Research Note – Sector – ETF Analysis (D)- STRATEGY & PROP Analysis (SP)

_____

Sector Analysis (D) - (SP)-

Contents for coverage within D # –SP

- **Attached, the Chart list & specific Charts (below).** *We have selected charts that has some distinct characteristics*:

- **CZ – PQV, PEC-D, Patterns & Oscillator Analysis for ETF's**
- **ETF's Qualified for > +/- 2 SD or Special Situation**
- *Selected charts that has some distinct characteristics*:
    1. */ PATTERN/ OSCILLATOR Analysis*
    2. *Confluence (CZ) & Price / Volume Analysis*
    3. *Poly Trend Analysis (If Applicable)*
    4. *Correlation Ratio Analysis v/s SPX*
    5. *PEC Analysis. (If Applicable)*
    6. *Sentiments Analysis Mathematical & behavior (if Extreme character)*

40- INDICES SUMMARY - <mark>Highlighted below are SD # +/- 2 & CZ –PQV Qualified –</mark>

- **Detail Coverage for sectors with extremes <u>SD # +/- 2.0</u> or Special situation (SP) , highlighted in yellow**
- **For Commodity based ETF's the Extremes <u>SD # +/- 2.0</u> should be qualified v/s both CRB and SPX**

GR1 (16) <mark>Coverage in A #1, A# 2 (B, G) MS</mark>	GR2 (14) <mark>Coverage in D # SECTOR</mark>	GR3 (10) <mark>Coverage in C # COMMODITY</mark>
US BROADER IDX (A # 2B) • SPY (SPX 500) • DIA (DOW 30 • QQQQ (NASD100) • IWM (Small Cap) • IYT (Transports) • NYA (NYSE) **BOND IDX (A # 2B)** • TLT (Bonds) • MUB (Muni). • JNK (Junk) **GLOBAL IDX (A # 2G)** • EEM (Emerg.) • EZU (Europe) • EWH (HK) • EWA (Aust) • EWJ (Japan) • FXI (China) • EWZ (Brazil) • IFN (India)	**SECTORS IDX (D #)** • RTH (Retail) - • <mark>XLF (Financials)</mark> • <mark>XLV (Health)</mark> • <mark>XLB (Materials)</mark> • <mark>XLE (Energy)</mark> • XLK (Tech) / QQQ - Proxy • XLI (Industrial) – • <mark>XLU (Utility)</mark> • <mark>XLP (Staples)</mark> • <mark>XLY (Discretionary)</mark> • <mark>XHB (Home Builders) -SP</mark> • SMH (Sem.) • BBH (Biotech) • IYR (Real Estate) **Highlighted above are covered in Today's Report** <mark>**SP- Special Situation**</mark>	**COMMODITY IDX (C #)** • DBC (Commodity) • GLD (Gold) • SLV (Silver) • GDX (Miners) • USO (Oil) • JJC (Copper • DBA (Agro) • DBB (Base metal) • UNG (Natural Gas)

<u>Index</u>

• *Executive Summary.*

SPX/ SECTOR IDX -

During recent correction , Our Sector participation has been in weaker "SECTOR IDX's " for <u>NET SHORT Position</u> (<u>POM 15 -1400 to 1350 = 50 point drop</u>) on first leg down and <u>Fully Hedge / or Raised Cash position (POM 14 – 1350 to 1300 = 50 point drop)</u> on 2nd leg down.

<u>CURRENT STATUS - On 5/23 – E- ALERT Announced for POM 13 – Triggered in CZ 1290-1310) for NET LONG , thereby in anticipation of bounce, reducing the HEDGES put in in Early Jan / Feb for breakeven.</u>

Since this Trigger, SPX has rallied 25 points approaching towards our <u>CZ 1345-1355</u> , where it probably shall fail on UPSIDE.(BUT <u>No trigger yet</u>).

On DOWSIDE, although earlier the Price projection to <u>CZ 1260 -1240</u> came very close to meeting it did not finish the full projections. There is certainly Re test work to be done on PQV Validation basis <u>at 1260 area (Heavy bottom)</u> . Only upon successful test rallies tends to sustain longer by our process.

*<u>**IMPACT OF SPX on Sector IDX**</u> - Majority of the SECTOR IDX's reached its individual CZ Price Projections in this correction Target (indicated in previous messages) and reversed to upside at the time SPX Triggered POM 13 on 5/25 at <u>CZ 1290-1310.</u> Accordingly SECTOR Bounces began .*

STATUS -

Below is the summary textures in SECTOR IDX's.

We have evaluated "the strength and weakness" of these Sectors via Top Heavy / Bottom Heavy CZ / PQV Analysis , ABCD Trend & Pattern , Ratio Analysis, VTO structure qualifying it as Bullish Top , Neutral Top , Bearish Top & Price Projections individually.

- *STRONG SECTORS – SETUPs with*
- *BOTTOM NEUTRALIZED @ POM 13 – CZ & BULLISH TOP (@ POM 15 - CZ*

XLV. XLP,XLU, During correction, the Pull back came into price target on downside as expected in BULLISH Manner & bounce began with volume picking up which is positive . Please be noted Bullish Top at POM 15 area is still in place. Such

Conclusion – These IDX should be accumulated on next pull back We had advised to accumulate these Markets on pull back at POM 13 area for next leg up .These are NOT candidates for Short Sell.

- *WEAKER SECTORS- SETUPs with*
- *BOTTOM HEAVY @ POM 13- CZ & BEARISH TOP (@POM 15 - CZ)*

 XLY, XLE, XLB, XLF

During correction, the Pull back came into our CZ price target & bit extended downside in BEARISH Manner (Heavy bottom) & bounce began with volume declining which is negative. Please be noted, these Sectors have BEARISH Top at POM 15 area which is still in place.

Conclusion -   The upside on this bounce should taper once SPX tops out at CZ 1345-1355 . These markets should be lightened up at those area for decline back to retest of lows (into Heavy bottom CZ – indicated in each individual charts below).

Summary of Market calls – past 6 weeks

After Flat Market during the Distribution phase in FEB, MARCH & APRIL, The Market down phase appeared in APRIL / MAY

For full disclosure we must admit we were not able to take advantage on our own calls on WTIC (OIL) at 106 Trigger to 88 , AUD & some other Individual commodities in spite of correct PRICE projections however were able to benefit from following

- **LONG USD** *- 78 to 83 (OPEN)*
- **SHORT EURO** *– 1.33 to 1.26 (CLOSED)*
- **LONG TLT (BONDS)** *- 111 to 125 (HEDGED)*
- **LONG GOLD** *– POM 13 – 1540 & GDX 41 to 46 (OPEN) - (Also by missed entire decline from GOLD 1775 to 1580)*
- **NET SHORT SP**X *- 1400 to 1350 via (weaker guys - **IWM, EFA, CRB, XLB, XLE** – these declined 2x times more) – (CLOSED)*
- **FULLY HEDGED SPX -** *1350 to 1300 protected during decline (CLOSED at BREAKEVEN)*
- **CURRENTLY NET LONG** *– POM 13 since CZ 1290-1310.to 1325 (OPEN) but looking for re test of lows after the bounce.*

Its been great 6 weeks in very volatile Markets. Staying on Top of the Price path / CZ's was safer way to Navigate the Risk.

Point to note – This is 4th year in a row (since 2009) , after Flat lining& Managing Risks for Q-1 with slow start , the Q-2 has worked out well .. Past 4 yrs Q-3 / Q4 has worked out well as well. We shall see how Q-3, Q4 works out

Trading & Invest Conclusions - Price / CZ Projection Summary

D # Sector Report 9-Jun	STATUS	CZ - Trigger start point Confluence Zone	Target Finish point	Comments
SPX				
SHORT-TERM - POM 13	NEUTRAL	1290-1310	1345-1356	Bounce in Progress
MID -TERM	BULLISH	1260-1240	TBA	
XLV (HLT)				
SHORT-TERM	NEUTRAL	35.75-34.75	at SPX 1350	Rally in progress
MID-TERM	BULLISH			
XLP (Staples)				
SHORT-TERM	NEUTRAL	33.25-32.25	at SPX 1350	Rally in progress
MID-TERM	BULLISH			
XLF (Financial)				
SHORT-TERM	BEARISH	13.50-13.0	14.75-14.25	Bounce in Progress
MID-TERM	NEUTRAL			
XHB (Home Builders)				
SHORT-TERM	NEUTRAL	20-19	at SPX 1350	Bounce in Progress
MID-TERM	BULLISH			
XLE (Energy)				
SHORT-TERM	BEARISH	61-63	67-66	Bounce in Progress
MID-TERM	NEUTRAL			
XLI (Inustrial)				
SHORT-TERM	BEARISH	34.5-33.5	TBA	Bounce in Progress
MID-TERM	NEUTRAL			
XLB (Meterials)				
SHORT-TERM	BEARISH	34-33	at SPX 1350	Bounce in Progress
MID-TERM	NEUTRAL			

CHART ANALYSIS - Sectors v/s SPX

- *YTD – Sectors Relative performance v/s SPX - Chart Analysis.*
- *XLY/ XLP Ratio Analysis (Risk On v/s Risk off – Defensive) v/s SPX*

SPECIAL SITUATION

XLV - Chart Analysis
- *XLV - MA, Pattern Trend & Oscillator Analysis*
- *XLV – CZ – Price & Volume- Analysis*
- *XLV - CORRELATION RATIO Analysis with SPX*

XLP - Chart Analysis

- *XLP - MA, Pattern Trend & Oscillator Analysis*
- *XLP – CZ – Price & Volume- Analysis*
- *XLP - CORRELATION RATIO Analysis with SPX*

XLU - Chart Analysis

- *XLU - MA, Pattern Trend & Oscillator Analysis*
- *XLU – CZ – Price & Volume- Analysis*
- *XLU - CORRELATION RATIO Analysis with SPX*

XLB - Chart Analysis -

- *XLB - MA, Pattern Trend & Oscillator Analysis*
- *XLB – CZ – Price & Volume- Analysis*
- *XLB - CORRELATION RATIO Analysis with SPX*

XLE - Chart Analysis

- *XLE - MA, Pattern Trend & Oscillator Analysis*
- *XLE – CZ – Price & Volume- Analysis*
- *XLE - CORRELATION RATIO Analysis with SPX*

XLF - Chart Analysis

- *XLF - MA, Pattern Trend & Oscillator Analysis*
- *XLF – CZ – Price & Volume- Analysis*
- *XLF - CORRELATION RATIO Analysis with SPX*

## XHB - Chart Analysis

- *XHB - MA, Pattern Trend & Oscillator Analysis*
- *XHB – CZ – Price & Volume- Analysis*
- *XHB - CORRELATION RATIO Analysis with SPX*

YTD - SECTOR (SD extremes / Defensive IDX) performance v/s SPX

For Pair – Weakest and strongest Indices -

Since is beginning of the year 2012 , it is very critical to keep close eye on this chart for Strength / weakness pick up in these market . (Chart below is our Inter Sector Analysis Model with Ratio Relative performance v/s SPX)
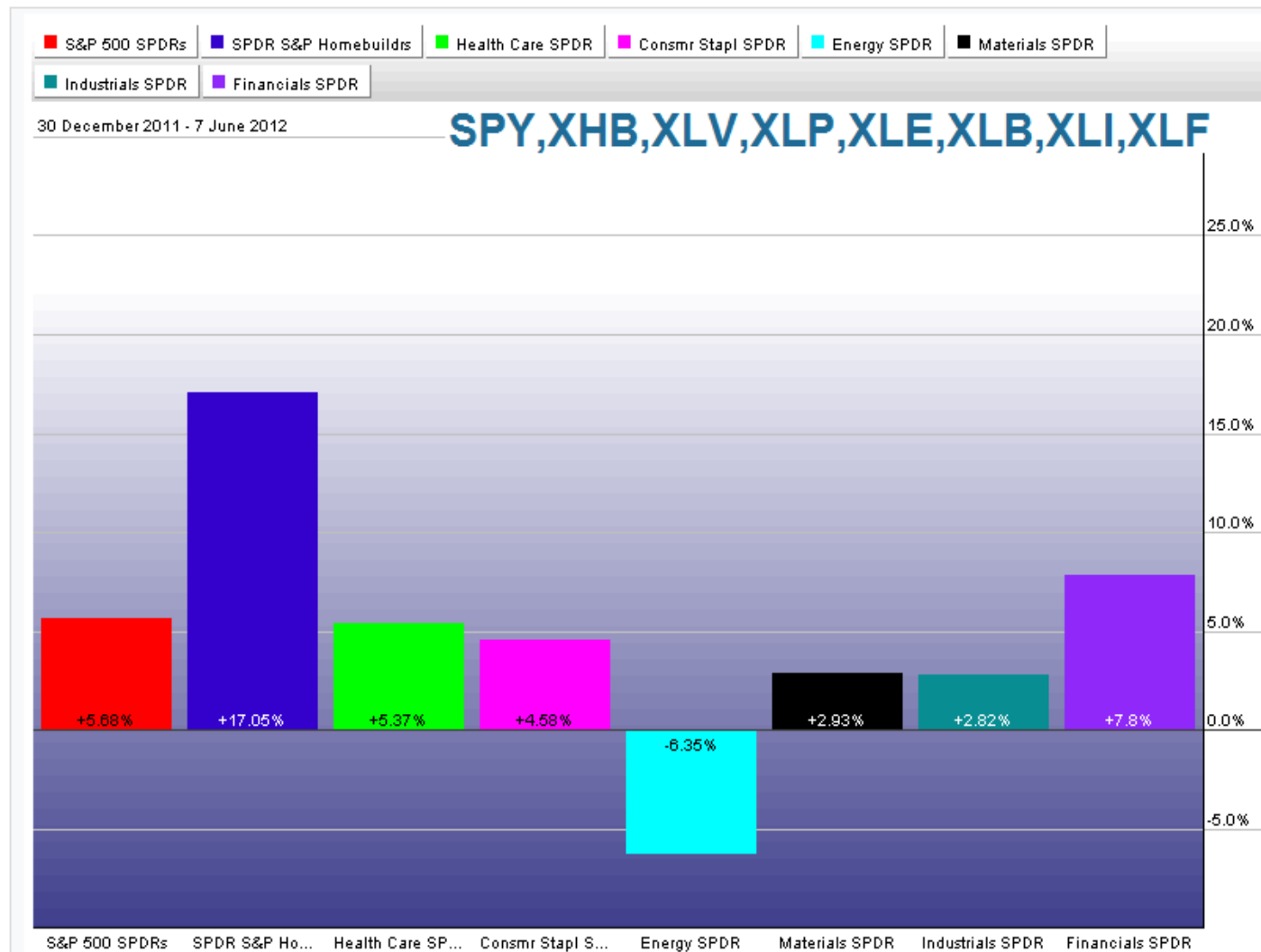
XLY/ XLP Ratio Analysis (Risk On v/s Risk off) Aggressive v/s Defensive

XLY / XLP Ratio is showing +ve divergence for Risk / off . .

At 1.34 gave exact signal at the top based on "RISK ON v/s RIKS OFF"   Sectors. Our Model predicted in preious message

DEFENSIVE LEADERSHIP... measures the relative performance XLY /XLP market sectors compared to the SPX. It's usually a bad sign for the market when defensive sectors are market leaders. XLY is under-performing XLP .

XLY/XLP ratio turned up on low volume . That's another Good sign for the market.

XLV - CZ / Ratio Analysis - *STRONG SECTORS – SETUPs with*

- *BOTTOM NEUTRALIZED @ POM 13 – CZ & BULLISH TOP (@ POM 15 - CZ*

BULLISH TOP / STRENGHT pointed out in last Report , resulted in very shallow retracement in this current decline to CZ Target in yellow

 Bounce is healthy, XLV / SPY Ratio is in strong up Trend with valid breakout.   ROC/ STOC – Bullish +ve VTO, Ratio in uptrend. . This is Strong market , any Correction in general Market *should have retracement* back into CZ (in yellow) 35.75 -34.75 testing on low volume
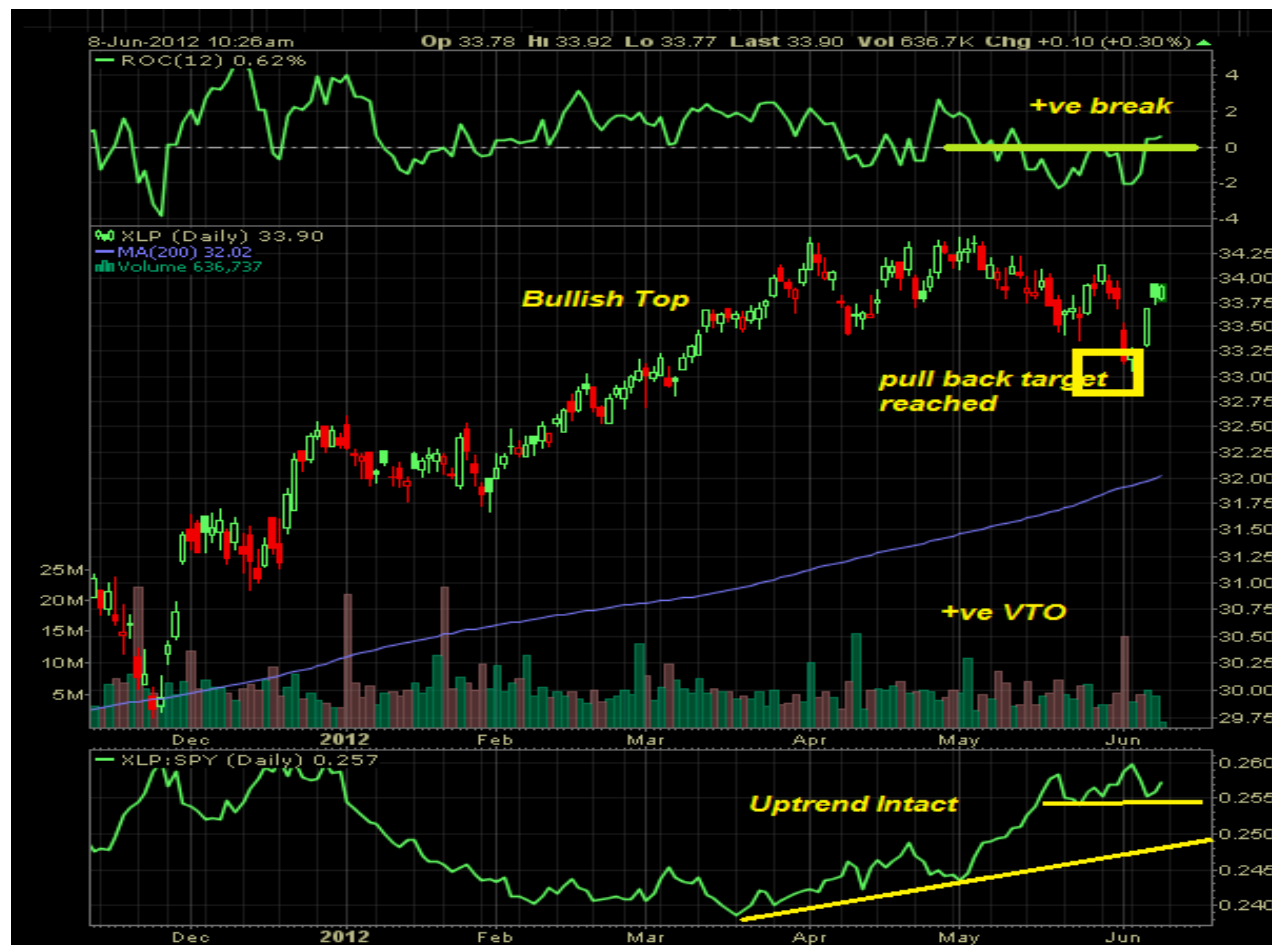
XLP - CZ / Ratio Analysis - *STRONG SECTORS – SETUPs with*

- *BOTTOM NEUTRALIZED @ POM 13 – CZ & BULLISH TOP (@ POM 15 - CZ*

BULLISH TOP / STRENGHT pointed out in last Report , resulted in very shallow retracement in this current decline to CZ Target in yellow

Bounce is healthy, XLP / SPY Ratio is in strong up Trend with valid breakout. ROC/ SLOPE / STOC – Bullish +ve VTO, Ratio in uptrend. . This is Strong market , any Correction in general <u>Market should have retracement</u> back into CZ (in yellow) 33.25-32.25 testing on Neutral volume

XLE - CZ / Ratio Analysis - *WEAKER SECTORS- SETUPs with*
- *BOTTOM HEAVY @ POM 13- CZ & BEARISH TOP (@POM 15 - CZ)*

BEARISH TOP / WEAKNESS pointed out in last Report , resulted in very large retracement in this current decline to CZ Target & <u>extended</u> . The anemic bounce should cap into CZ 67-66 followed by Retest to CZ – 63-61 (Bottom heavy)

XLE / SPY Ratio is broken down the Trend & still downtrend. ROC/ STOC – Bearish . –ve VTO , Ratio in downtrend.
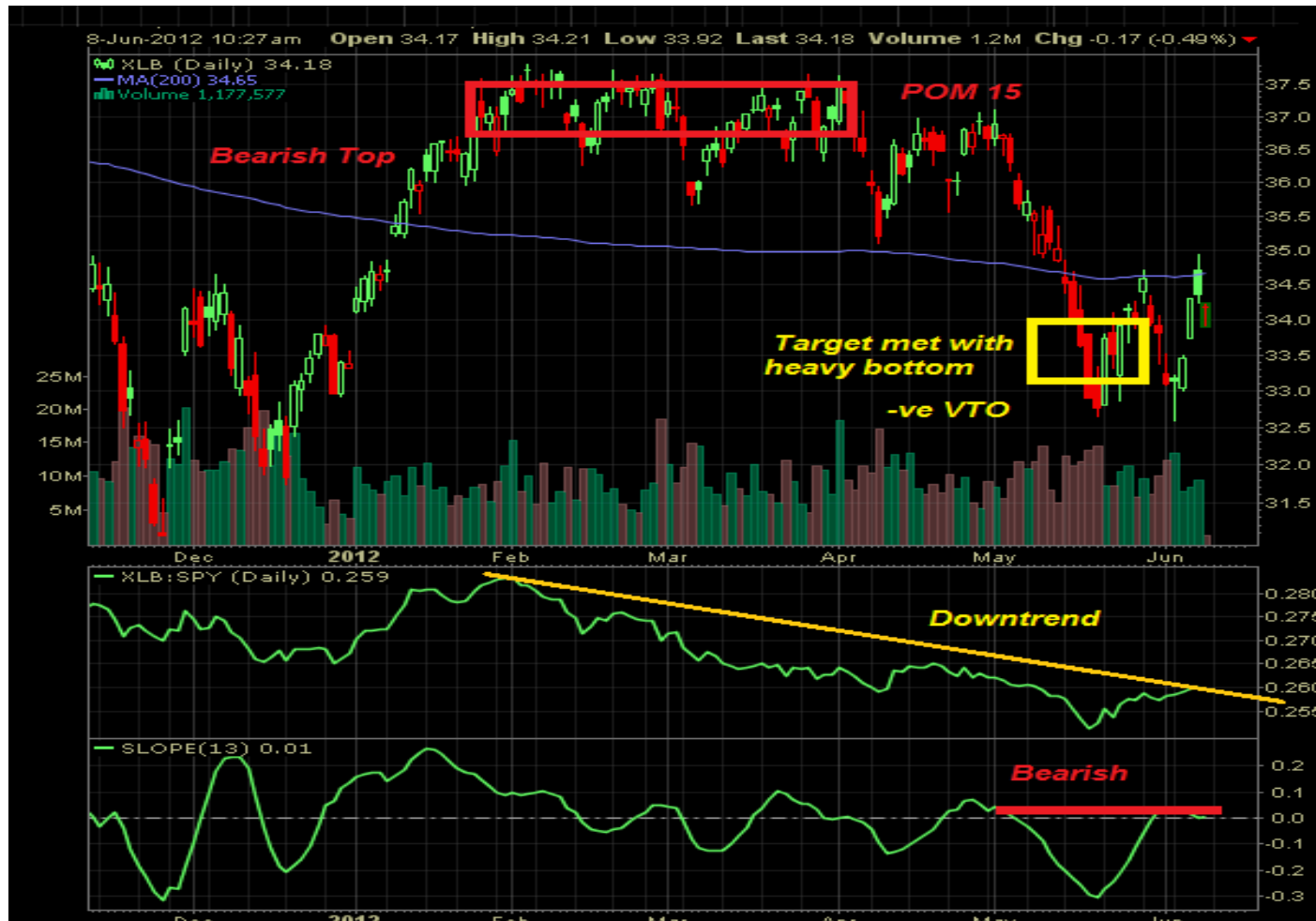
XLB - CZ / Ratio Analysis - *WEAKER SECTORS- SETUPs with*
- *BOTTOM HEAVY @ POM 13- CZ & BEARISH TOP (@POM 15 - CZ)*

BEARISH TOP / WEAKNESS pointed out in last Report , resulted in very large retracement in this current decline to CZ Target & extended . The anemic bounce should followed by Retest to CZ – 34-33 (Bottom heavy)

XLB / SPY Ratio is broken down the Trend & still downtrend. SLOPE /STOC – Bearish . –ve VTO , Ratio in downtrend.

XLI - CZ / Ratio Analysis - *WEAKER SECTORS- SETUPs with*

- *BOTTOM HEAVY @ POM 13- CZ & BEARISH TOP (@POM 15 - CZ)*

BEARISH TOP / WEAKNESS pointed out in last Report , resulted in very large retracement in this current decline to CZ Target & extended . The anemic bounce should followed by Retest to CZ – 34.5-33.5 (Bottom heavy)

XLI / SPY Ratio is broken down the Trend & still downtrend. SLOPE/ STOC – Bearish . –ve VTO , Ratio in downtrend.

XLF - CZ / Ratio Analysis - *WEAKER SECTORS- SETUPs with*

- *BOTTOM HEAVY @ POM 13- CZ & BEARISH TOP (@POM 15 - CZ)*

BEARISH TOP / WEAKNESS pointed out in last Report , resulted in very large retracement in this current decline to CZ Target & <u>extended</u> . The anemic bounce should cap into CZ 14.75-4.25 followed by Retest to CZ 13.50-13 (Bottom heavy)

XLF / SPY Ratio is broken down the Trend & still downtrend. ROC/ STOC – Bearish . –ve VTO , Ratio in downtrend.

XHB - LT – Trend Analysis - (Special Situation)

Last Month XHB tried to breakout, Longer time from HOMEBUILDERS APPEAR TO BE BOTTOMING. There is Dynamic change in the direction of homebuilders. The monthly bars breaking of the CZ coming off the bottom. The last hurdle it needs to overcome is its early 2010 high. The bottoming process, First comes the downtrend, which is then followed by a sideways bottoming pattern by relatively flat trading which includes at least one retest of the first bottom. That successful retest took place during 2011, and is usually followed by a test of the upper part of that trading range (the 2010 high). If that 's broken to the upside, a major new uptrend will have been initiated. This is how bottoms are made on Monthly

XHB - CZ / Ratio Analysis - (Special Situation)

HOME CONSTRUCTION XHB - ETF – Pull back target CZ 20-19 – Volume is bit heavy , In ST this lows should be tested even if get bounce before New ABC up starts

BULLISH TOP - XHB / SPY Ratio is in strong up Trend with valid breakout. ROC/ SLOPE/ STOC – Bullish +ve VTO, Ratio in uptrend. . This is Strong market ,

Any Correction in general Market should have retracement should be great opportunity when SPX Trigger POM 13
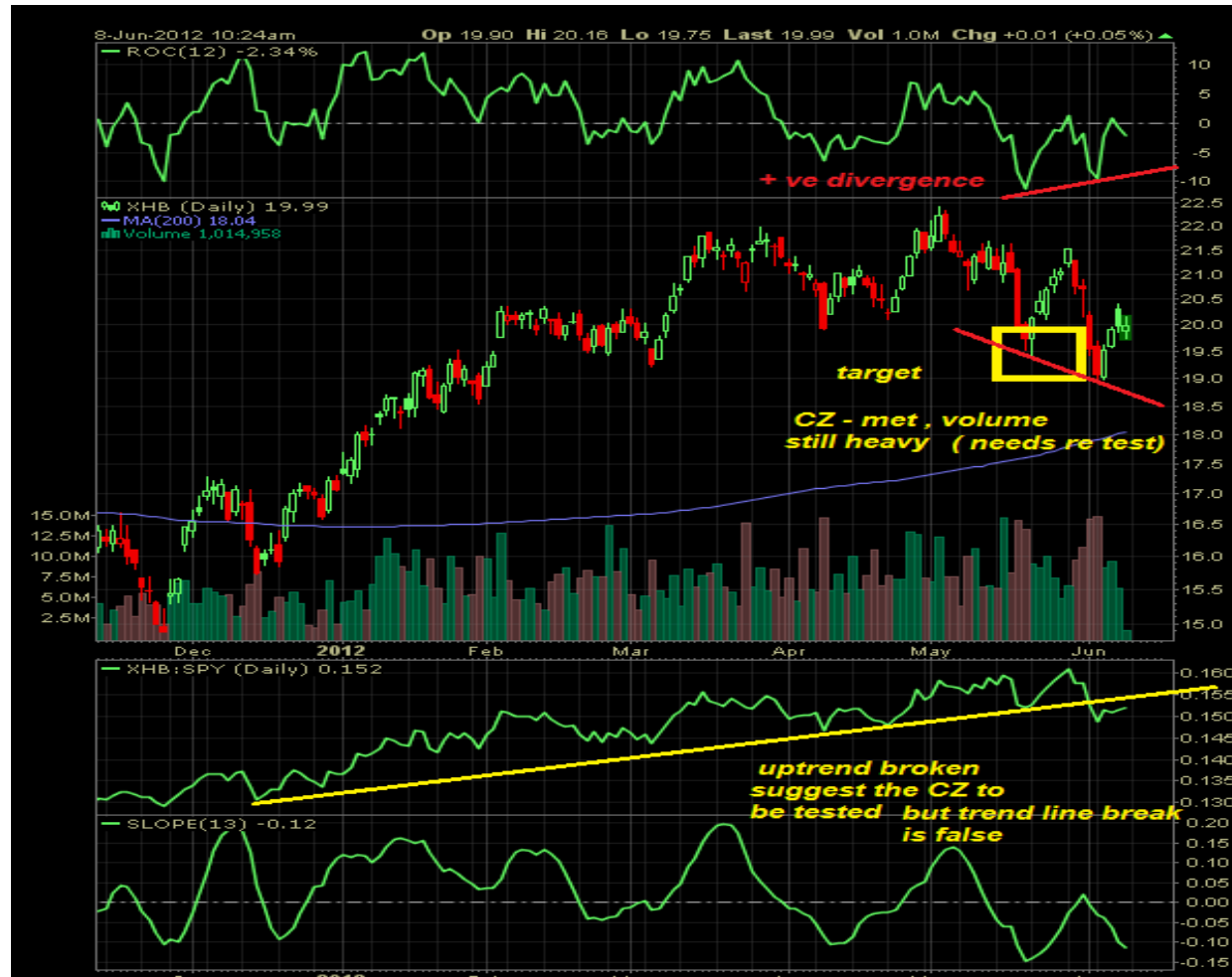
SD -MEAN REVERSION FROM PREVIOUS

- ***NONE -*** *(SD – Mean to Reversion this week)*

SD - OVERVALUED v/s SPX   ETF (SD +2)

- **NONE**

SD - UNDERVALUED v/s SPX ETF (SD - 2)

- **XLE**

Appendix Content

- **Objectives & POM /CZ Guidelines**

- **Guidelines for Full Utilization of " SP" Report with Limitations**

- **Trading & Investment CZ - Conclusion History 2011**

- **SPX- POM – " Price Oscillation Model " Criteria**

- **PEC –D " Pythagoras – Expansion & Contraction Criteria**

- **SPX – TAS 3x3x3 / 9EMA - " Trend Adjusted Signal " Criteria.**

- **Definitions of Extreme Sentiment Indicators**

- # <u>Objective</u>

Focus is on the Short & Intermediate term turning point of the "Sectors" via SPX's POM's & Price projections and / or CZ (Bullish & Bearish between the POM's) . POM is <u>Unidirectional</u> Judgmental Model, It utilizes multiple input signal via the Global Inter market Analysis (GIC), Price & Quality Volume (PQV), Pattern Recognition (PEC) , Cycles, Internal & External price equilibrium points to assists in output signals . POM is supplementary Analytics to add value to RA/ RI Framework for Risk Management.

- *SPX acts as Risk Benchmark for all the other Markets (Sectors) , these Markets gets priced off SPX- Risk (in different Proportion) . Therefore within A # 1 – MS Report, our critical component being SPX and its internal ingredients for timely POM & Bullish CZ calls . Our D # – Sector Report focuses on Sectors of the Market.*

- *All the Sectors tends to follows the Price path of POM 11, 12, 13 of SPX (except during POM14, 15), various Sectors will Top out at different time to Trigger CZ – Validation for NET SHORT.*

- *SPX is still following the Bear Market / Trading Market POM Regimes unlike GOLD market*

- *All CZ / POM's – Marked on charts (in color) below has been Announced on Real time in our Previous Reports prior to Price shifts.*

- *Stops always on other side of CZ @ value based on Portfolio's Objectives and Risk tolerance*

- *Conclusions to be cross verified by other methods prior to final decision*

- *For Maximum utilization of POM Process for Risk Management. Refer to guidelines within the Appendix below*

- ## <u>Objective …cont…</u>

The Focus is to derive and compare the Relative performance of various Sector ETFs via using Standard Deviation (SD) Criteria, POM – SPX Methodology as a PIVOT point for start then use with SECTOR / SPX Ratio chart for their "Pattern Recognition and Technical Analysis" <u>for OVERVALUATION AND UNDERVALUATION</u> of Sectors.

<u>Step 1</u> *– Qualify the Sector based on Correlation Ratio Analysis with SPX to determine Standard Deviation (SD# 2) @ extremes level to define "Overvaluation and Undervaluation" of the SECTOR*

<u>Step 2</u> *- Overlay this Correlation input data on Sector's Relative strengths based on the SPX –POM latest STATUS as Pivot point to measure Maximum and Minimum strength of the Sector. Validate those ideas via technical Patterns of absolute Charts & SPX Ratio charts of these Sectors for Bullish and Bearish SETUPS via Pattern Recognition, Technical Analysis via second derivative DMA's & Derive CZ for PQV Validation test.*

<u>Overlay Criteria</u>

- *SD # /2 ANALYSIS EXTREMES by 365 D Correlation.*
- *SPX - POM FRAMEWORK as PIVOT by Trend Correlation*
- *TECHNICAL PATTERNS, 2nd Derivative DMA's & VOLUMES" & Derive CZ for PQV Validation.*

SPX – " POM Signals with SECTORS @ SD +/- 2

 The Weekly Validated Sector selection - (Undervaluation) / (Overvaluation).

Utilizing SD, POMs within RA / RI framework with composition of ETF's with SD # 2 (+/-) Overvalued and Undervalued characteristics.

- *At POM 15 in SPX - Focus is on Sectors with + 2.5 SD   for CZ – PQV Validation for NET SHORTS*

- *At POM 14 or Bearish CZ on SECTORS- Focus is on Sectors with + 2.0 SD   for CZ – PQV Validation for SHORTS FOR HEDING*

- *At POM 13 (Bounce) or Bearish CZ on SECTORS -   Focus is on Sectors with +2.0 for CZ – PQV Validation for SHORTS*

- *At POM 13 (Pull back) or Bullish CZ on SECTORS -   Focus is on Sectors with -2.0 for CZ – PQV Validation for LONGS*

- *At POM 12, 11 on SPX – Focus is on All the Sectors & Broader Indices for Entry*

This Observation above can be utilized within any specific Portfolio's Objective for Risk Management

KEY NOTES

- *In Our POM Guidelines Section – The Purpose of POM 13 Trigger is for Risk management. In volatile Market the Risk management is critical point protection on counter Trend moves for rebalancing*

- *All the Sector Indices tends to follows the Price path of POM's in general but for POM14, 15 regime various individual Sectors might Top out at different time to Trigger CZ – Validation for SELL. We have CZ – PQV validation indicated in charts below (For Risk Management – STOPS always on other side of CZ based on Portfolio Objectives. For POM 12,11,13 , All broader market will move in concert with SPX*

➤ *Key Points for Full utilization of SP- Reports*

- *Maximum Utilization of various POM's , CZ's & ABC's – for Risk Management & full enhancements on CZ pricing & CZ-PQV Timeliness*

  - ➤ *At Top down Level* – *Triggers around POM's -Mid term & CZ's - Short term – (CZ's happens in between the POM's) . Critical component for Clean execution is to maintain ongoing updated data base spreadsheet of CZ's Pre announced in SP releases prior to price shifts. These inputs when Computerized Daily Monitoring, Triggers, Timely PQV validations, Price projections Alerts on real time should warn in timely manner to take action. .*

  - ➤ *Rebalancing Pre Planned procedure at Triggers* – " Rebalancing % of Overall Position Sizing" , Beta & , Net Exposures sizing depending on each Portfolio's Objective & Risks Tolerances for either Recycling of Capital or Fresh capital.*

  - ➤ *Key points for Risk Management*

  - ➤ *Hard Stops around CZ's*
  - ➤ *STOP SELL- " early warning Alerts" in fast moving markets, Over night Day / Night (IST) time delay Risks.*
  - ➤ *Cross verification by Other Methods*
    Computerized Daily Monitoring, CZ Triggers, Timely PQV validations

  - ➤ *2. CZ – Tracking*

  - ➤ *Programing - "Time/ Price Displacement, Supply / demand Activity Bar Analysis" –*

  - *At "Institutional Grade - Price , Volume with Time Integration*

  - *Supply / Demand Activity bar Analysis – Real time.*

  - *Candlestick – Price displacement Algo Programing experience at CZ Validation for Triggers*

For Price Path and more Justification for the Market Calls, refer   to conclusions and Detail Charts in the Trailing sections within the Report
  - *All the SECTORS Indices tends to follows the Price path of POM's in general but for POM14, 15 regime various Instruments XLF, XLP, XLV, XLE, XLI, XLU, XLY   might Top out at different time to Trigger CZ – Validation for SELL. We have CZ – PQV validation indicated in charts below (For Risk Management – STOPS always on other side of CZ based on Portfolio Objectives. For POM 12,11,13 , All broader market will move in concert with SPX*
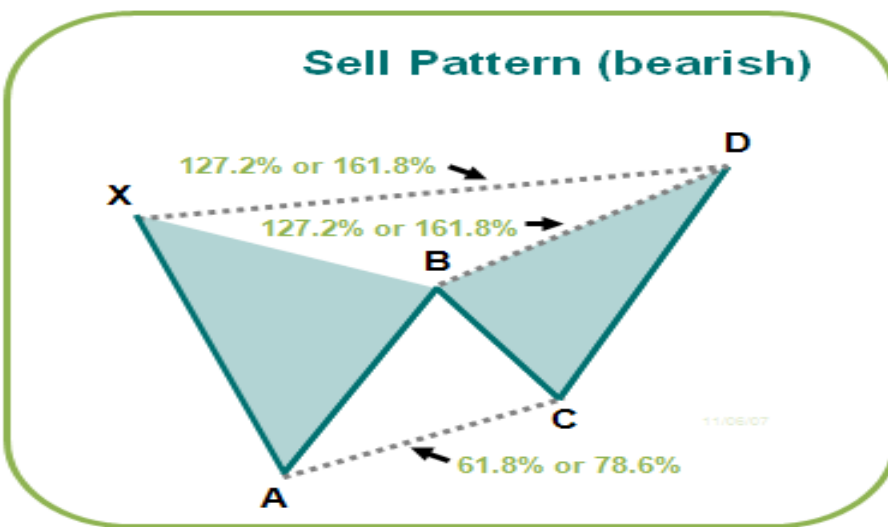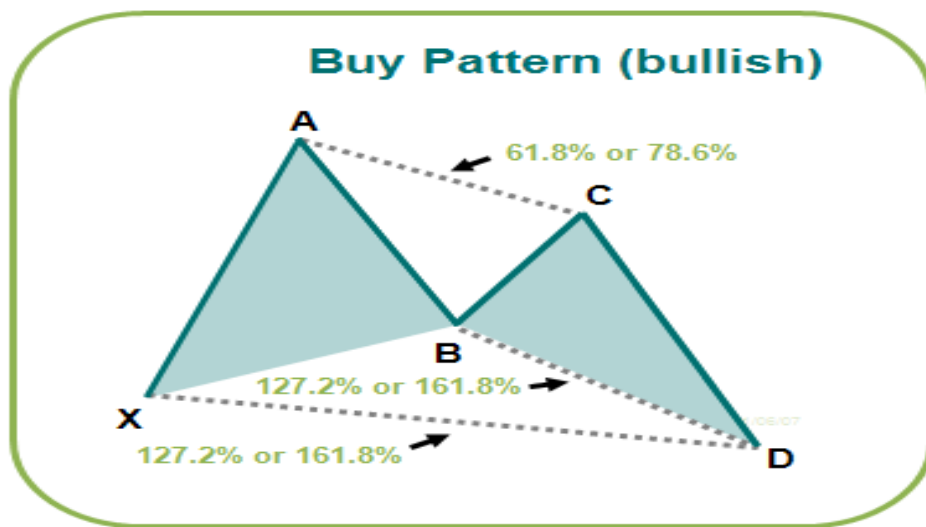
POM criteria for Implementation on SPX

- **POM is rated from 10 to 15**

- POM 14 , 15 (is Sell Signal) and 12 , 11 (is Buy Signal) both are the Actionable Area whereas POM 13 is A Neutral Signal for Risk management

- On way UP move, POM 13 signifies to STOP executing additional 'New Buys" that was initiated at POM 12 or POM 11 levels

- On way DOWN move, POM 13 signifies to STOP executing additional " New Short Sells" that was initiated at POM 14 or POM 15 levels

- (Bear Markets) POM 15 is for - Net Short & POM 14 is for - Hedge Longs

- (Bull Markets) POM 15 is for -Hedge Longs & POM 14 is for - Partial Hedge

- POM 12 & 11 is for Net Long

- POM 10 is Climatic Crash low Buy Signal to add to Net long position (Rear event)

Pythagoras Expansion / Contraction – (PEC) Model

- PEC Model is a 2th Derivative Timing Tool utilized on core currencies which identifies the turning point, for Tops and Bottoms on "Short & Intermediate term" Trend in the currency market.

- Methodology is based on Mathematical Pattern Recognition with Symmetrical Pythagoras Triangular expansion and contraction (PEC) in concert with Price Oscillation (POM). This has a high probability for greater accuracy on Price projections at confluence when Integrated together.

- Once our POM analysis is complete, it will overlay PEC. The input signals are from tracking rolling Arithmetic Numerical series of Regression utilizing Fibonacci to Identify Triangular patterns of Expansion / Contraction. Triangular pattern completes at the convergence of 2 separate Fibonacci extension levels and overlay Price Oscillation Model.

- Since the Currency has 2 dimensional pairs, PEC is critical to analyze with 2x2 Fibonacci steams to achieve confluence point D coinciding with POM

PYTHAGORAS EXPANSION / CONTRACTION –(PEC) Model

The output signal of ABCD price moves preceded by a swing high or low (XA) generates projection point D, which is actionable point derived from 2 connecting triangles with convergence ratio. As with all geometric patterns, a Buy or Sell signal occurs as the pattern completes at point D

Buy Pattern (bullish) — A, 61.8% or 78.6%, C, B, 127.2% or 161.8%, X, 127.2% or 161.8%, D

Sell Pattern (bearish) — D, 127.2% or 161.8%, X, 127.2% or 161.8%, B, C, A, 61.8% or 78.6%

- ## <u>Daily SPX - " Trend Adjusted Signal"</u>

- ## <u>3x3 /9EMA – Break Indicator</u>

The process utilizes the cumulative Algorithm of price trails 3x3 / 9EMA input signals for Trend formation. This signal tends to work well in Market extensions (i.e. Post POM 14).

This Methodology is implemented by Program Traders especially in Momentum extensions and diagonal triangle formation Trend-following system which bases its reversal signals on breaking a significant closing Break Indicator I to confirm the new trend. (it's important to use a stop if you act on a signal). The reversal price is generated on the close of a bar. (The drawback of strategy is that it can whip saw).

INTERNALS OF 3X3- 9EMA – Break Indicator.

The line break indicator has captured the post POM 14 Moves on a mechanical basis. Although can't guarantee it will continue. But, even if it misses on occasion , it's still is the best indicator we've ever seen in Market for extensions.

Tight trading ranges tend to cause whipsaws and those are environments where trading multiple markets can help for diversification, in SPX & DOW. The reason is that we have a purely mechanical indicator, our line break indicator, that is much better to use. That indicator has proven extremely good over the past several months in many markets in many extensions.

As a reminder of how simple this indicator is, when the market closes above the "break" price level, the indicator is ""bullish"; when the market closes below the break price, the indicator is then "bearish". at the close