%	-2.65%	0.4647	0.4257	7
17	Aussie \$/Pound	AUD/GBP	0.4085	-1.00%	-0.81%	0.42%	0.4221	0.372	5
18	Canada \$/Euro	CAD/EUR	0.6189	-2.46%	-0.19%	-3.28%	0.6497	0.5962	2
19	Canada \$/Yen	CAD/JPY	85.1394	-2.63%	1.89%	-2.24%	89.7805	78.0564	3
20	Canada \$/Pound	CAD/GBP	0.4215	-4.20%	-2.18%	-5.48%	0.454	0.397	1

GLOBAL STOCK INDICES

Rank	Country	Index	April 27	1-month gain/loss	3-month gain/loss	6-month gain/loss	52-week high	52-week low	Previous
1	Hong Kong	Hang Seng	13839.64	1.84%	1.52%	7.23%	14339.06	10917.65	13
2	Egypt	CMA	1621.55	1.19%	14.97%	31.50%	1717.34	884.52	1
3	Singapore	Straits Times	2145.34	-0.28%	3.37%	8.68%	2189.67	1690.35	4
4	U.S.	S&P 500	1156.38	-1.30%	-1.57%	2.68%	1229.1	1060.72	12
5	Switzerland	Swiss Market	5840.5	-1.63%	1.14%	7.97%	6041.7	5264.5	7
6	Canada	S&P/TSX composite	9323.52	-2.25%	1.60%	5.71%	9968.41	8098.06	11
7	India	BSE 30	6278.5	-2.62%	0.62%	9.81%	6954.86	4227.5	10
8	UK	FTSE 100	4789.4	-2.78%	-1.34%	3.33%	5077.8	4283	9
9	Mexico	IPC	12454.69	-3.20%	-4.27%	7.52%	13931.32	9423.99	15
10	Australia	All ordinaries	3987.5	-3.61%	-2.85%	5.86%	4255.8	3346.8	6
11	Germany	Xetra Dax	4189.02	-3.69%	-0.65%	6.21%	4435.31	3618.58	8
12	Italy	MIBTel	23618	-3.75%	-1.25%	8.54%	25155	19733	5
13	France	CAC 40	3927.68	-3.84%	0.92%	6.35%	4143.93	3452.41	2
14	Brazil	Bovespa	25242	-5.78%	4.80%	8.20%	29584	17601	14
15	Japan	Nikkei 225	11005.42	-6.87%	-3.05%	2.85%	11988.12	10489.84	3

ACCOUNT BALANCE

Rank	Country	2004	Ratio*	2003	2005 ⁺	Rank	Country	2004	Ratio*	2003	2005 ⁺
1	Hong Kong	16.404	10	16.697	16.598	9	UK	-43.338	-2	-33.39	-43.098
2	Taiwan	21.3	6.9	29.202	19.378	10	Spain	-33.066	-3.4	-23.549	-36.462
3	Germany	118.525	4.4	52.933	129.726	11	New Zealand	-4.102	-4.4	-3.267	-4.151
4	Japan	159.402	3.4	136.238	148.931	12	Australia	-32.036	-5.3	-30.212	-30.248
5	Canada	28.195	2.9	17.00	25.243	13	U.S.	-631.268	-5.4	-530.669	-641.678
6	Denmark	4.289	1.8	6.327	4.543	<i>Totals in billions of U.S. dollars</i>					
7	France	-12.761	-0.6	5.474	-13.246	<i>*Ratio: Account balance in percent of GDP; ⁺ Estimate</i>					
8	Italy	-18.074	-1.1	-21.942	-13.315	<i>Source: International Monetary Fund, World Economic Outlook Database, October 2004</i>					

AMERICAS



▼ **Brazil's February unemployment rate** climbed to 10.6 percent, a rise of 0.4 percent from the previous month, but 1.4 percent lower than February 2004.

▼ **Brazil's benchmark interest rate**, already stratospheric at 19.25 percent, could go even higher if high oil prices and other inflation fears persist. Despite eight consecutive rate hikes, the Brazilian government threatened another half-point increase at the next Monetary Policy Committee meeting in May.

▼ **The March unemployment rate in Canada** was 6.9 percent, a drop of 0.1 percent from February and a fall of 0.6 percent compared to March 2004. While more adult men found work, fewer youth were employed, and the accommodation and food services industries lost many jobs.

EUROPE



▼ **France's January unemployment** remained unchanged from December's 10.1-percent rate. However, the data was undergoing a revaluation at press time.

▼ **German unemployment** dropped 0.1 percent in February to 12.5 percent, 1.6 percent below the February 2004 rate.

▼ The chief economist at the Bank of Ireland predicted a rise in **UK interest rates** at the June meeting. In the B of I's monthly bulletin, Dr. Dan McLaughlin "projects a gradual rise in inflation over the next two years until it exceeds the 2-percent target in early 2007. This can be seen as justification for further monetary tightening."

▼ All 72 European economists surveyed in a Reuters poll believe the **European Central Bank** will leave interest rates at 2 percent when the ECB meets May 4, and 38 of the 72 believe rates will rise before the end of the year. One economist predicts a rate cut before 2006.

ASIA & THE SOUTH PACIFIC



▼ Australia's unemployment rate remained stable at 5.1 percent in March, falling .5 percent below the March 2004 rate.

▼ **The January-March jobless rate for Hong Kong** remained at 6.1 percent from the previous period (December to February), according to preliminary data. The figure represented the country's lowest level since the period of September to November 2001. "The near-term outlook will continue to hinge on the overall economic growth giving rise to additional jobs for the labor force, including in particular graduates entering the labor market during the summer months," said a government spokesperson in a press release. "Total employment soared to an all-time high of 3,354,000 in the first quarter of 2005. The department posted a record high of 8,254 job placements in March."

▼ **Interest rates in India** rose for the second time in six months, this time 25 basis points to 5 percent. India's central bank cited high oil prices as a main reason for the increase, which Indian economists called, "a preemptive strike."

AFRICA



▼ **South African unemployment** fell 1.7 percent from 27.9 percent in March 2004 to 26.2 percent in September 2004. This decrease came partially from increases in construction and trade employment. According to the Labor Force Survey, "Black women continue to be the most affected by unemployment, more than seven times white males."

International Monetary Fund

▼ Global output, which averaged about 6 percent in late 2003 and early 2004, has moderated after a slowdown in industrial production and global trade because of higher oil prices and the start of more sustainable growth, according to the International Monetary Fund (IMF) in its April 2005 World Economic Outlook. Predictive indicators still support solid expansion in 2005, as growth would incur modest economic impact from the December 2004 tsunami and keeping in mind oil price changes.

▼ Despite the overall trend, certain economies showed

different patterns. While the U.S., China, and most emerging economies had strong growth expansion, Europe and Japan had disappointing growth because of falling exports and weak domestic demand. Global current account balances have increased, particularly with the U.S. posting an account deficit that comprised 5.7 percent of its GDP in 2004. As a result of the deficit and other factors, the U.S. dollar depreciated more, while industrial and emerging markets — particularly in some Asian countries — had their currencies appreciate.



Event: The 22nd Annual World Cup Trading Championship

Entrants will compete in separate stock, futures, and forex divisions for prizes, bull & bear trophies and a possible staff position on the worldcupadvisor.com team.

Date: Through 2005

For more information: Log on to www.robbingstrading.com

Event: The Options Industry Council is conducting a handful of options seminars across the country this winter. They are taught by exchange professionals in a classroom-style format and run from 6 p.m. to 9 p.m. There is no cost to attend.

For more information: Log on to www.888options.com for an updated listing of seminar locations, as well as schedules for OIC's Covered Calls and Directional Strategies seminars.

Event: The 17th Annual Las Vegas Money Show

Date: May 9-12

Location: Paris & Bally's Resorts; Las Vegas

For more information: Log on to www.intershow.com

Event: Expo Trader Brazil International Asset Managers and Traders Conference

Speakers include John Bollinger, Larry Williams, and Frank Tirado.

Date: June 23-24

Location: Sofitel Hotel, Rio de Janeiro, Brazil

For more information: www.expotrader.com.br/

Event: The Traders Expo Chicago

Date: July 13-16

Location: Hyatt Regency Chicago

For more information: <http://www.tradersexpo.com> or call (800) 970-4355

NEW PRODUCTS

▼ **COESfx Inc.** has announced its recent partnership with AbleSys Corporation (ASC), a financial trading software company. AbleSys' eASCTrend software offers traders specific buy, sell, and stop signals, and is fully automated for day, swing, and position trading for all markets. Traders on the COESfx platform will gain access to eASCTrend's up-to-the-minute trading signals. COESfx is offering a free one-month trial of the COESfx Level 1 Trading Platform to AbleSys software users. To learn more about the AbleSys eASCTrend software and to begin trading with COESfx, visit www.coesfx.com.

In addition, www.coesfx.com has been enhanced with content from Thomson Financial's IFR Markets. IFR Markets provides investors with key market transactions, data, analysis and commentary on the international markets, and a broad array of information including currency outlooks, economic calendars, and forecasts.

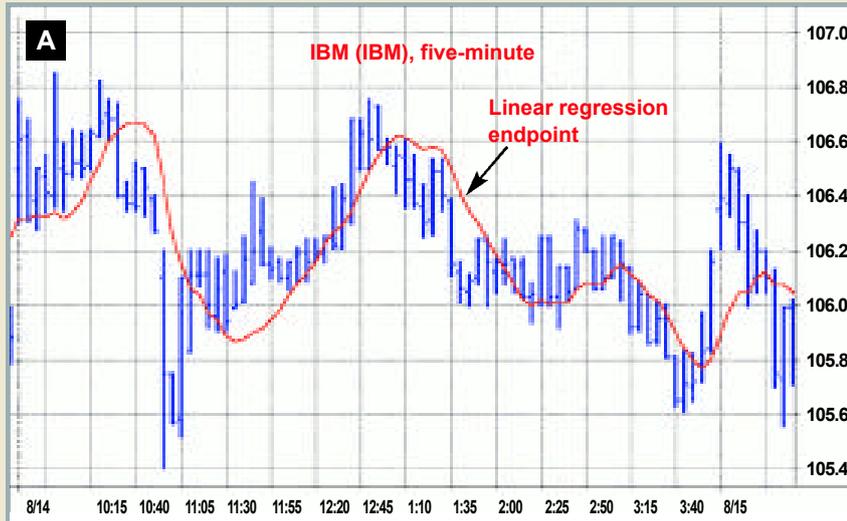
▼ **Efutures**, an operating division of First Capital Group, has launched its fully automated foreign exchange trading platform. The platform — EZ-FX Trader — offers trading execution, information, and risk management in real-time. EZ-FX Trader contains a suite of 120 spot currency pairs customized to three customer segments: EfuturesFX Mini, EfuturesFX Premium, and EfuturesFX Institutional. The three versions of the platform offer customized workspaces and product coverage in line with graduating levels of investment. For more information, visit www.efuturesfx.com.

▼ **Advanced Trading Research** and **Collective2.com** announced a new joint service that will allow customers to place trades without human involvement. Thanks to Advanced Trading Research's TradeBullet software, any trading system monitored by Collective2 can be automatically traded in a customer's live brokerage account. Collective2 monitors more than 500 trading systems for stocks, options, futures, and forex. Anyone who wants to sell their trading advice can add their system to the Collective2 Web site. Collective2 then tracks the results each trader achieves and rates all systems on their results. Those interested in TradeBullet can download a demo version at www.tradebullet.com/download.



FIGURE 1 — CATCHING TRENDS: FROM MOVING AVERAGE TO POLYNOMIAL

A) The linear regression fits a straight line to prices in the lookback period. The endpoint of the line fits the data but lags at market turns. B) The second-order polynomial curves and, therefore, the endpoint changes direction at market turns sooner than the linear regression. C) The endpoint of the fourth-order polynomial closely tracks the trend of the market, quickly changing direction at market turns.



Source: TradeStation Pro by TradeStation Group

Least squares analysis/second order polynomials

A least squares approach fits a straight line through the series of prices over a lookback period so the difference between each of the individual prices and the straight line is the smallest (least). This is a “best fit” line of the data (also referred to as a “regression line”). “Squares” refers to finding the minimum squared difference between prices and the straight line. The differences are squared because some price points are above the line (positive) and some are below it (negative). Plotting the final value, or endpoint, of the least squares lines for each bar calculated over a certain lookback period tracks price more closely than a moving average (see Figure 1A).

The formula for a least squares line is simple. A straight line has a beginning point and rises at a fixed rate. For example, if IBM starts at \$100 and moves up for 10 more days, closing at \$105, a straight line fit to the data would start at \$100 and rise at 50 cents per day, arriving at \$105 the final day.

The formula for a straight line is:
 $a_0 + a_1 t$

where
 a_0 is the initial value of the line;
 a_1 is the slope of the line;
 t is time.

For our example, a_0 is \$100, a_1 is 50 cents, and t is 10 (days). The formula has two terms: coefficients ($a_0 + a_1$) and variables (t). Mathematicians call this formula a polynomial, which means it has more than one term. Because t is not raised to a power, the polynomial is referred to as a “first-order” polynomial.

Although the least squares line may be an improvement over the moving

average, it still changes directions too late for tradable signals. What's needed is a formula for a line that curves.

A curved line does not change direction at a fixed rate, but at an accelerating or decelerating rate. The mathematical trick to making a line curve is to add an additional term to the formula for a straight line, and have this term be squared (i.e., raised to the sec-

ond power). The formula for a line that can curve is $a_0 + a_1 * t + a_2 * t^2$. This line takes on the appearance of a parabola. Because it curves, this line fits price data better than a straight line, as Figure 1B shows. Because the final term of this polynomial is squared, it is called a "second-order" polynomial.

Just as the second-order (parabolic) polynomial calculation displays

changes in trend direction sooner than a straight line, higher-order polynomials approximate price better than straight or parabolic lines, as shown in Figure 1C. The more terms added to a formula, the closer the fit to the price data.

For more information, see "Surfing the least squares curve," Active Trader, December 2001.

Exponential moving average (EMA)

The simple moving average (SMA) is the standard moving average calculation that gives every price point in the average equal emphasis, or weight. For example, a five-day SMA is the sum of the most recent five closing prices divided by five.

Weighted moving averages give extra emphasis to more recent price action. The exponential moving average (EMA) weights prices using the following formula:

$$\text{EMA} = \text{SC} * \text{Price} + (1 - \text{SC}) * \text{EMA}(\text{yesterday})$$

where SC is a "smoothing constant" between 0 and 1, and EMA(yesterday) is the previous day's EMA value.

You can approximate a particular SMA length for an EMA by using the following formula to calculate the equivalent smoothing constant:

$$\text{SC} = 2 / (n + 1)$$

where n = the number of days in a simple moving average of approximately

equivalent length.

For example, a smoothing constant of .095 creates an exponential moving average equivalent to a 20-day SMA ($2 / (20 + 1) = .095$). The larger n is, the smaller the constant, and the smaller the constant, the less impact the most recent price action will have on the EMA. In practice, most software programs allow you to simply choose how many days you want in your moving average and select either simple, weighted or exponential calculations.

Variance and standard deviation

Variance measures how spread out a group of values are — in other words, how much they vary. Mathematically, variance is the average squared "deviation" (or difference) of each number in the group from the group's mean value, divided by the number of elements in the group. For example, for the numbers 8, 9 and 10, the mean is 9 and the variance is:

$$\{(8-9)^2 + (9-9)^2 + (10-9)^2\} / 3 = (1 + 0 + 1) / 3 = .667$$

Now look at the variance of a more widely distributed set of numbers, 2, 9, 16:

$$\{(2-9)^2 + (9-9)^2 + (16-9)^2\} / 3 = (49 + 0 + 49) / 3 = 32.67$$

A common application of variance in trading is *standard deviation*, which is the square root of variance. The standard deviation of 8, 9, and 10 is: $\sqrt{.667} = .82$; the standard deviation of 2, 9, and 16 is: $\sqrt{32.67} = 5.72$.

The more varied a market's price changes are from day to day (or week to week, etc.), the higher their variance or standard deviation, and more volatile that market is; the more varied a system's returns, the higher their variance or standard deviation, and the riskier the system will likely be to trade.

Also, if a distribution of trading results is said to be "normally distributed" (i.e., adhering to the standard Gaussian "bell curve," as shown in Figure A), a one-standard-deviation calculation will hold approximately 68 percent of all results; a two-standard-deviation calculation will hold approximately 95 percent of all results. For example, if the average of several samples is 1.21 and the one standard deviation boundary comes out to 0.11, 68-percent percent of the values should fall somewhere between 1.10 (1.21 - 0.11) and 1.32 (1.21 + 0.11).



When you're wrong, you're wrong.

TRADE

Date: Thursday, April 14, 2005.

Entry: Short the Euro/U.S. dollar (EUR/USD) at 1.2794.

Reason(s) for trade/setup: After the rally that ended in mid-March failed to reach the Dec. 30, 2004 high, EUR/USD sold off again before consolidating roughly between 1.2800 and 1.3000 in late March and early April. The low of this recent trading range was 1.2799, which was a bit higher than the support implied by the early-February low of 1.2730.

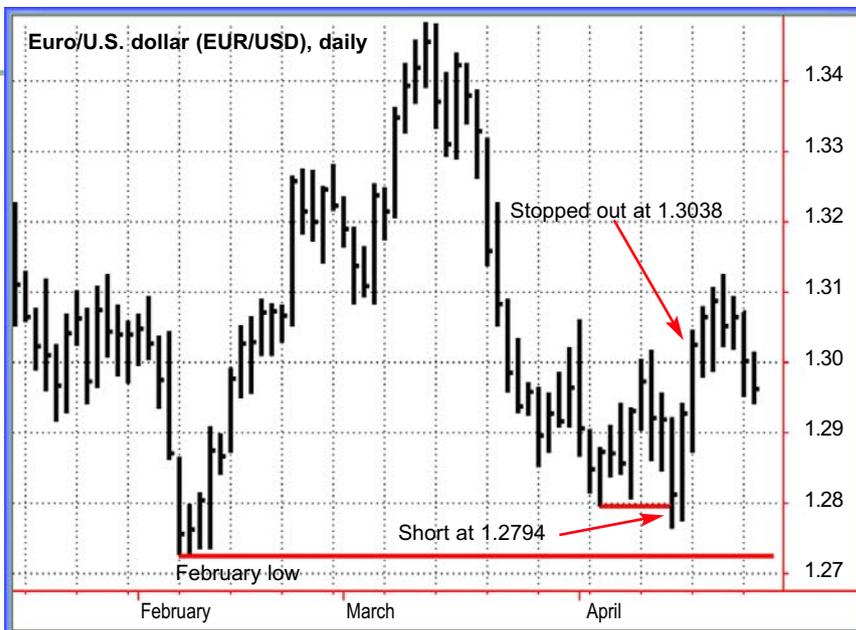
On April 14, the market moved lower, falling below the 1.2799 level. Many chartists would probably either buy around this level in anticipation of a bounce off the supposed support or sell on a move below the February low.

We went short on the move below the April low in anticipation of an eventual breakdown below the February low. Most trend-following systems are already short this market, and the renewed selling should push price below the February low — which is a conspicuous support level on the weekly time frame.

Initial stop: 1.3038, which is 24 pips above the most recent swing high on April 12.

Initial target: We'll actually cover part of the position at the February low (1.2730) to guard against the possibility of a bounce off this support level.

We estimated a secondary target level by looking at two simple aspects of the price action. First, the most recent down swing was 678 pips; subtracting that amount from the April 12 high of 1.3014 (in anticipation of another down leg that approximates the most recent leg) gives a target of 1.2336. Second, this roughly corresponds to the high of the mid- to late-2004 consolidation around 1.2400. We'll use the latter price level as the target.



Source: TradeStation

RESULT

Exit: 1.3038.

Reason for exit: Initial stop hit.

Profit/loss: -244 pips (1.9 percent).

Trade executed according to plan? Yes.

Lesson(s): Not much to say other than it was a quick death. We didn't even get a chance to liquidate even a small portion of the position, as the post-entry low was 1.2767. The market reversed the next day and closed above the high of the entry day — not a good sign. The trend was no friend in this case.

We considered reversing to a long position when the market reversed the day after entry, but we didn't. The currency pair did follow through nearly 200 pips to the upside over the next few days, but then it sagged again, leaving the intermediate-term market picture murky. 📉

TRADE SUMMARY

Date	Rate	Entry	Initial stop	Initial target	IRR	Exit	Date	P/L	LOP	LOL	Trade length
4/14/05	EUR/USD	1.2794	1.3038	1.2730	26	1.3038	4/14/05	-.0244 (1.9%)	.0027	.0244	2 days

Legend: IRR — initial reward/risk ratio (initial target amount/initial stop amount); LOP — largest open profit (maximum available profit during lifetime of trade); LOL — largest open loss (maximum potential loss during life of trade).