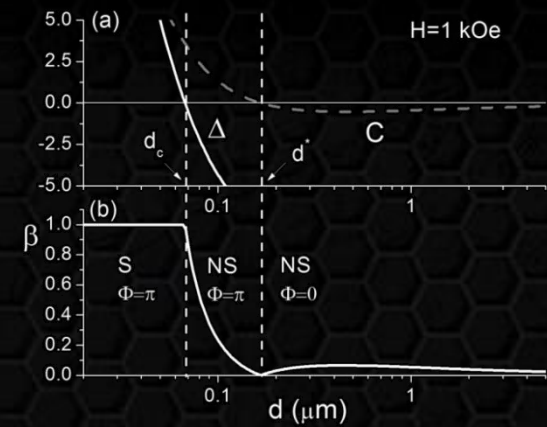




Waverly
Advisors



Trading Market Cycles

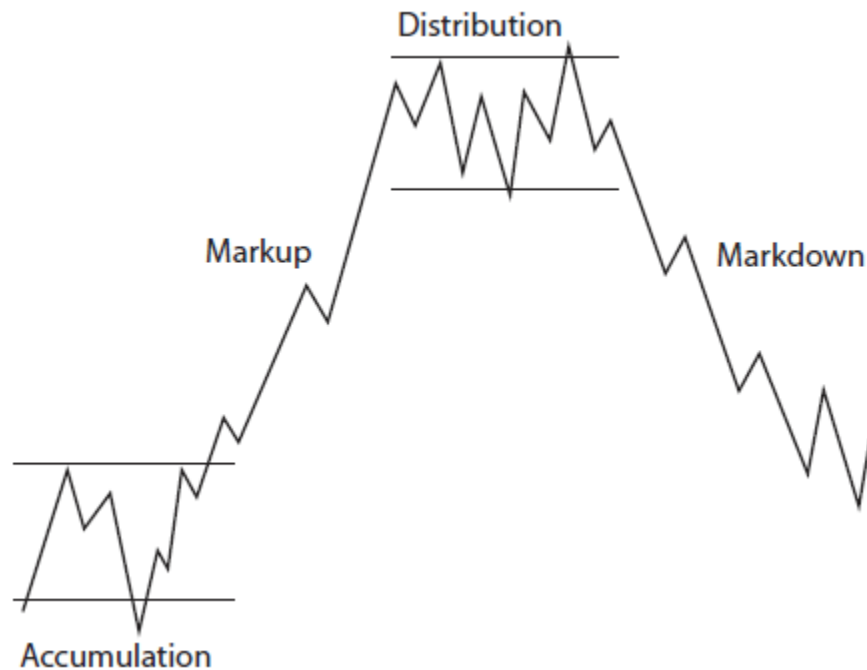
January 13, 2014

Market Cycles

- The Wyckoff Cycle
- Behavioral and Psychological Cycles
- Cycles in prices
- Cycles in volatility
- Cycles in equilibrium/disequilibrium



The Wyckoff Cycle



The Wyckoff Cycle

- Accumulation
 - Smart money buys without lifting prices
 - Look for possible failure tests below support
- Uptrend
 - At some point, the public catches on and buys
 - Smart money sells to the public
 - There are common structures in trends
- Distribution
 - Trend ends and smart money finishes selling
 - Public still optimistic
 - Look for failure tests above resistance
- Downtrend
 - Public still behind the curve, but eventually they panic
 - And that panic ends the trend



Applying the Wyckoff Cycle

- Not always possible to tell accumulation from distribution.
- The cycle is a highly simplified market model.
 - Reality is much more complicated.
 - Anything can happen at any time.
 - If there is an underlying structure, it is often hidden behind random noise.
 - Difficult to tell where Acc/Dist end
 - Accumulation does not always lead to uptrend, etc.
- Very difficult to find idealized examples in real market data, so it has limited utility as a trading structure.
- What can the cycle teach us, then?



Lessons of the Wyckoff Cycle

- Price movements are driven by interaction of supply and demand.
- Evaluating price action can give insights into the balance of supply and demand.
- It is useful to think of the market in simplified groups of participants, their actions, and effects on prices.
 - Insiders (smart money)
 - Public (emotional?)
- There is a psychological aspect to market structure.
- Markets alternate between trends and trading ranges



Behavioral Cycles



Psychological Aspects

- Price movements are interpreted through the filter of human experience and emotion.
- Human behavior is more predictable in aggregate (crowds) than individuals.
- The market has evolved to encourage individuals to do the wrong things at the wrong time.
- Psychological dynamics alternate between extremes of fear and greed.
- Market moves are often driven by trapped market participants.
 - You can be trapped out of a move as effectively as in.
 - Panic and fear of missing a move can be real motivators.
- People have made the same mistakes for a long time.
- Crowd psychology can reach extremes.

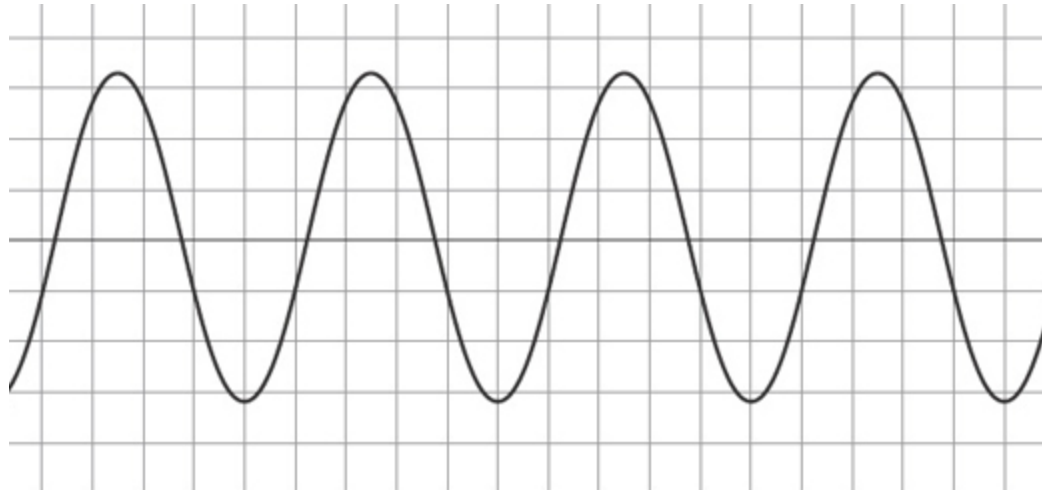


“Risk On / Risk Off”

- Theory that says price movements are driven by investors’ risk tolerance.
- During periods of risk on, investors seek “risky” assets. Money flows to “safe” assets during risk off.
- A methodology that works well to explain price movements after the fact, but harder to apply in real time.
- Probably most useful when looking at global markets across multiple asset classes.



Price Cycles



Price Cycles

- Can find with complex signal processing tools.
- Can also find by counting periods between highs and lows on charts.
- Cycles can be ephemeral. They shift, abort into trends, change periods, etc.
- Just because you can see it, don't assume you could have traded it.
- Consider the dampening effect of natural buying and selling on a visible cycle.
- Market dynamics will work to erode simple cycles.



Volatility Cycles

- What is volatility?
 - Measure of uncertainty
 - Used as a measure of risk, but...
 - “How prices move around”
 - Can be traded via options and other derivatives
- How to measure it?
 - Relationship of price movement to time
 - Implied volatility: reflection of supply/demand in options.
 - Historical (realized) volatility: usually calculated as the standard deviation of returns.
 - Range-based methods: averages of the range covered during a fixed time period.



Volatility Cycles

- There are more predictable cycles in volatility than in price.
- Volatility tends to be mean-reverting in the short-term (i.e., comes back to an average price) and to show some trending behavior in the long-term.
- There exists no mechanism to dampen swings and cycles in volatility as there does in prices.



Volatility Cycles

- Volatility clustering
 - Volatile moments in markets tend to be followed by other volatile moments.
 - Think of the effect of rocks randomly thrown into a pond. Splash and decay.
 - This is modeled quantitatively via models (EGARCH, etc.) that assume random price shocks that decay over time.
- Volatility contraction
 - Leads to a period with strong directional tendencies.
- Volatility expansion
 - Naturally follows contraction (mean-reverting?)
 - Can reach extremes and climaxes



Volatility Clustering



Volatility Cycles (10 day ATR)



Volatility Contraction on Charts



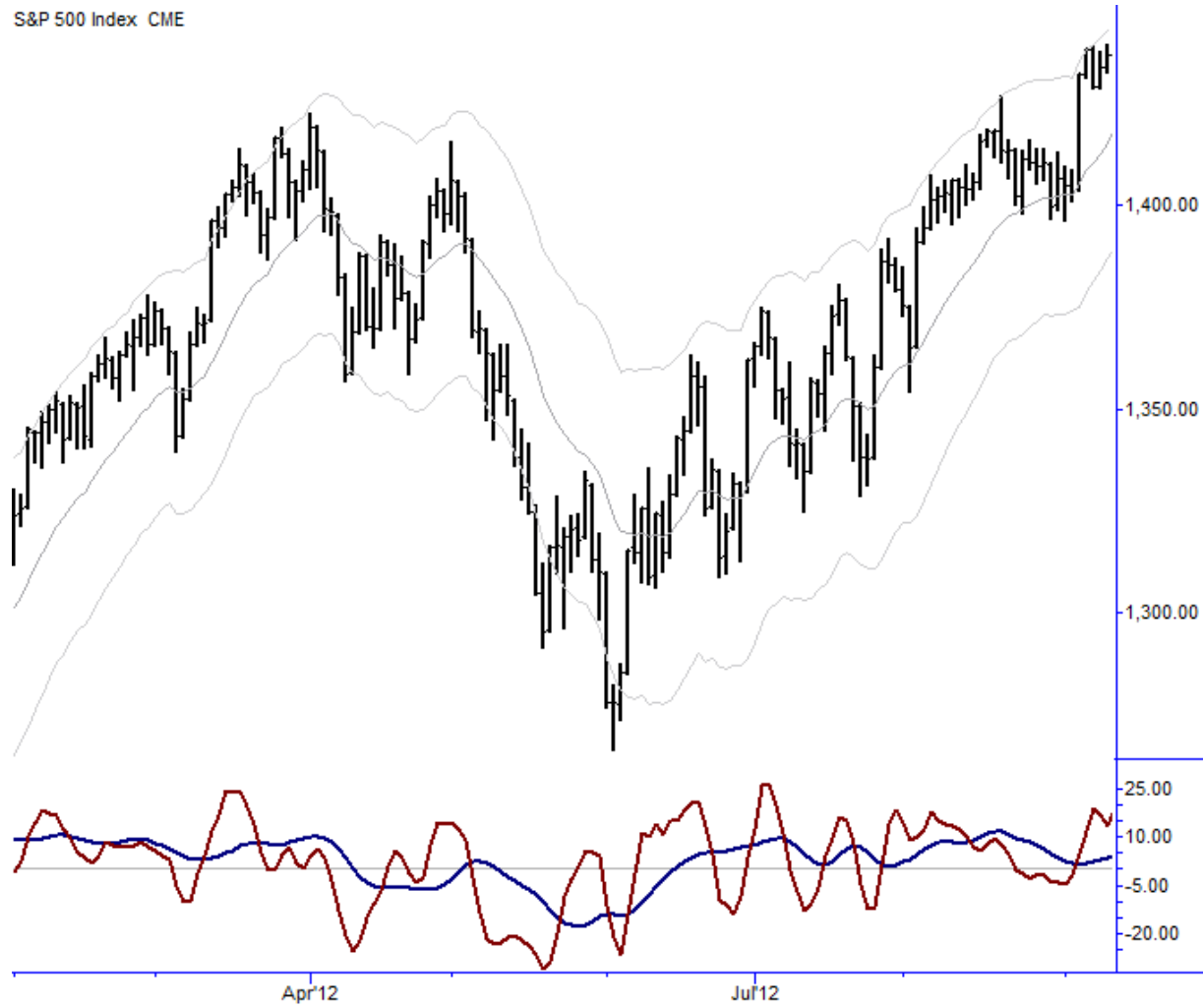
The Cycle that Matters Most

- Markets alternate between periods of trend and trading range.
- Trends
 - Directional movement
 - Driven by supply/demand imbalance
 - Disagreement
 - Volatility expansion
 - Basic structure: ABC
- Ranges
 - Sideways movement
 - Suggests equilibrium
 - Agreement
 - Volatility contraction
 - Basic structure: support/resistance holding

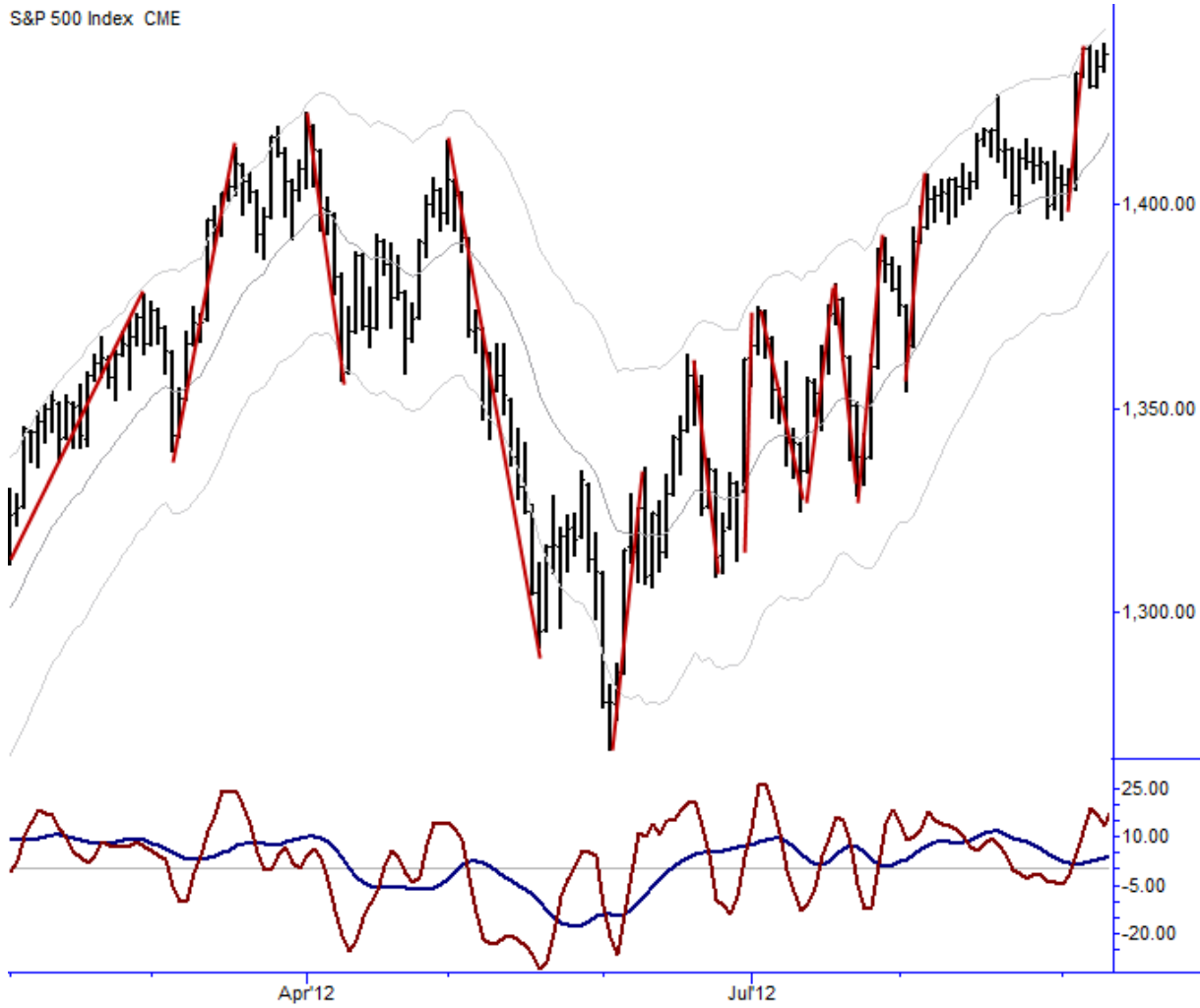


Trend / Trading Range

S&P 500 Index CME

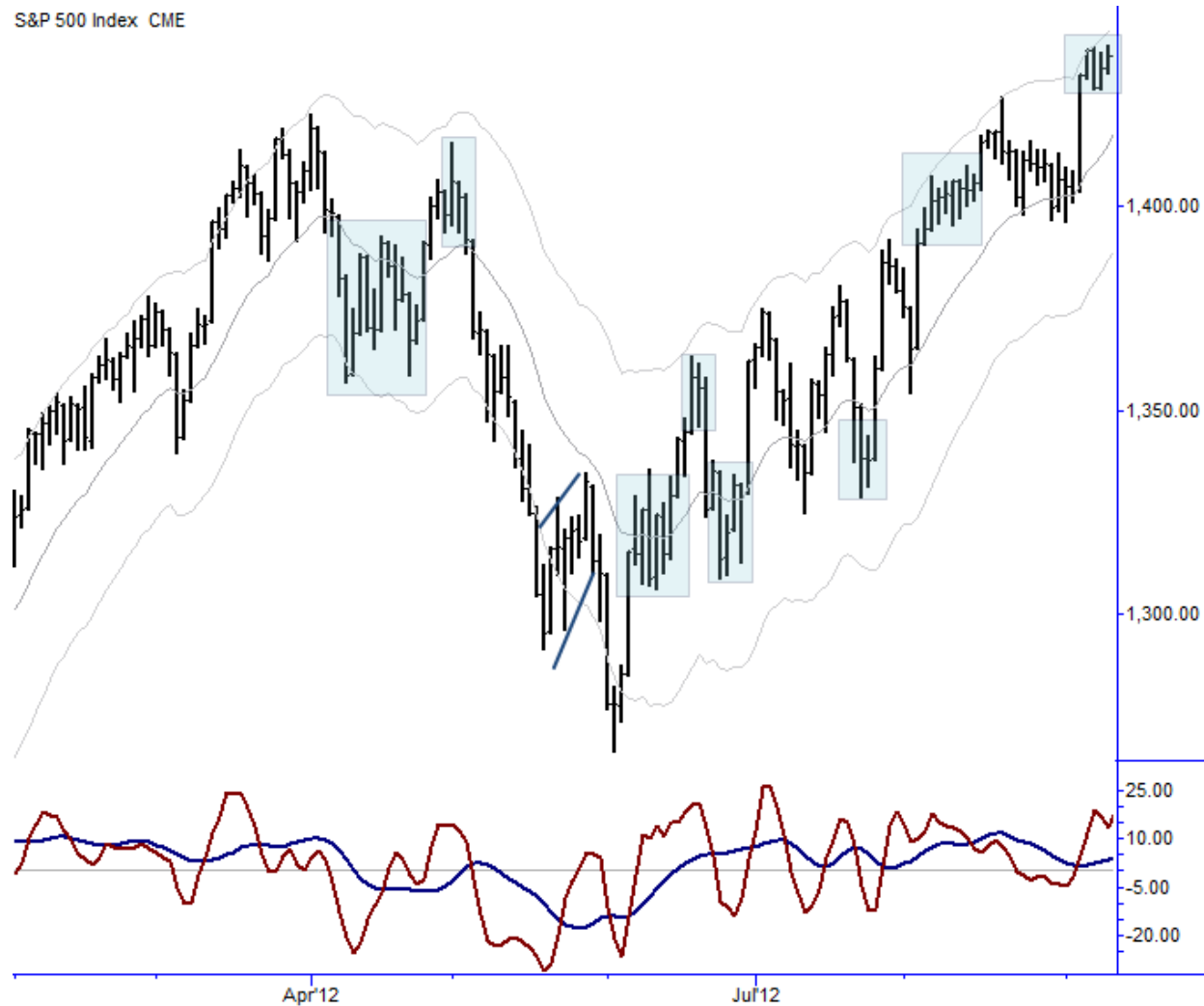


Trend



Trading Range

S&P 500 Index CME



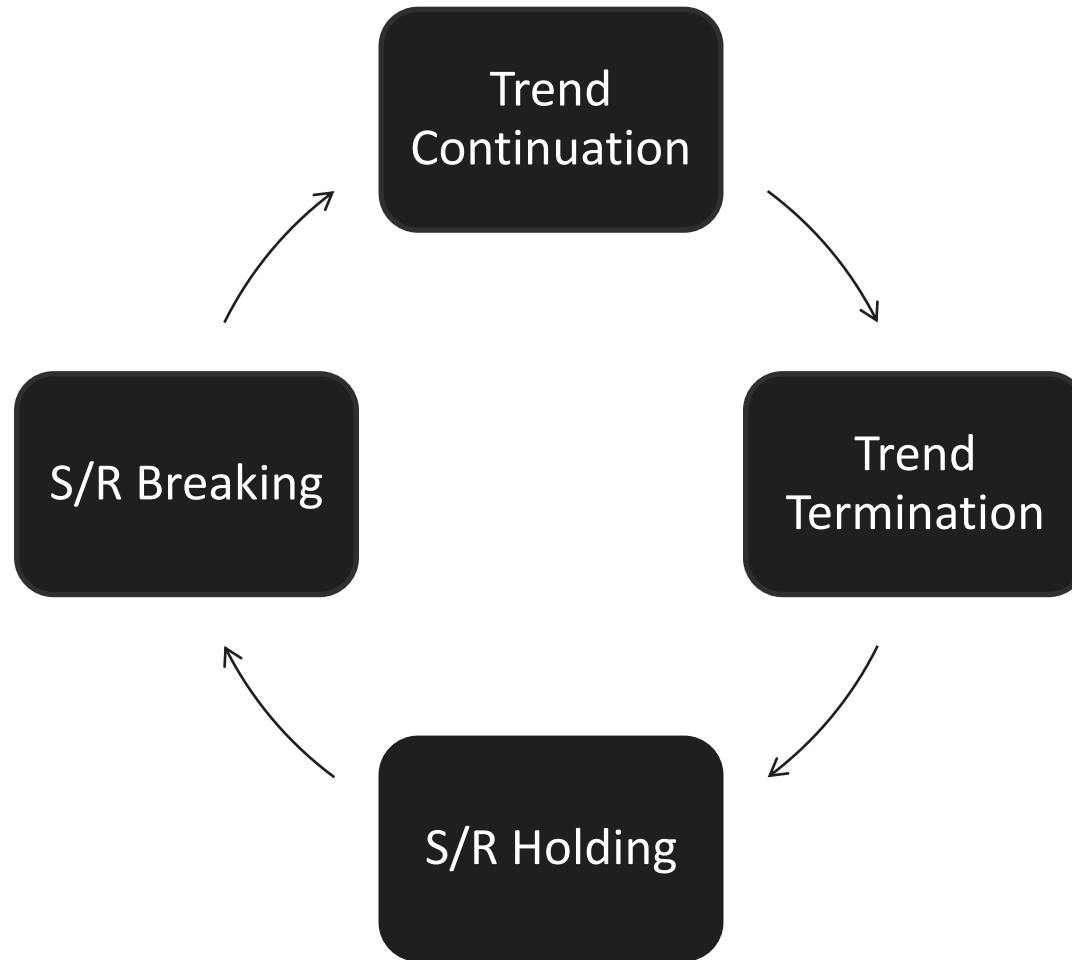
The Four Trade Types:

Trading the Cycle

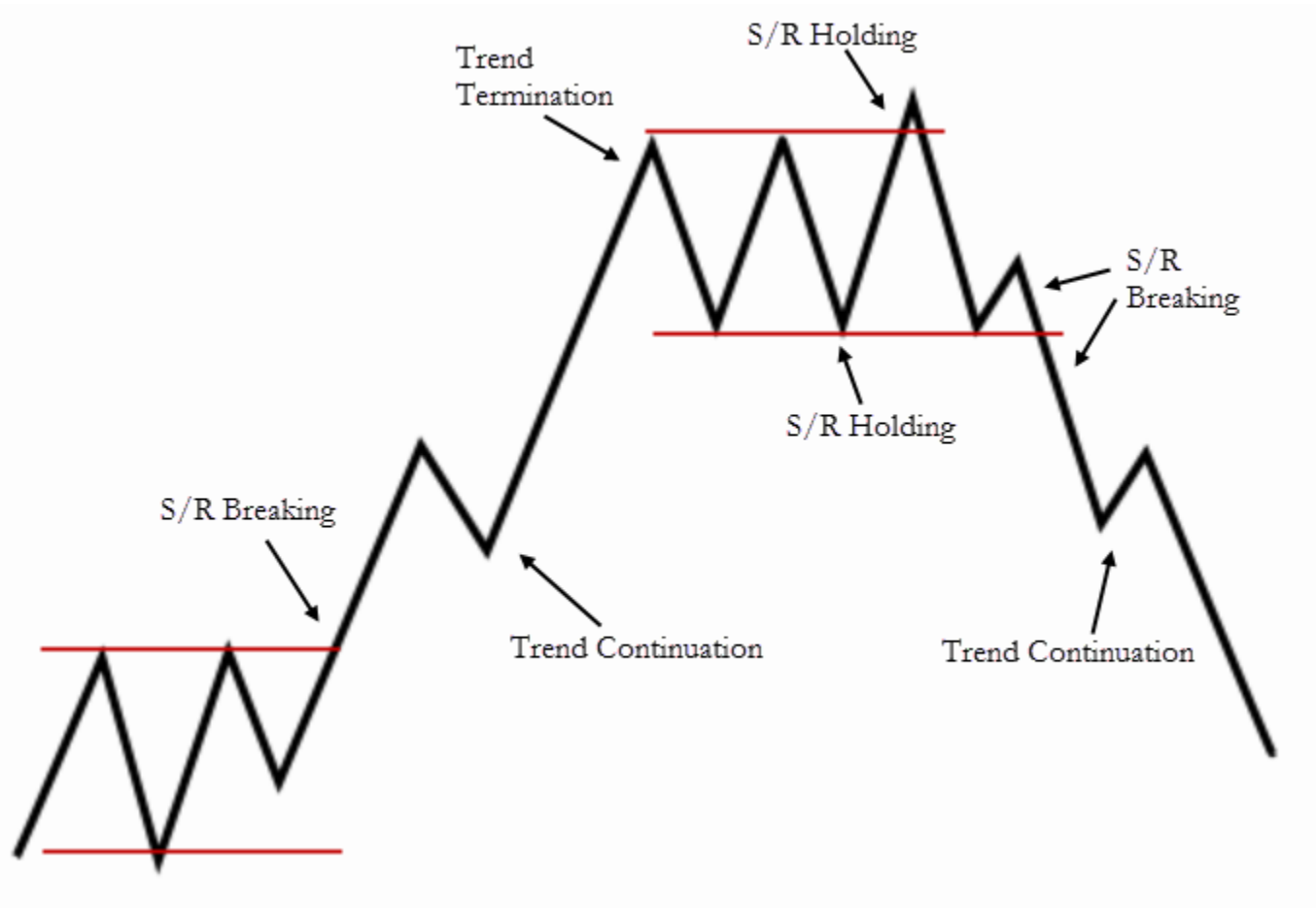
- **Trend Continuation**
 - Identify a trend and look to position with the trend
- **Trend Termination**
 - Identify a trend that may be ending and look to take a position against the trend
- **Support/Resistance Breaking**
 - Identify a range and look to trade breaks of the confines of the range
- **Support/Resistance Holding**
 - Identify a range and look to trade tests of the confines of the range



Trading the Cycle



Trading the Cycle



Review

- The Wyckoff Cycle
- Behavioral and Psychological Cycles
- Cycles in prices and volatility
- Trend/Trading Range


- The Four Trade Types
 - Trend Continuation
 - Trend Termination
 - S/R Holding
 - S/R Breaking



Waverly Advisors' Research

- Tactical commentary highlighting potential extremes.
- Specific trade entries in climaxes.
- Using climaxes as a filter to avoid lower-probability with-trend trades.
- Specific stock screens published daily:
 - Consecutive closes
 - Extremes
 - Big Movers
 - Historical Big Movers (published weekly)



 WILEY Trading

MARKET STRUCTURE,
PRICE ACTION, AND
TRADING STRATEGIES

THE
ART AND SCIENCE OF
TECHNICAL
ANALYSIS

ADAM GRIMES



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Waverly Advisors, LLC:

Research Products

Tactical Playbook – Available on Interactive Brokers

- Written for the active trader on the daily/weekly timeframes
- Exact trade recommendations
 - Hybrid systematic-discretionary methodology
- In-depth technical “drill down” into a set of markets.
- Bigger-picture overview of all liquid asset classes.

Tactical Portfolio Outlook– Available on Interactive Brokers

- Written for the longer-term manager
 - Addresses both the allocator and the longer-term active trader.
- Emphasis on executing with ETFs in a long-only and long-short environment
- Focus on Equities, Equity Sectors, and other asset classes
- Macro perspective on risk factors and major economic events.

Options Market Outlook – Contact Waverly Directly

- Proprietary, quantitative analysis of options market
- Incorporates both volatility and directional analysis
- Macro risk factors and cross-asset perspective
- Actionable trade ideas



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