Basic Momentum Principles

Presented by
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Three Points to Take Home.

1. Prices are determined by psychology, people’s attitude to the emerging fundamentals not the fundamentals themselves.

2. Keep things simple and apply common sense at all times.

3. Only use approaches that make sense to you.
Definition of Technical Analysis:

The art of identifying a price trend reversal at a relatively early stage and riding on that trend until the weight of the evidence shows or proves that the trend has reversed.
In technical analysis we are dealing in probabilities, never certainties.
The hopes and fears of all market participants are reflected in one thing ....the price !!
Technical analysis assumes that prices move in trends.
Trends have a tendency to perpetuate.
Prices in any freely traded market are determined by the **attitude** of all market participants to the underlying fundamentals.
“A trend is a trend is a trend.”

Always assume the prevailing trend is in existence.
There is no known technique for determining the duration and exact magnitude of a price move.

We can only recognize a change in direction.
It doesn’t matter what *time frame* you are following...

...the principles of technical analysis remain constant.
The only difference is;

the longer the time frame, the greater the significance of any given trend reversal.
It doesn’t matter what security you are following...

...the principles of technical analysis remain constant.
Now for Momentum!
Price

Momentum (Oscillator)
Momentum is a generic term.
Rate of Change
RSI
MACD
Stochastic
These are all momentum indicators
Momentum indicators share common characteristics, much like fruit.

<table>
<thead>
<tr>
<th>FRUIT</th>
<th>MOMENTUM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Fruit is sweet</td>
<td>1. Divergences apply to all momentum indicators</td>
</tr>
<tr>
<td>2. Fruit is almost always grown in the warmest season</td>
<td>2. Overbought/oversold lines can be drawn on all momentum indicators</td>
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Actual buy and sell signals can only come from a reversal in the trend of the price . . .

Not

. . . the momentum series.
Just because oscillators change direction . . . doesn’t mean that prices will also!

.....but they usually do!

Just because oscillators change direction . . .
Momentum’s valuable contribution is to tell us when the underlying technical structure is weakening, or strengthening.
There are two broad momentum categories:

1. **Momentum characteristics**
   
   Characteristics dealing with overbought, oversold conditions, divergences etc.

2. **The identification of trend reversals in the momentum indicator itself**
   
   You can apply trendline violations, moving average crossovers and price pattern completions, etc., to momentum.
Momentum Characteristics

1. Overbought/oversold

2. Divergences

3. Characteristics in bull and bear markets
Momentum Characteristics

1. Overbought/oversold
The news is so good, I am certain to make money if I buy now!!

Take partial profits

Overbought

Equilibrium

Oversold
The news is so bad only a fool would buy now !!!

Cover at least part of the short position
Additional profit

Overbought premature

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Better timing
The Rate of Change
The rate of change is probably the easiest momentum indicator to construct.
The golden rule of technical analysis should be:

Don’t cast away an indicator just because it’s simple, reject it because it doesn’t work.
The rate of change lends itself handsomely to overbought and oversold interpretations.
The problem is that there are no hard and fast rules about where the lines should be drawn...
The problem is that there are no hard and fast rules about where the lines should be drawn...

...because the magnitude of the oscillations will vary according to the volatility of the underlying security and the time being considered.
Phelps Dodge

13-week ROC

Lines are too close
Phelps Dodge

13-week ROC

Lines are too far apart
Phelps Dodge

13-week ROC

Lines not perfect, but better placed
Silver

30-day ROC
The RSI
The RSI, or Relative Strength Indicator, is a momentum indicator and should in no way be confused with the principle of comparative relative strength.
Benefits of the RSI vs. ROC:

1. It is less volatile.

2. The RSI falls within the finite boundaries of 0 and 100.

3. Constant overbought/oversold trading bands applicable to all securities.
Overbought at 70
Oversold at 30
British Pound
14-day RSI

Overbought at 70
Oversold at 30
The magnitude of the oscillations of the RSI are inverse to that of most other momentum series.
Overbought/oversold are at 70 and 30 for both series.

9-day RSI

65-day RSI

Hang Seng
Hang Seng

9-day RSI: Overbought/oversold now at 80/20

65-day RSI: Overbought/oversold now at 62.5 and 37.5
The true meaning of “long” and “short” time spans.
Proctor and Gamble (daily)

40-day RSI

OB/OS at 65/35

2-month RSI

OB/OS at 85/15

Proctor and Gamble (mthly)
Suggested Alternative RSI Time Spans

<table>
<thead>
<tr>
<th>Daily</th>
<th>Weekly</th>
<th>Monthly</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>13</td>
<td>9</td>
</tr>
<tr>
<td>14</td>
<td>26</td>
<td>12</td>
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<td>18</td>
</tr>
<tr>
<td>45</td>
<td>52</td>
<td>24</td>
</tr>
</tbody>
</table>
Benefits of the RSI vs. ROC:

1. It is less volatile so erratic movements minimized.

2. The RSI falls within the finite boundaries of 0 and 100.

3. Constant overbought/oversold trading bands applicable to all securities.

4. The RSI makes comparison between different securities easier.
Canadian Dollar

Use Trendlines as confirmation

No confirmation

Overbought confirmation

Oversold confirmation

No confirmation

RSI 14

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Be mindful of the time frame when you see a signal.
General Motors Daily

- 45-day decline

General Motors Monthly

- 2-year decline
Momentum Characteristics

1. Overbought/oversold

2. Divergences
In the description of overbought and oversold conditions,

we assumed the oscillator peaks and troughs at roughly the same time as the price . . .
... but momentum often turns *ahead* of the price.
Negative divergence
Everything looks good!!
Weak momentum is warning of trouble ahead
Divergences *must* be confirmed by the price.
Confirmation can come from…

1. Trendline breaks

2. Price pattern completions

3. Moving average crossovers
Weak momentum finally confirmed by price
In one respect, markets are like houses, they take longer to build than tear down.
Divergences also appear at market bottoms, where they are called positive divergences, because momentum hits bottom before the price.
Positive divergence
Sugar

10-day ROC

Confirmation

Positive divergence
Virtually no upside momentum at final peak
Virtually no upside momentum at final peak

Sharp decline
Virtually no downside momentum at final low
Followed by a sharp rally

Virtually no downside momentum at final low
Chennai Petroleum

10-day ROC Barely below zero at final low.
Momentum negative when price very close to its previous high.
Momentum Characteristics

1. Overbought/oversold

2. Divergences

3. Characteristics in bull and bear markets
Prices in any freely traded market are determined by the attitude of all market participants to the underlying fundamentals.
Earnings up

Price down

Earnings up
Earnings up

Price down

Earnings up
Ebay

Earnings Up

Price sideways to down

Ebay Earnings
Calculating a Price Oscillator

S&P Composite

13-week moving average.

Price oscillator appears on the next chart.
Stock Sentiment vs Stock Momentum

S&P momentum

Bullish advisors momentum
Bond Sentiment vs Bond Momentum

Govt Bond Prices

Bond Bulls (10-week MA)*

14-week RSI (10-week MA)

*Source Market Vane

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Primary bear market lasts 1 to 2 years

Primary bull market lasts 1 to 2 years
Oversold in a bull market . . .

. . . means that the price will very likely rally.

Oversold in a bull market . . .
Overbought in a bear market . . . probably means the top of the rally.
Followed by a trading range

Overbought in a bull market
Followed by a trading range

Oversold in a bear market
Doesn’t necessarily result in much of a rally

Oversold in a bear market
Goldman Sachs Commodity Index

Bull trend

Bear trend

30-day ROC

Extreme overbought is a bull market characteristic
Goldman Sachs Commodity Index

30-day ROC

Extreme overbought is a bull market characteristic

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Two Broad Ways of Interpreting Momentum

1. Momentum characteristics

2. Identifying momentum trend reversals
Techniques

1. Trendlines

2. Price Patterns

3. Moving Averages
Techniques

1. Trendlines
Momentum **must** be confirmed by price.
Momentum must be confirmed by price.
CDN $ (Weekly)

Reality check: Two examples of failed signals.

False breakout followed by an above average move to the downside.
China ETF (FXI)

Bullish divergence and positive confirmation.

Bearish divergence and negative confirmation.

RSI (14)
S&P ETF (SPY)

Outside bar violates up trendline when RSI is overbought.

Resistance at extended line.
S&P Composite

12-month RSI
Techniques

1. Trendlines

2. Price Patterns
Head and shoulders

Confirmation
Procter & Gamble

RSI (14)
Warning: Breakout is coming from an overbought level.
Comcast

Higher highs

Overbought

Lower highs

10-day ROC
Techniques

1. Trendlines

2. Price Patterns

3. Moving Averages
Smoothing of raw data
Bad sell signal
Canadian Dollar/Yen

45-day ROC

30-day MA

10-day MA of 30-day
Canadian Dollar/Yen (daily)

45-day ROC (30/10)
The Special K
Market Cycle Model

Primary trend: 9 months to 2 years

Intermediate trend: 6 weeks to 9 months

Short-term trend: 2 to 6 weeks

Ideal place for a sell signal

Primary reversal realized some way from the actual peak.

Source: Yelton Fiscal
Primary trend
9 months to 2 years

Short-term trend
2 to 6 weeks

Intermediate trend
6 weeks to 9 months

Now Becomes....

Primary trend
9 months to 2 years

Source: Yelton Fiscal
Market Cycle Model

Price

Special K

The top

The bottom
CRB Composite

Upward and downward sloping inverse H&S patterns.

Triangle top

Reverse H&S

Special K

Simultaneous MA and trendline cross.