ANCHORED VWAP
THE PERFECT COMBINATION OF PRICE, VOLUME, & TIME

Brian Shannon
Alphatrends.net
Do you use VWAP as an analysis tool?

<table>
<thead>
<tr>
<th>Filter</th>
<th>Code</th>
<th>Description</th>
<th>% of Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>$</td>
<td>Price</td>
<td>Price</td>
<td>78.3%</td>
</tr>
<tr>
<td>TV</td>
<td>Volume Today</td>
<td>Volume Today</td>
<td>43.7%</td>
</tr>
<tr>
<td>RV</td>
<td>Relative Volume</td>
<td>Relative Volume</td>
<td>37.5%</td>
</tr>
<tr>
<td>C%</td>
<td>FCP</td>
<td>Change from the Close</td>
<td>24.0%</td>
</tr>
<tr>
<td>Vol1</td>
<td>Volume 1 Minute</td>
<td>Volume 1 Minute</td>
<td>18.4%</td>
</tr>
<tr>
<td>Vol</td>
<td>Average Daily Volume (10D)</td>
<td>Average Daily Volume (10D)</td>
<td>17.4%</td>
</tr>
<tr>
<td>Vol5D</td>
<td>Average Daily Volume (5D)</td>
<td>Average Daily Volume (5D)</td>
<td>16.2%</td>
</tr>
<tr>
<td>Vol5</td>
<td>Volume 5 Minute</td>
<td>Volume 5 Minute</td>
<td>15.0%</td>
</tr>
<tr>
<td>Float</td>
<td>Float</td>
<td>Float</td>
<td>14.2%</td>
</tr>
<tr>
<td>VolBM</td>
<td>Average Daily Volume (3M)</td>
<td>Average Daily Volume (3M)</td>
<td>12.1%</td>
</tr>
<tr>
<td>VWAP</td>
<td>VWAP</td>
<td>Distance from VWAP</td>
<td>6.4%</td>
</tr>
</tbody>
</table>

Brian Shannon, CMT @alphatrends - 21h
Do you use VWAP as an analysis tool?

51% Yes
49% No

736 votes • 2 hours left
CHASE THE GAP, OR WAIT FOR VWAP?
WHAT WE WILL COVER?

● Explain Volume Weighted Average Price (VWAP)
● *Explain Alphatrends Anchored Volume Weighted Average Price (AVWAP)*
● Investor Behavior/ Anchoring Bias
● Anchored VWAP from:
  ○ Key Dates and Swing Levels
  ○ Gaps
  ○ Intraday
  ○ Year to Date (YTD)
  ○ Initial Public Offerings (IPO)
Understanding Moving Averages

- **Simple** - Most commonly used, each period being averaged receives same weighting. **TIME** weighted.

- **Exponential** - Calculated by applying percentage of today’s closing price to yesterday’s MA value. Places more weight on recent prices. **TIME** weighted.

- **Volume Weighted** - Total dollars traded divided by the total shared for the period studied. **Dollar Average**
Volume Weighted Average Price (VWAP) Calculation

Average price per share traded during the time studied

<table>
<thead>
<tr>
<th>Price</th>
<th>Shares</th>
<th>$Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>20.05</td>
<td>6,000</td>
<td>120,300</td>
</tr>
<tr>
<td>20.15</td>
<td>2,500</td>
<td>50,375</td>
</tr>
<tr>
<td>20.20</td>
<td>1,500</td>
<td>30,300</td>
</tr>
<tr>
<td>20.65</td>
<td>1,000</td>
<td>20,650</td>
</tr>
<tr>
<td>20.26 avg</td>
<td>11,000</td>
<td>221,625</td>
</tr>
</tbody>
</table>

VWAP = \frac{221,625}{11,000} = 20.14
Anchored VWAP is the perfect combination of Price, Volume and Time

- **Price** is how we keep score, it is at the end of the day, that only thing that really matters in trading & investing.

- **Volume** allows us to gauge the emotional level of commitment to price movement.

- **Time** is a relative study, which is highly subjective.

- **Anchor** point determination is more of the ‘art’ than the science of trading.
Understand Investor Behavior
The Anchoring Bias

Cognitive biases refer to tendencies to think and act in certain ways.

<table>
<thead>
<tr>
<th>Bias</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anchoring</td>
<td>The tendency to be over-influenced by the earliest information presented to us when making decisions, thus allowing oneself to be driven to a decision or conclusion that is biased towards that initial piece of information (the “anchor”)</td>
</tr>
</tbody>
</table>

“*A person begins with a first approximation (anchor) and then makes incremental adjustments based on additional information.*” ~Daniel Kahneman

Price has memory
Volume Weighted Average Price (VWAP)

- Institutional Benchmark
- Basis For Algorithmic Trades
- Balance of Power Determination, who has control?
  Great reference point “since the event”
- Can Be Used On Any Timeframe
- Represented as Moving Average
- Acts as “Hidden” Support and Resistance
- Another Critical Piece of a Very Complicated Puzzle
- More responsive to volume than price
TIME ANCHOR

Moving Average Psychology

Why do moving averages tend to offer support in up trends and resistance in down trends?

“Self-fulfilling” Nature

In uptrend- Pullbacks to a rising 50 DMA

• Sellers slow as price approaches 50 DMA
• Shorts start to cover near rising 50 DMA
• Sidelined cash starts to purchase
This is a simple picture of MORE DEMAND & LESS SUPPLY

In down trend- Rallies to a declining 50 DMA

• Buyers slow down in anticipation of resistance
• Sellers more active as resistance is expected
• Shorts offer supply at expected resistance
This is a simple picture of MORE SUPPLY & LESS DEMAND
Intraday (One Day) **BULLISH VWAP**

Anchored to beginning of the day.

Notice how responsive the AVWAP is earlier in the day.

Buyers are in control while the stock is above the advancing VWAP

Selloffs likely to find buyers while VWAP is rising
Intraday (One Day) BEARISH VWAP

Anchored to beginning of the day.

Notice how responsive the AVWAP is earlier in the day.

Sellers are in control while the stock is below the declining VWAP.

Rally attempts likely to fail while VWAP is declining.
Anchored VWAP “From an Event”

Anchor from key swing levels and dates (YTD)
Anchored VWAP “From an Event”

A VWAP from a significant event often act as “hidden” support and resistance levels.
Intraday Analysis Shows Emerging In IBB And Then Support Failure
YTD VWAP Can Reveal Important Levels of Support & Resistance

Resistance at VWAP
Right now the Qs seem to be finding resistance at the daily Volume Weighted Average Price (VWAP) which can be loosely interpreted as the sellers have control of the session as the average price Qs have traded at is higher than current levels.
The More Times The VWAP is Tested, The More Likely it is to Fail
The More Times The VWAP is Tested, The More Likely it is to Fail
VWAP allows a clear view of where buyers regained and maintained control of the trend in BABA.
VWAP From The IPO

DOCU 195 Min 10/18/18
2 equal candles/day
VWAP From The IPO

BE 130 Min Timeframe
3 equal candles/day
10/18/18

VWAP high

Where does YOUR stop go? What is YOUR timeframe, risk tolerance?

VWAP shakeout

Good short setting up?

VWAP IPO

30 20 10 0 10 20 30
Aug 2018 Sep 2018 Oct 2018
VWAP 2 Timeframes Noble Corp (NE)
Dominant Moving Average (VWAP)

- A rising VWAP indicates positive price action
- A declining VWAP indicates negative price action
- Rallies with a declining VWAP are treated as bounces which are likely to fail
- Be more aware of the direction of the VWAP than whether it closes above or below it for a session or two
- Like any support or resistance level, the more times they are tested, the more likely they are to fail
What Have We Learned?

Volume Weighted Average Price can be useful for market participants of all timeframes.

VWAP is a quick & easy way to visualize who is in control, buyers or sellers.

Trading in the direction of VWAP will keep you on the right side of the trend.

VWAP “From the Event” helps us understand the emotional disposition of participants.

Breakouts / Breakdowns
Federal REserve Announcements
FDA Reports
Where short sellers will feel pain
Open of trading day
Earnings
Year to date
Gaps
Any significant event you can imagine, have fun and profit with it!
Thank You for Attending!

Follow Brian on Twitter @alphatrends for VWAP insights and more!

Technical Analysis Using Multiple Timeframes Book by Brian Shannon is available exclusively on Amazon.com