Two New Oscillators

Volume Zone
Price Zone

Developed by Walid Khalil, MFTA
VOLUME

• Volume analysis is a key component of analyzing and predicting the future directional behavior of an asset.

• Joe Granville and OBV: Add a period's volume when the close is up and subtract the period's volume when the close is down.

• Time is not relevant to OBV.
Volume Zone Oscillator (VZO)

- VZO takes into account both time and volume.
- VZO smoothes the volume and plots such actions in the form of an oscillator, not as a trend following indicator like the OBV.
- These modifications take the form of a leading indicator that provides buy/sell signals based on oversold/overbought behavior.
- Useful in up trending, down trending, and sideways markets.
Formula

• If today’s closing price is higher than yesterday’s closing price, then the volume will have a positive value (Bullish); otherwise, it will have a negative value (Bearish).

Volume zone oscillator = 100 x (VP ÷ TV);
Where, VP (Volume Position) = 14-period EMA of volume; and
TV (Total Volume) = 14-period EMA (of volume)
PRICE

• Price discounts everything.
• Determined by the interaction between demand and supply.
• When demand increases relative to supply, price goes up.
• When demand decreases relative to supply, price goes down.
Price Zone Oscillator (PZO)

- Similar in concept to VZO.
- Useful in up trending, down trending, and sideways markets.

Formula: If today’s closing price is higher than yesterday’s closing price then the closing price will have a positive value (Bullish), otherwise it will have a negative value (Bearish).

Price Zone Oscillator = 100 X (CP÷TC);
Where, CP (*Closing Position*) = 14-period EMA; and TC (*Total Closes*) = 14-period EMA.
Components of VZO and PZO

• 60-period exponential moving average;
• 14-period ADX; and
• Seven oscillator zones: +60, +40, +15, 0, -5, -40 and -60.
VZO Clarifies Money Flow

- VZO discerns bullish volume from bearish volume and is useful for identifying at which zone (bullish or bearish) volume is positioned.
- The oscillator is plotted on a vertical scale of -100 to +100.
- Movements above +40 are considered overbought while an oversold condition would be a move under -40.
- Movements above +60 mark extreme overbought levels while an extreme oversold condition is a move under -60.
- The zero line demonstrates equilibrium between buyers and sellers.
- VZO movements and its money flow analysis also explain Dow Theory’s trend phases of accumulation, public participation, and distribution.
The chart shows only the four major zones (+60, +40, -40, -60) plus zero (horizontal black line).
Seven Oscillator Zones

- +60 is marked with green crosses;
- +40 with a green line;
- +15 with a gray line;
- 0 with a black line;
- -5 with a rose line;
- -40 with a red line; and
- -60 with red crosses.
System Rules For VZO/PZO

• 14-period ADX is the determinant between trending and non-trending (oscillating) price behavior:
  - ADX > 18 = trending
  - ADX < 18 = non-trending

• Price < or > 60-period EMA determines whether action is Bearish or Bullish.

• When ADX < 18, the relationship between price and EMA is ignored.
Up Trend Psychology

• “Volume goes with the trend” – Dow Theory as expressed by Edwards and Magee.

• Long term investors tend to accumulate shares gradually, leading to a major shift in the demand/supply outcome towards the demand, which in turn leads to waves of higher lows followed by higher highs.

• Volume tends to increase upon reaching new price territories and decrease during downward corrections.

• The oscillators will react to that volume behavior by staying in the upper zone between 0 and +40, indicating more buying pressure than selling pressure.
Up Trend Buy Rules

When price is above the 60-period EMA and ADX is > 18, buying signals are issued when:

1. The VZO/PZO crosses from below -40 to above -40 (oversold reversal); or
2. A retracement down from +40 that fails to reach -40 is common during an uptrend. VZO/PZO will not reach the lower boundary and will rebound from a low above -40. Thus, crossing from below 0 to above 0 generates a buy signal.

• To reduce whipsaws you can wait for a crossing from below 0 to above +15.
Up Trend Selling Rules

1. When the VZO/PZO rises above +60 and starts to go down; or
2. When a negative divergence appears at extreme level and VZO/PZO breaks below +40; or
3. When price goes below the 60-period EMA and VZO/PZO falls below 0.
Down Trend Psychology

• During down trends, volume rises with falling prices and falls during upward corrections.
• Long term investors tend to lay off their shares gradually, leading to a major shift in the demand/supply outcome towards the supply, which in turn leads to waves of lower highs followed by lower lows.
• The VZO/PZO will react to that volume behavior by staying in the lower zone between -40 and 0, indicating more selling pressure than buying pressure.
Down Trend Sell Short Rules

When price is < 60-period EMA and ADX is > 18, sell short signals are issued when:

1. The VZO/PZO crosses from above +40 to below +40 (overbought reversal); or

2. A retracement up from -40 that fails to reach +40 is common during a down trend. VZO/PZO will not reach the upper boundary and will fall lower from a high below +40. Thus, crossing from above 0 to below 0 generates a sell short signal.

- To reduce whipsaws you can wait for a crossing from above 0 to below -5.
Short Sell Covering Rules

1. When the VZO/PZO falls below -60 and starts to go up; or
2. When a positive divergence appears at extreme level and VZO/PZO breaks above -40; or
3. When price goes above the 60-period EMA and VZO/PZO rises above 0.
Non-Trending Psychology

• In non-trending periods the demand/supply outcome is neutral, with periods of buying followed by periods of selling.
• The VZO/PZO usually reacts to this volume behavior by fluctuating between -40 and + 40, indicating a balance between buyers and sellers.
• If VZO/PZO reaches the zone between -40 and -60, it means that Sellers are finishing off-loading their shares, which increases the likelihood of Buyers stepping in.
• If VZO/PZO reaches the zone between +40 and +60, it means that Buyers are finishing up accumulating their shares, which increases the likelihood of Sellers stepping in.
Non-Trending Buy And Sell Rules

If ADX is < 18, buy when:

1. The VZO/PZO crosses up from below -40 to above -40; or
2. The VZO/PZO crosses from below +15 to above +15.

There are two sell conditions during a long position:

1. If the VZO/PZO rises above +40, use the sell rules from when ADX > 18; or
2. If the VZO/PZO never rises to +40, sell when it closes below -5.

Remember to ignore the relationship between price and the 60-period EMA.
Non-Trending Sell Short and Cover Rules

If ADX is < 18, sell short signals are issued when:

1. The VZO/PZO crosses up from above +40 to below +40; or
2. The VZO/PZO crosses from above -5 to below -5.

There are two covering/close conditions during a short position:

1. If VZO/PZO falls below -40, use the close/cover rules from when ADX > 18; or
2. If the VZO/PZO never falls to -40, cover/close when it rises above +15.

Remember to ignore the relationship between price and the 60-period EMA.
PZO – Interpreted Like VZO
Divergence

• Between oscillator and price; and/or
• Between the two oscillators.
• VZO and PZO are usually in synch with each other.
  – VZO leading PZO is a bullish divergence
  – PZO leading VZO is a bearish divergence
• When trending, volume typically leads price.
• When price leads volume, check ADX to see if the trend is losing strength.
• Ignore the relationship between price and EMA
Bearish Divergence Between Oscillators
Bearish Divergence Between Price and Oscillators
Bullish and Bearish Divergence
Scanning for Candidates

• HGSI includes 12 filters to search for PZO and VZO buy and sell candidates.

• There are also four new views.
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**Warehouse Views**

- **NASDAQ Selected**
- **Stock Picks**
- **Top Performing**
- **Upcoming Events**
- **Investor Relations**
- **Earnings Calendar**
- **Dividend Pay Dates**
- **S&P 500 Index**
- **Dow Jones Industrial Average**
- **NASDAQ Composite**
- **NASDAQ 100**

**User Views**

- **Default View**
6.29.10 – That’s Gonna Leave A Mark
Posted on June 29, 2010 in Dave’s ETF RoundUp

The trading range of the past five weeks came an end today as the market broke out to the downside on concerns about weakening growth in China and a slump in U.S. consumer confidence. Treasuries soared (the two-year note slid to a record low yield) as the Dow Industrials tailed off to close at 12,870.30, a drop of 2.63%. The S&P 500 Index fell 3.14% and intraday it made its lowest close since November 2009. The Nasdaq Composite dropped 3.85%. Ominously, volume rose dramatically on the indexes...don’t forget, price tends to follow volume.

Anything short was a winner today. IXN, the 3x leveraged China Bear ETF, soared 14.99%. BND, the short Muni Bond ETF, climbed 10.56% to close above its 50 and 200-day SMAs on heavy volume – had its A/DX been slightly lower it would have made a Popcredible. FAS, the 3x leveraged short Financials ETF, tacked on 10.06%. DIT, the leveraged short Mid Europe ETF, gained 8.05% – it too would have made a Popcredible had its A/DX been a little lower. Please click on the symbols for details.

6.30.10 – I’ve Fallen And I Can’t Get Up
Posted on June 30, 2010 by Dave

Remember that old TV commercial? That was my thought watching the market action today as strong pre-opening indications gave way to sideways action most of the day after the employment numbers came out, followed by a “get the heck outta Dodge!” reaction in the final hour. Moody’s Investors Service’s warning that it may downgrade Spain certainly didn’t help matters, either.

The Dow Industrials ended up losing 96 points to close at 12,774.02. The S&P 500 Index posted its first quarterly loss in over a year with a decline today of 1.61%. The Nasdaq Composite fell 1.24%.

Despite the last-hour sell-off there weren’t any out-sized gains in any ETFs. The falling stock market once again boosted treasuries and hurt financial stocks, as evidenced by FAZ, the 3x leveraged short Financials ETF, climbing 3.57%. Real Estate, the 3x leveraged Real Estate bear ETF, added 3.44%. QID, the leveraged short S&P 500 Index, rose 3.14% and closed above its 200-day SMA for the first time since March 23, 2009. QID was above its
7.16.10 – Would You Like To Play A Game?

No thank you, WOPR. The market is exciting enough for me.

The market sold off in a major way today with the Dow Industrials losing 261 point to close at 10,097.90. Volume was the heaviest it’s been all week. The pullback was approximately a 38.2% retracement of the rise between the June 21st low and this week’s high.

The S&P 500 Index lost 2.88% and the Nasdaq Composite fell 3.11%. Volume on the Naz was also up but still below its 50-day average volume. Options expiration and weaker-than-estimated revenues at giants like GE and Bank of America stoked fears (again) that the economic rebound is slowing.

Any short ETF that is equity related was a big winner today. Financials were hit hard and FAZ, the 3x levered short financial ETF, skyrocketed up 12.13%. It is still trading below its 200-day SMA, however. TWN, the levered short Russell 2000 ETF, soared 7.38%. SMH, the levered short Msci Mexico ETF, gained 6.58%. Over the past few days I’ve discussed
Conclusion

- PZO and the VZO reveal two important aspects in the market: price and volume.
- The oscillators also aid in analyzing and defining strengths or weaknesses within the current trend.
- Divergences can anticipate important turning points in the trend.
- When volume starts lagging behind price and ADX begins to weaken, a VZO/PZO bearish divergence can give traders advance warning about upcoming non-trending price action.
- When ADX begins rising and volume again leads price, the VZO/PZO bullish divergence enables traders to enter trades earlier and position themselves either for a resumption of the trend or the initiation of a new trend.