TAS PRO Indicator Suite™
User Manual and Applications Guide

Gold Futures
Daily Candle Chart
TAS PRO VAP Map (210,5,250)
TAS PRO Dynamic VAP (2,7,7)

$1424.30 – $1432.50

$1389

$1352.70

$1315.60 – $1329

"Hole"

	GC1 Comdty (COMEX Gold 100 Troy Ounces F	1324.9001
	Unfair High	1388.55
	POC	1381.38
	Unfair Low	1359.8701
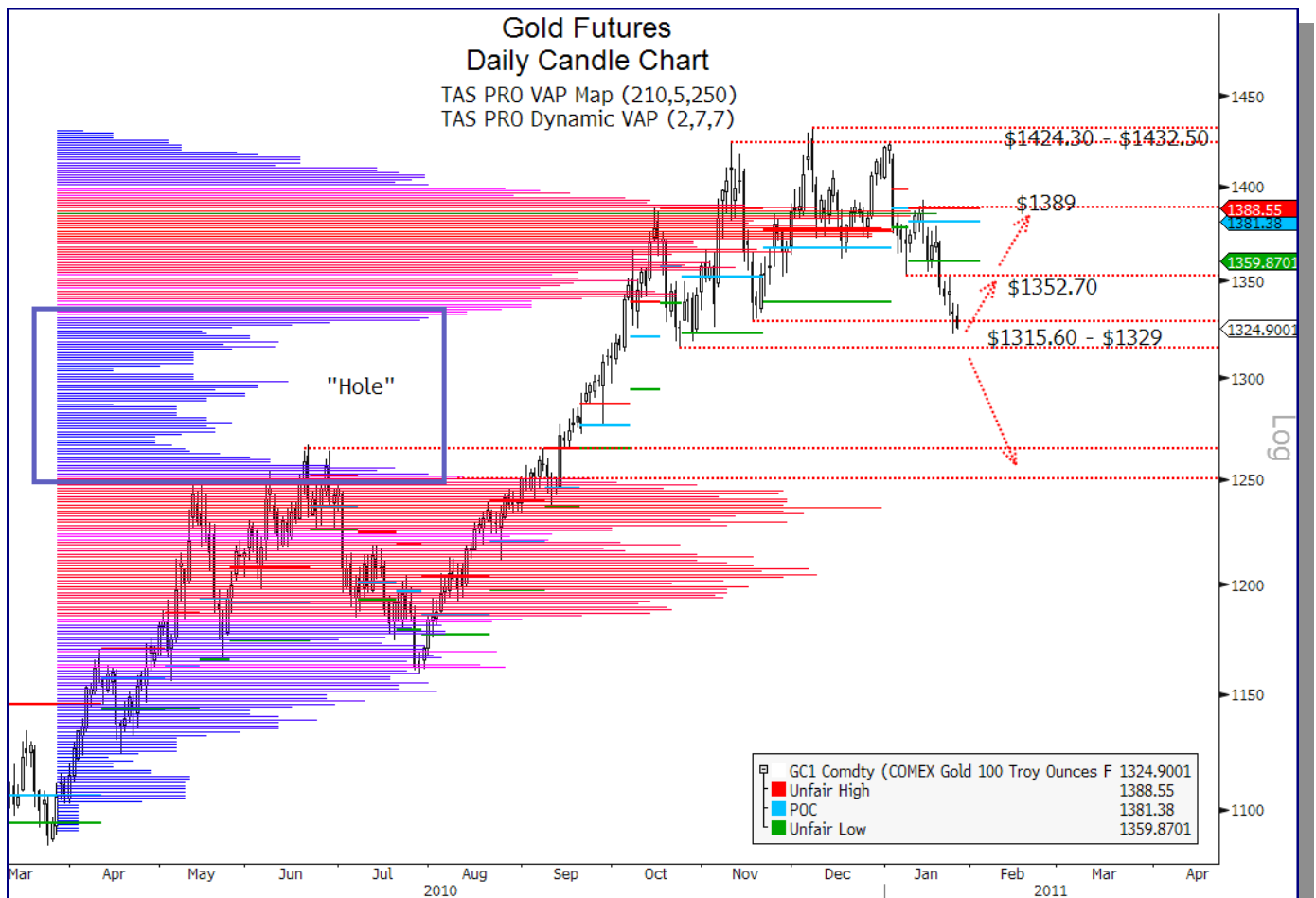
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About This Publication

Notes

- All charts used in this publication are provided courtesy of Bloomberg L.P.

Revision History

- Released version 1.0, January 2, 2011

Conventions Used in This Publication

- Indicator and other products and services names as well as **TAS Professional** trademarks are denoted in **dark blue, bold Calibri font**, such as: **TAS PRO Navigator**

- Configurable input names are denoted in black, bold Calibri font, such as: **Momentum Look Back Period**

- Indicator default values are denoted in green, Calibri font, such as: Default = 25.

- Colors are denoted in bold, Calibri font in the applicable color, such as: a **light blue** line.

- **Bold** text and underlining is sparingly used for emphasis, such as: –However, even if a market can simultaneously be trading up, down, and sideways—**it can never do so simultaneously in a single time frame**.

- Words and terminology that are defined in the glossary are denoted in *dark blue italics*

- Charts are numbered and indexed with full descriptive captions in *italic Calibri font*

- Tables are lightly shaded and contain Calibri font, as follows:

Map Starting Bar	Sets the number of price bars ago where the **Market Map** should start from. (Bar 0 is the current bar.) Default = 30.
Map Ending Bar	Sets the number of price bars where the **Market Map** should end. (Bar 0 is the current bar.) Default = 0.

Contents

Foreword

Inspired by Peter Steidlmayer's *Market Profile®* and designed by industry professionals applying the highest standards for quantitative analysis, **TAS Professional** is proud to offer our **TAS PRO Indicator Suite.**

The **TAS PRO Indicator Suite** is a collection of 7 trading tools that seamlessly integrate price, volume, and time into unique algorithms that enhance the speed and forecast accuracy of traditional time series analysis. When combined with traditional forms of technical analysis and market timing techniques, the **TAS Pro Indicator Suite** provides new dimensions of data analysis and depth of market perspective.

TAS PRO Trader Education fast-tracks students to the highest levels of proficiency and expertise in deploying the **TAS PRO Indicator Suite**. With a global network of **TAS PRO Certified Instructors**, our highest priority mission is to provide on-site, structured training courses right out of the box—or tailored to meet your traders' unique needs.

From topic-specific, a-la-carte courses to comprehensive multi-day, hands-on, skill building workshops, our proven training methodology will help your trading team deploy essential core skills in using the **TAS PRO Indicator Suite** with strategies and tactics that are flexible and adaptable to each individual's methods and style.

From basic indicator functionality to adaptable advanced trading concepts, our courses will prepare participants to become proficient, skillful, and confident using the **TAS PRO Indicator Suite** in the minimal time possible and with the least amount of disruption to your operations.

Introduction

Market participants know the value of accurate, timely, responsive, and ‖distilled‖ market-generated data. By distilled, we mean *data* that has been stripped of the unwanted market noise and presented to traders as *information* in a screen-based format that's clearly presented, intuitive, and most importantly—actionable.

At **TAS Professional**, we believe there are few chart-based market presentation formats that effectively present what a market is trying to do—and either succeeding or failing to do—as those developed by J. Peter Steidlmayer in his creation of *Market Profile®* in the 1980s.

Market Profile® is a statistically based method of aggregating market-generated data and presenting it in an informational ‖profile format that reveals the true auction that is taking place in a market. This flexible format allows a two-dimensional view of the markets that clearly illuminates the relationship of two mutually exclusive phases of market activity taking place:

- Horizontal price development which is a ‖fair price area in the market where supply and demand are in relative balance, accommodating both buyers **and** sellers

- Vertical price non-development which is an ‖unfair price area in the market where either supply or demand are in relative imbalance, accommodating either buyers **or** sellers—but not both

At **TAS Professional**, we instinctively knew that *Market Profile®* provided the right answers we wanted to know about the market. But one of the challenges inherent in *Market Profile®* was the steep learning curve associated with gleaning the right information from the profiles. And there was an additional subjectivity in its interpretation that left us wondering: *Is there a better way to use the core concepts of Auction Market Theory and Market Profile® and yet simplify the presentation to its actionable components?*

It was the need to overcome these inherent challenges that lead us to develop the **TAS PRO Indicator Suite** of trading tools. After seven years of ongoing development, we developed this suite of trading tools that have allowed us, our traders, market analysts, and clients around the world to make some very good market calls.

Properly reading and interpreting the market is an endeavor that is as unique of an experience to one person as it is to another. However, when it comes to trading tools, market participants want them to timely and accurately perform six main functions:

- *Provide intelligence and insight* into the broader market structure while at the same time, helping us pinpoint precise entries

- *Speed up analysis* of trading conditions in multiple time frames (and quite often in multiple trading instruments)

- *Improve accuracy* in reading the market's subtle clues of imminent change in market activity, regardless of time frame being observed

- *Improve decision making ability* by offering multiple and simultaneous views and perspectives of varying market conditions and environments

- *Tightly manage risk* in all trades while preserving profits in both directional and non-directional trades

- *Help market participants relax, observe, analyze, interpret, and make good decisions about high probability situations* while the computer does the laborious background analysis of trading levels, volume, volatility, and the like

Specifically, the **TAS PRO Indicator Suite** will help you to:

- Clearly read, interpret, and understand where the concentration of crowd activity is located to make incisive interpretations and timely decisions that are suitable to your application

- Read, understand, and make decisions based on the two phases of market activity—the only two events that repeatedly occur in the market

- Make better decisions by properly interpreting volume-at-price, volatility, pivot levels, momentum characteristics, and other key market attributes and characteristics in all time frames

- Avoid neutral, low-odds areas in the market—saving time, money, energy and frustration on ‖go-nowhere‖ situations

- Improve market timing and reward-to-risk by understanding where the crowd is lending demand-support in a declining market or supply-capping a rising market

- Analyze and trade the market on your terms according to your tactics, strategies, and methods—which can now be supplemented by the **TAS PRO Indicator Suite**.

What This Manual Covers

This manual covers all of the individual indicators that make up the **TAS PRO Indicator Suite**. Please spend some time studying the examples in this playbook to become familiar with some of the applications that are part and parcel of the **TAS PRO Approach to Trading** training courses.

The markets are dynamic and ever changing. And our trading tools readily adapt to changing market environments and conditions. Therefore, this publication is an ongoing document which we will be adding to as new techniques, methods, and applications become available.

For this edition, we will overview and cover application concepts related to the following 7 **TAS PRO Indicators**:

- **TAS PRO Market Map**
- **TAS PRO Dynamic VAP**
- **TAS PRO Navigator**
- **TAS PRO Statics**
- **TAS PRO Floaters**
- **TAS PRO i-Ratio**
- **TAS PRO Vega**

Before we get started with an overview of **TAS Professional's** basic discretionary trading philosophy, let's cover some basic points about the **TAS PRO Indicator Suite**:

- Each of these indicators may be used on their own or as part of an overall system of trading tactics and strategies

- Take your time to become competent and confident in using the tools. Diligent study, practice, and repetition under no-risk/low-risk market conditions are the mother of skill. Be smart and judicious and give yourself time to adapt and integrate the indicators to your specific methods and applications.

- The indicators come with default settings which may be adjusted to fit your applications. Try different settings until you feel comfortable

- Most of the indicators may be used on any time frame chart and with any security where there is adequate or consistent volume. Where consistent volume is not collected for a particular security (for example, in spot Forex), many of the **TAS PRO Indicators** will use price-based TAP[1] calculations.

- Most of the indicators in the **TAS PRO Indicator Suite** will work in all time frames. However:

  - Some of the indicators, such as **TAS PRO Price Map** and **TAS PRO Statics**, are often better suited for longer time frame market analysis

  - Other indicators, such as **TAS PRO Floaters** and **TAS PRO Dynamic VAP (Boxes)**, are often better suited for shorter time frame market analysis

- The old market adage, ‒When in doubt—stay out‖ applies to any aspect of analysis or trading and applies to the use of these indicators.

- Lastly, there's a Pygmalion effect when analyzing charts in the sense that you often get what you're looking for. This *confirmation bias* can often skew objectivity and distort rational analysis in the markets, a common pitfall of many traders. Give yourself adequate time to obtain objectivity in using these tools.

We are all human and tend to see what we want to see. But that doesn't often lead us to getting us what we really want in terms of results. Study the markets with these tools and learn to make new distinctions with a critical eye. A methodical learning process will be a valuable investment of your time.

The following section overviews a suggested process for becoming familiar with and adapting the **TAS PRO Indicator Suite** into your application regimen.

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[1] For all terms in *blue, italic text,* please see Appendix C, Glossary of Terms for definitions

Suggested Process for Studying and Learning the TAS PRO Indicator Suite

We strongly recommend the following process for becoming familiar with the indicators:

- We repeat: *Under no circumstances should you be in a hurry to make decisions with these new tools. Be smart and be judicious: "Earning follows learning"—not the other way around.*

- Read this manual in its entirety. Take your time with the learning process. The markets will be there tomorrow.

- While using the **TAS PRO Indicator Suite**, take notes and keep a journal of the new distinctions you are making. Add to your notes and integrate your new knowledge into your existing methods and procedures.

- Do not try to learn all of the indicators at once. We suggest that you start with the **TAS PRO Statics** and/or **TAS Pro Dynamic VAP (Boxes)** first. Only after you are comfortable with these should you consider adding others into your arsenal one at a time.

- In the quiet of the after-hours market, start viewing charts of various securities and in multiple time frames. Make notes on areas of interest in where the **TAS Pro Indicator Suite** can assist you in the following basic concepts:

    o Identifying low-risk trading setups and applications

    o Identifying entry, stop, and target points in the market

    o Accurately measuring the reward-to-risk of various trading setups

    o Discriminating between higher quality, higher probability market situations vs. lower-quality, lower probability ones—especially, identifying areas of the market to completely avoid

- Using just one or two of the indicators, experiment with different settings for securities of interest. The **TAS Pro Indicator Suite** is infinitely configurable and adaptable to almost all market conditions. Be prepared for them with diligent study and practice in the quiet of the after-hours markets.

- As an initial goal, you should be looking for –continuous process improvement—one step at a time—not a –holy grail tool, process, or method. The tools don't make decisions for you. You make good decisions by becoming proficient and well-versed in the use of the tools which are a portal to reveal unique attributes and insights into the actions of the markets.

TAS PRO Discretionary Trading Philosophy

- **At all times, capital preservation is job #1 for all market participants.** You must develop a written, objective, rules-based plan for managing risk vs. reward. No exceptions.

- We believe that earning follows learning—not the other way around. Although each of us participates in the market with different goals and objectives, we are realistic about the inherent risk in the marketplace and work hard not to get too far ahead of ourselves. We pride ourselves in having developed a rules-based, methodical approach to the markets.

- We believe that price and pattern analysis alone—without concurrent volume analysis—misses a lot of the picture in trading. Price is the messenger, not the message.

- Every trade or trade application has an underlying context: a particular time frame that is being displayed on a chart. Learning to correctly use the **TAS PRO Indicator Suite** in multiple time frames increases your edge over single time frame analysis.

- Charts have memory: The price levels where the crowd has traded before are likely to be levels of interest again. Our **TAS PRO Indicator Suite** reveals the–footprints of the crowd.

- We believe that there is no single –best answer to understanding market behavior. However, we have developed **TAS PRO Indicator Suite** to model a professional institutional style of market analyses that we feel reveals the most important information about the markets. And we are constantly adapting our indicators to reflect ongoing changes in the market's environment.

- True market professionals do not kid themselves about the complexity of their undertaking. At **TAS Professional**, our goal in all of our training is to help you dramatically shorten the learning curve by providing world-class education, ongoing training, and responsive support.

- Proficiency in navigating the markets is a journey—not a destination. And complacency is the enemy of proficiency. We believe that all market participants must accept that lifelong learning and ongoing study of your craft is mandatory and part of the business. We are like professional athletes and must continue to train to be the best we can be. We are all works in progress.

- We believe that in the trading arena, there are no get-rich-quick schemes. If you are looking for a few get-rich-quick ideas, we are likely not the right company for you. On the other hand, if you are realistic about the difficulty and magnitude of your undertaking, then we can help.

- The application of any new skill requires time, dedication and consistent effort. Legendary CBOT trader Peter Steidlmayer says, *"Education provides a foundation and method for learning, but knowledge comes through experience."* Practice makes perfect. Don't miss the opportunity to practice what you learn—before you apply what you know.

- We acknowledge that no two market participants are identical in their approach to the markets. Therefore, we teach multi-dimensional styles of rules-based analysis, tactics, and strategies.

- According to the **TAS PRO Approach to Trading**, our goal is to objectively read and interpret the market according to the tenants of market structure, Auction Market Theory, volume, and volatility analysis.

We applaud your efforts to learn and grow in your market discipline and we welcome and value your contributions to the worldwide community of dedicated market participants.

The TAS PRO Approach to Trading—The Basics

The **TAS PRO Approach to Trading** is a structured and logical approach to analyzing and interpreting the markets that has its foundation in the principles of *Auction Market Theory* and *Market Profile®,* developed by legendary floor trader, Peter Steidlmayer. The two sciences are complimentary in that *Auction Market Theory* defines the concepts behind the inner workings of markets—and *Market Profile®* is the mathematically and statistically based ‒visual presentation layer‖ of those sound principles.

These two sciences, combined with the **TAS PRO Indicator Suite**, allow market participants to see the markets for what they are and what they are doing—not what you hope them to be. As Pete Steidlmayer says: *In an uncertain market, it is hard to predict with better than a fifty-fifty shot. So rather than predicting, the idea is to try to understand current market structure and market conditions. Then do what the market is doing rather than what you want to do, whether it is going with the market—or fading the market.*

Although *Auction Market Theory* and *Market Profile®* tend to be very complex in their typical presentation— and take years to understand and master—**TAS Professional** has distilled and simplified these backbone concepts into precision trading tools that reveal what you need to know about the actions of markets. Let's take a look at some of these basic concepts.

First Things First: The Context of Time Frame

The concept of multiple time frames is one of the greatest challenges to master. And that's because it's possible for any market to be in an uptrend, downtrend, and sideways trend—*all at the same time.* **But it can never be so simultaneously in a single time frame.**

Consider the following three charts:

Weekly Multi-month Uptrend   Daily: Up + Down + Sideways Trend   60-min: Down + Sideways Trends

Illustration 1: Different trends in different time frames of the same instrument

Each of these charts is the same trading instrument. However, depending on our *focus of time frame and where we're looking*, the same instrument can be in different trends at the same time.

Therefore, our first rule in any chart analysis is: **Consider the time frame you are evaluating—at all times**. Never generalize your analysis by concluding, ‒The market is in an uptrend… or ‒The market is in a

downtrend. At all times, **narrow** your thinking to a <u>specific</u> time frame from the top down such as, ‒The weekly is in an uptrend, the daily chart is in mostly sideways and choppy trend, and the 60-minute is mostly in a downtrend.

As you will see in later lessons, this type of multiple-time frame analysis will help you immensely in many of the following areas:

- Understand the larger context and structure of the market

- Determine the direction of the major flows of capital

- Determine where the ‒thickest demand and supply points are

- Determine appropriate buy and sell levels in bracketed or rotating markets

- Accurately assess the reward to risk characteristics of an opportunity for proper risk management

- Help you evaluate what's next in terms of high probability moves in the market

- Precisely determine entries, potential targets, and precise stops for market opportunities

- Gain better insight into the relative speed of directional market movements

- Know where the market either needs to pause or needs ‒breathing room to make the next move

- Keep focused on a practical trade premise based on objective analysis

- Stay in tune with the pulse of the market

There are certainly many more benefits to this multiple time frame analysis but the former statements provide a good starting point for objective analysis.

There Are Only Two Things a Market Can Do

Within the context of a particular time frame—and with few exceptions—there are only <u>two</u> things a market can do:

Markets either move **horizontally** (non-directionally, sideways)

OR…

Markets move **vertically** (directionally, up or down)

For illustration purposes, we treat up or down market movements as the same in the sense that they move along the same vertical plane in the price axis. We call this the *two phases of market activity*.

Definitions: The Two Phases of Market Activity

1. A *horizontal market* is one that exhibits relatively equal price *pivot* highs and relatively equal price *pivot* lows. (In the following three diagrams, *price pivots* are denoted by **green** or **red** arcs above and below the turning points):
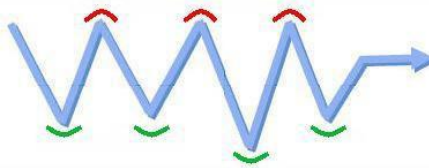
2. A *vertical market* can either be up trending or down trending:

   a) An *uptrend* is defined by a series of higher price *pivot* lows and higher price *pivot* highs

   b) A *downtrend* is defined by a series of lower price *pivot* highs and lower price *pivot* lows

Another way of looking at this two-phase concept is, as follows:

Markets either trade through **time**:

   OR

Markets trade through **price**:

The reason that these two states exist is a function of where liquidity is acting on price. For example, if there is a *relatively* equal amount of volume on both the long *and* short side of the market, then that market is constrained by liquidity. This means that for all of the trade occurring on both sides of the market, buying is met with selling—and selling is met with buying—such that the market cannot move out of the range.

However, when there is excess liquidity in the market favoring one side *or* the other, then the market moves vertically, as follows:

Markets are either *constrained by liquidity:*

OR

Markets are *unconstrained by liquidity:*

The primary function of the markets is to facilitate trade by rationing supply. If a market is accommodating all buyers and sellers in a particular time frame then that market is said to be efficient from the standpoint that it is accommodating the needs of both buyers and sellers. Hence, the market displays horizontal movement through time in a fairly well-defined price range. However, if a market is accommodating or favoring only one side of the trade instead of both sides, the market is inefficient, as follows:

Markets are either **efficient**:

OR

Markets are **inefficient**:

Another way of looking at this two-phase concept is to think in terms of *balance* and *imbalance*. A *balanced market* occurs when there is a relatively equal amount of buying and selling going on—and the market remains in balance, neither going higher or lower outside of a fairly tight or well-defined trading range. An *imbalanced market* occurs when more trading volume favors one side of the market or the other, as follows:

Markets are either **balanced**:

OR

Markets are **imbalanced**:

We could go on and on with analogies about this concept. But the fact remains: There are only two things a market can do: move horizontally or vertically. Following is a list of synonyms for these two states or *phases* of market activity:

Horizontal	Vertical
Sideways	Sloping
Non-trending	Trending
Non-directional	Directional
Balanced	Imbalanced
Rotational	Non-rotational
Consolidation	Non-consolidation
Efficient	Inefficient
Non-random	Random
Range-bound	Non-range-bound
Bracketing	Non-bracketing
Overlapping Value	Non-overlapping value
Price-controlled	Non price-controlled
Constrained by liquidity	Unconstrained by liquidity
Moving through time	Moving through price
Slow	Fast
Boring	Exciting

Trading and Trading Styles

A cardinal rule in trading is: Don't fight the market. In other words, do what the markets are doing by understanding what they are communicating. Therefore, as a general rule, since markets only have two dominant phases of activity—trending and non-trending:

a) When the markets are trending (*imbalanced*, *vertical*, directional, etc.), trade the trend and stay with the trend.

b) When the markets are non-trending (*balanced*, *horizontal*, non-directional, etc.), buy the lows of the range and/or short the highs of the range.

When trading in the direction of major capital flows based on the *two phases of market activity*, you are doing what the market is doing. The **TAS PRO Indicator Suite** has been specifically designed to delineate these two dominant phases.

The Market's Two Phases Are Mutually Exclusive

Markets trade in one of two mutually exclusive phases of market activity: horizontal movement through time or vertical movement through price—but never both at the same time in the same time frame. During a transition from one of the phases to the other, it may seem that they co-exist but in a general sense, until we get confirmation of the actual change in phase, we evaluate the market based on the phase at hand.

So a market either exhibits a horizontal formation…   OR a vertical formation—never both simultaneously.

Balance Leads to Imbalance—Then Back to Balance

Since the market's two phases are mutually exclusive, then when the market is in one phase, we know what's next: the other phase. We like to say that balance leads to imbalance—and then back to balance again. And it's simplest sense, markets move *slowly* through time or *fast* through price levels. We say that markets are either slow—or markets are fast.

To simplify this concept by way of illustration, think of the two phases of market activity as being composed of two building blocks:

- Building block 1: a *slow* horizontal component:

- Building block 2: a *fast* vertical component:

There are some basic guidelines for ‒assembling‖ and then observing these two components:

1. Fast follows slow. This is an either/or state. The market will either go higher in price following a horizontal move—or it will go lower in price following a horizontal move

2. Slow follows fast. After a vertical move, a market consolidates.

3. When slow becomes relatively slower, we are typically approaching the transition point to fast

4. When fast becomes faster—and more volatile—we are typically approaching the next slow phase in the market

5. There is one notable but less frequently occurring exception to guidelines 1 and 2 and that is when a market goes from fast to fast—in the opposite direction—skipping horizontal development. These formations are known as *V-pivots* or *inverted V-pivots*.

   NOTE: Can a market actually skip the horizontal development phase? Yes, it can—but it's rare when you consider that on a smaller time frame, there is most likely some form of transition from fast to slow—then slow to fast—then faster.

Because one phase follows the other, we can illustrate this slow-to-fast then fast-to-slow market movement, as follows:

a. A market is horizontal and trading slowly through time:

b. A supply imbalance occurs in the market which causes the market to move either higher or lower in price:
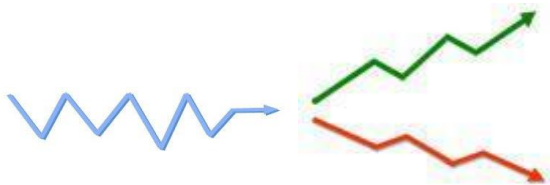
c. Supply and demand come back into balance after either of the prior vertical price movements and the market resumes a slow and horizontal trading range:

d. A supply imbalance occurs in the market [again] which causes the market to move either higher or lower in price:
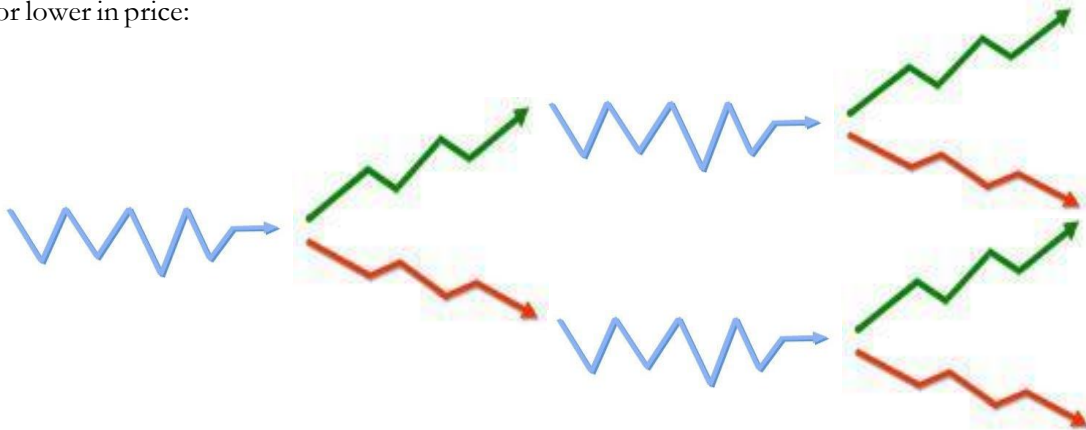
This simple diagram flow depicts the simple continuous ebb and flow of the two phases of market activity.

Accurately identifying the two phases of the market is a valuable skill and once obtained, makes the *practice* of trading simple because it simplifies and provides clarity in two ways:

1) The two phases are mutually exclusive

2) The two phases are traded differently

Therefore, once you know which of the two states are being exhibited, then you know how to adapt how your trading to the current market conditions. To paraphrase Pete Steidlmayer: *Stop predicting what the market might do. Rather, trade what the market is actually doing. Align yourself and your trading style with what is being presented to you.*

The **TAS PRO Indicator Suite** was designed to illuminate these two states in selectable time frames to shed light on where the major flows of capital are and how they are affecting price moment.

Trading Horizontal Markets

A sideways market is relatively easy to identify. Its formal definition is a market with relatively equal price *pivot* highs and price *pivot* lows, as follows:
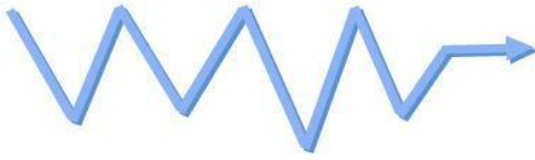
This is a market that is *constrained by liquidity* and hence, the market stays within a range, as follows:
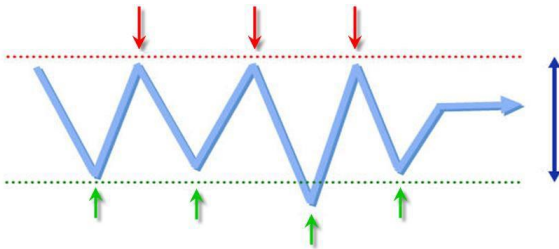
We trade sideways, non-trending markets by looking to:

a) Buy the price *pivot* lows of the range

b) Sell/short the price *pivot* highs of the range

c) Buy the price *pivot* lows <u>and</u> short the price *pivot* highs

NOTE: There are many variations to trading all markets and trends. What we are trying to distinguish here is that since there are only three trends but two basic movements (horizontal vs. vertical), the trading tactics for these two movements are decisively different.

The **TAS PRO Indicator Suite** allows you to quickly and easily determine which of these market movements you are in—and then trade them accordingly. And since the vast majority of losing trades occur by simply being on the wrong side of the market, knowing where you are and what type of movement the market is in is paramount to improving trading—immediately.

Trading Vertical Markets: The Uptrend

An uptrend is easy to identify. Its formal definition is a market with a series (two or more) higher price *pivot* lows and higher price *pivot* highs, as follows:
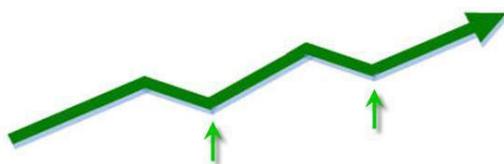
This is a market that is *unconstrained by liquidity* in that more and more buyers and/or buying volume is coming into the market. Therefore, we typically have higher odds trading in the direction of the flow of capital (going long) as opposed to going against it (shorting this market).

We trade uptrends by looking to:

a) Buy the higher price *pivot* lows of the range

b) Shorting the price *pivot* highs—fading the uptrend—is a lower-odds trade, albeit a trading tactic that many skilled traders use to their advantage

Trading Vertical Markets: The Downtrend

A downtrend is easy to identify. Its formal definition is a market with a series (two or more) lower price *pivot* highs and lower price *pivot* lows, as follows:

This is a market that is *unconstrained by liquidity* in that more and more sellers and/or selling volume is coming in to the market. Therefore, we have higher odds trading in the direction of the flow of capital (going short) as opposed to going against it (buying this market).

We trade downtrends by looking to:

a) Short the lower price *pivot* highs of the range

b) Buying the price *pivot* lows—fading the downtrend— is a lower-odds trade, albeit a trading tactic that many skilled traders use to their advantage.

TAS PRO Indicator Suite: Overview of the Indicators

This section overviews the basic capabilities of the indicators included in the **TAS PRO Indicator Suite**. Please be sure to thoroughly familiarize yourself with the basic functionality of each separate indicator before progressing to the applications section of this playbook.

We have grouped the indicators into the following functional categories:

Profiling Maps

- **TAS PRO Market Map**

Dynamic Profiles

- **TAS PRO Dynamic VAP**

Composite Indicators

- **TAS PRO Navigator**

- **TAS PRO Vega**

Market Pivots / Price Compression Levels

- **TAS PRO Statics**

- **TAS PRO Floaters**

Timing and Trade "Purifying" Tools

- **TAS PRO i-Ratio**

TAS PRO Market Map (VAP Map) Specifications and Applications

Price Map *(Volume-at-Price Map)* dynamically calculates and displays a sideways, color coded frequency distribution *histogram* that is set to a user-definable fixed number of look-back bars. **Market Maps** can either remain fixed in place or move forward one bar at a time as new bars are printed on a chart. These ―profile maps‖ are overlaid onto price bars to graphically represent areas of market *balance* and *imbalance* where the market is likely to move slowly and horizontally—versus fast and directionally. **Market Maps** employ the concepts of statistical probability distribution and have their basis in *Auction Market Theory* and *Market Profile®*. **Market Maps** reflect price action relative to the volume traded within the delineated map area.

- Gradient-rich, intuitive, color-coded display delineates where volume is accumulating—or not accumulating—at price

- Provides key insights about where the market is likely to move slowly and develop horizontally through time versus where the market is likely to move rapidly and vertically through price levels

- Adaptable to any time frame or tradable instrument that has volume

- Ability to place multiple right-facing and/or left-facing **Market Maps** of different look-back lengths on the *same* chart

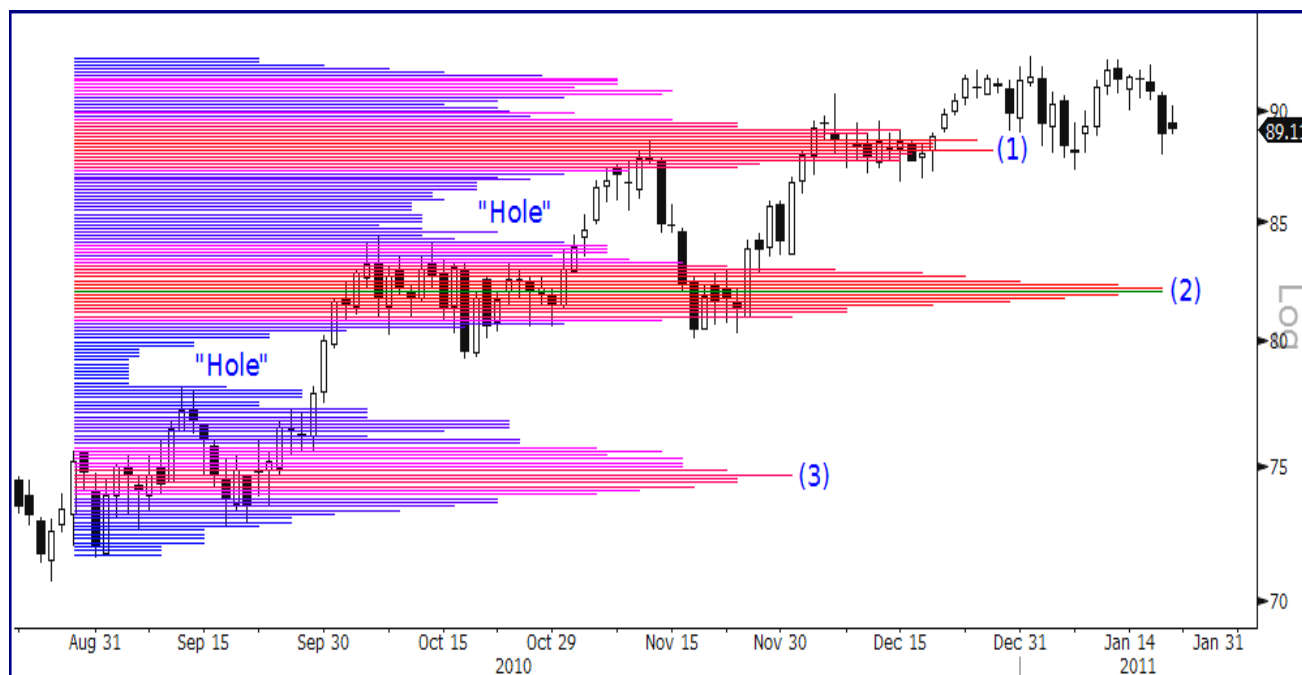- Customizable horizontal line resolution with key-area highlights

*Chart 4: **TAS PRO Market Map** illuminates three volume-at-price distribution (numbered) areas and two "holes"*

Market Map Configurable Inputs

Map Starting Bar	Sets the number of price bars ago where the **Market Map** should start from. (Bar 0 is the current bar.) Default = 50
Map Ending Bar	Sets the number of price bars where the **Market Map** should end. (Bar 0 is the current bar.) Default = 0
Density	Sets horizontal line resolution in profile *histograms* on the vertical price axis. Default = 5
Keep Map Static	When checked, **Market Map** stays in fixed position based on **Map Starting Bar** and **Map Ending Bar** inputs. When unchecked, **Market Map** moves one bar at a time per each new bar displayed in chart under observation. Default = checked
Auto Repeat Map	When checked, automatically repeats the **Market Map** at set intervals determined by the inputs **Map Starting Bar** and **Map Ending Bar**. Default = unchecked
Extend High Volume Node	When checked, this input sets the high volume node (Point of Control / POC) to print across the screen to the right. Default = unchecked

- Right-facing vs. left-facing **Market Maps:** To create a right-facing **Market Map** (where the narrowest part of the map points to the right), **Map Starting Bar** must be *greater than* **Map Ending Bar**. To create a left-facing Market Map, **Map Starting Bar** must be *less than* **Map Ending Bar**.

- Map Density: If the **Market Map** encompasses a large trading range, consider increasing the **Density** setting to better fill out the **Market Map**. Alternatively, if the trading range is narrower, it may be hard to see each line making up the **Market Map** in which case decrease the **Density** setting.

Market Map Display Settings

RED	A relatively wider horizontally developed area on the **Market Map** which reflects a relatively higher concentration of volume-at-price traded.
GREEN	Each **Market Map** will have at least one horizontal **green** line inside the *value area* that indicates the "fattest" part of the profile (widest, left to right). This is called the *point of control (POC)* in *Market Profile®* nomenclature.
PURPLE	Represents an area where there are fewer traders willing to transact and is referred to as being outside of the *value area*.
BLUE	Represents a relatively narrower area on the **Market Map** where there is relatively low interest on the part of the crowd to transact. These areas are commonly formed by "runaway gaps" or "rejection tails."

Market Map **Applications**

- **Market Maps** reveal that markets have the tendency to trade slowly and horizontally within the **red** area of the **Market Map** and they trade rapidly and vertically outside of the boundaries of maps.

- **Market Maps** are especially intuitive in large time frames in terms of orienting traders to the general –tone and –tempo of the market.

- When price is inside the **red** *value area*, the market bias is horizontal. Anticipate moderate to strong support and resistance at the extremes of the *value area*.

- When price does break out of the **red** *value area*, the market bias is vertical. Anticipate the previous *value area* and especially the *point of control (POC)* area to demarcate support or resistance.

- Create multiple, independent, and simultaneously displayed maps to get a broader perspective of several areas of the market and how price and volume-at-price action affects the present market, especially where there is a confluence of activity.
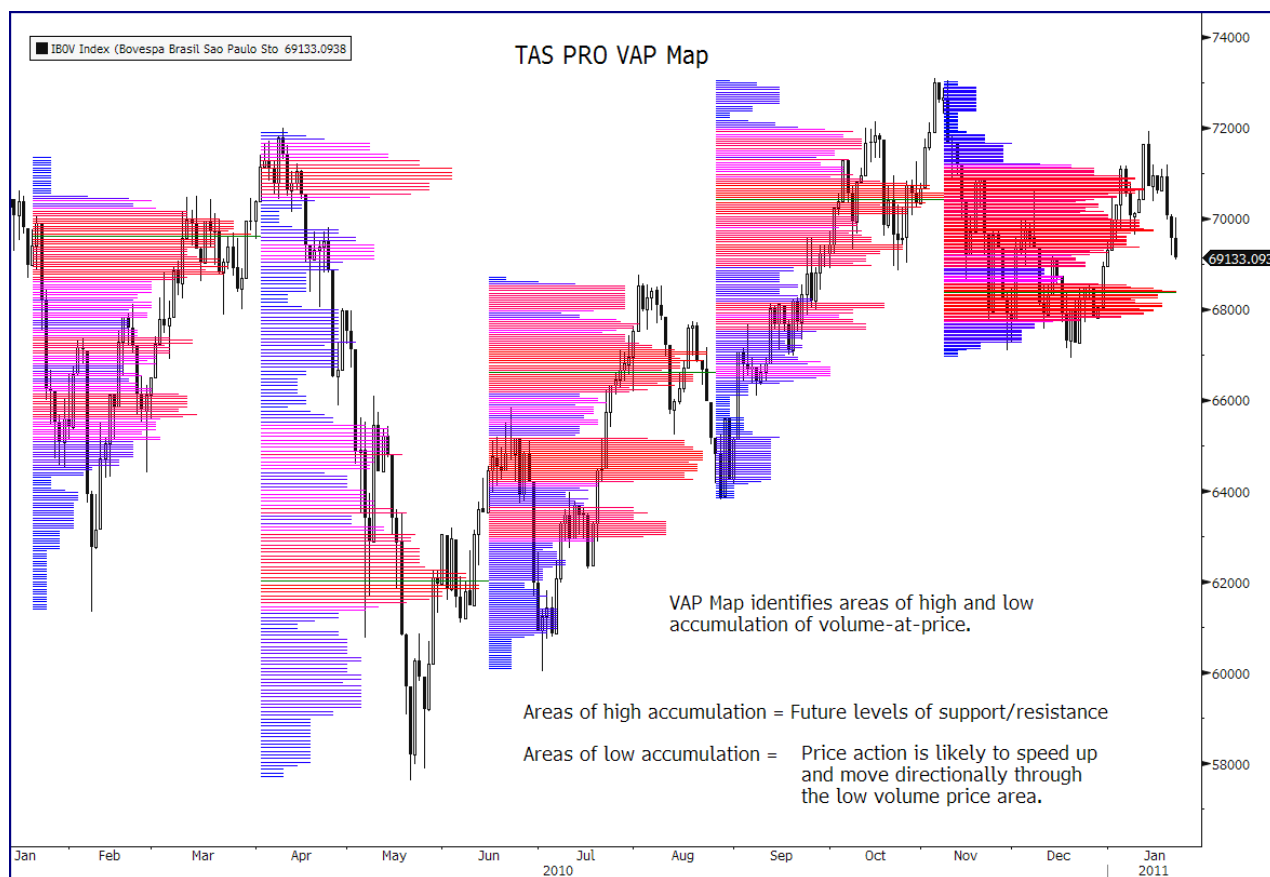

*Chart 5: **TAS PRO Market Map** on the daily IBOV Index with five user-configured distributions*

TAS PRO Dynamic VAP (Boxes) Specifications and Applications

Dynamic VAP *(Dynamic Volume-at-Price)* displays a dynamic representation of developing *balance* and *imbalance* areas by measuring *volume-at-price*, a statistical method for aggregating trading data that has its roots in *Auction Market Theory* and *Market Profile®*. **Dynamic VAP** —profiles are displayed as a series of three horizontal lines. The profiles are calculated based on the price action from the previous profile and new profiles are derived from a proprietary *swing* and momentum algorithm that dynamically calculates the next **Dynamic VAP** profile.

- **Dynamic VAP** is usable on all time frames

- The longer the time frame, the more robust the support and resistance areas are that are identified by the *unfair low* and *unfair high*

- Use to identify low risk, high probability areas to trade while measuring relative volatility

The top/bottom lines of **Dynamic VAP** profiles are the interim *unfair high* and *unfair low* areas, respectively. The middle line represents the *high volume node* or *point of control* which is the area where the most volume occurred in that balanced area.

When price is trading inside **Dynamic VAP** profiles, it depicts an interim state of market *balance*, an area of trade that is deemed fair to both sides. New profiles form after the market moves away from *balance* to *imbalance* when new valuations are detected from market data. When price goes into *imbalance*, either a new set of **Dynamic VAP** profiles will form or price will be pulled back into the existing profiles.
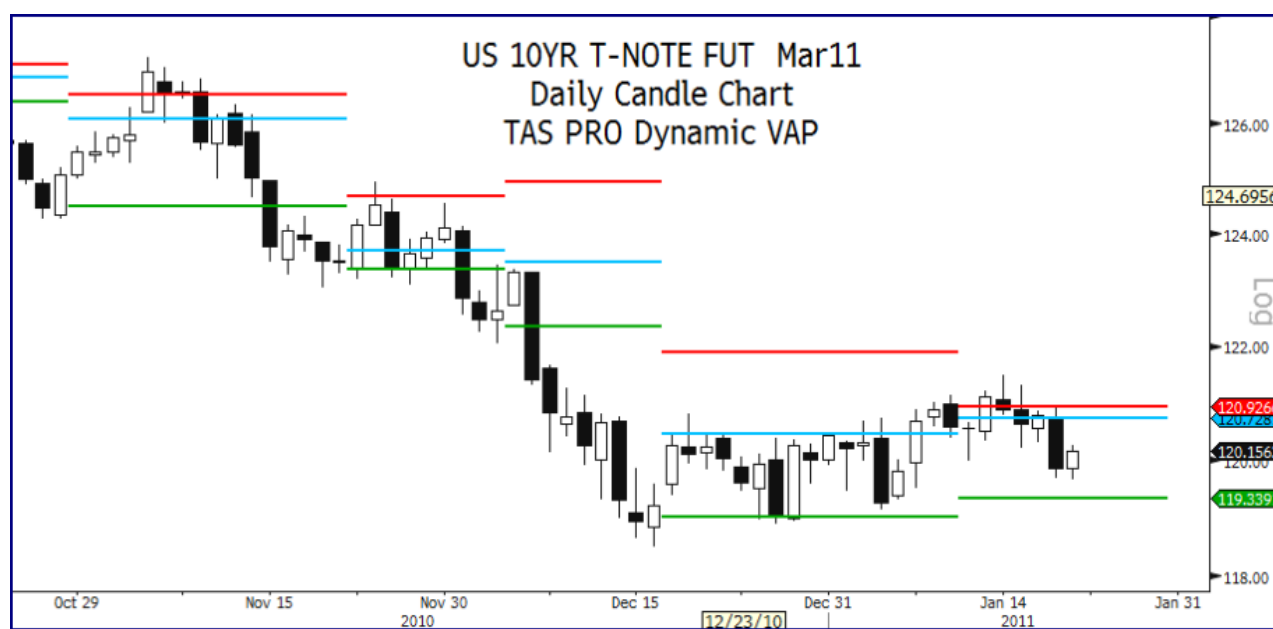

*Chart 12: **TAS PRO Dynamic VAP** on daily US 10-year T-note futures*

Dynamic VAP Configurable Inputs

Signal Strength	Sets the signal strength to be considered when forecasting market *swings*. 1 = weak; 2 = medium; 3 = strong. Default = 2
Momentum Look Back	Sets the look-back period for the momentum oscillator from which *swings* are derived. Default = 7
Look Back Period	Sets the number of bars of data that are used to create the parameters of the **Dynamic VAP** profile. Default = 7

Dynamic VAP Display Settings

Unfair High	Top line indicates the *unfair high* area (**red**)
Point of Control	Center line indicates the *point of control* (*POC*) (**light blue**)
Unfair Low	Bottom line indicates the *unfair low* area (**light green**)

Dynamic VAP Applications

- When price is bracketed inside a **Dynamic VAP** profile, the top line is considered a supply area (resistance) and the bottom line is considered a demand area (support).

- When price moves outside the top of a **Dynamic VAP** profile (a) a *breakout* has occurred; (b) the market bias is directional to the upside; (c) and the relative vertical speed of movement through price levels will likely increase.

- When price moves outside the bottom of a **Dynamic VAP** profile (a) a *breakdown* has occurred; (b) the market bias is directional to the downside; (c) and the relative vertical speed of movement through price levels will likely increase.

- When *breakouts* and *breakdowns* occur above and below **Dynamic VAP** profiles, there is a high probability that the new directional move will remain intact until a new **Dynamic VAP** profile occurs.

- Previous **Dynamic VAP** profiles to the left in the chart are support or resistance areas where the market will either pause and reverse—or pause, consolidate, and then resume the current directional move.

- **Dynamic VAP** profiles that are narrower (top to bottom) area relatively lower volatility states and provide relatively lower risk entry opportunities as contrasted to wider **Dynamic VAP** profiles which are relatively higher volatility states.

- When price is trading inside a **Dynamic VAP** profile, we look to buy the lows in the range and/or short the highs. To improve trading odds in this situation, give directional preference to higher time frame trends.
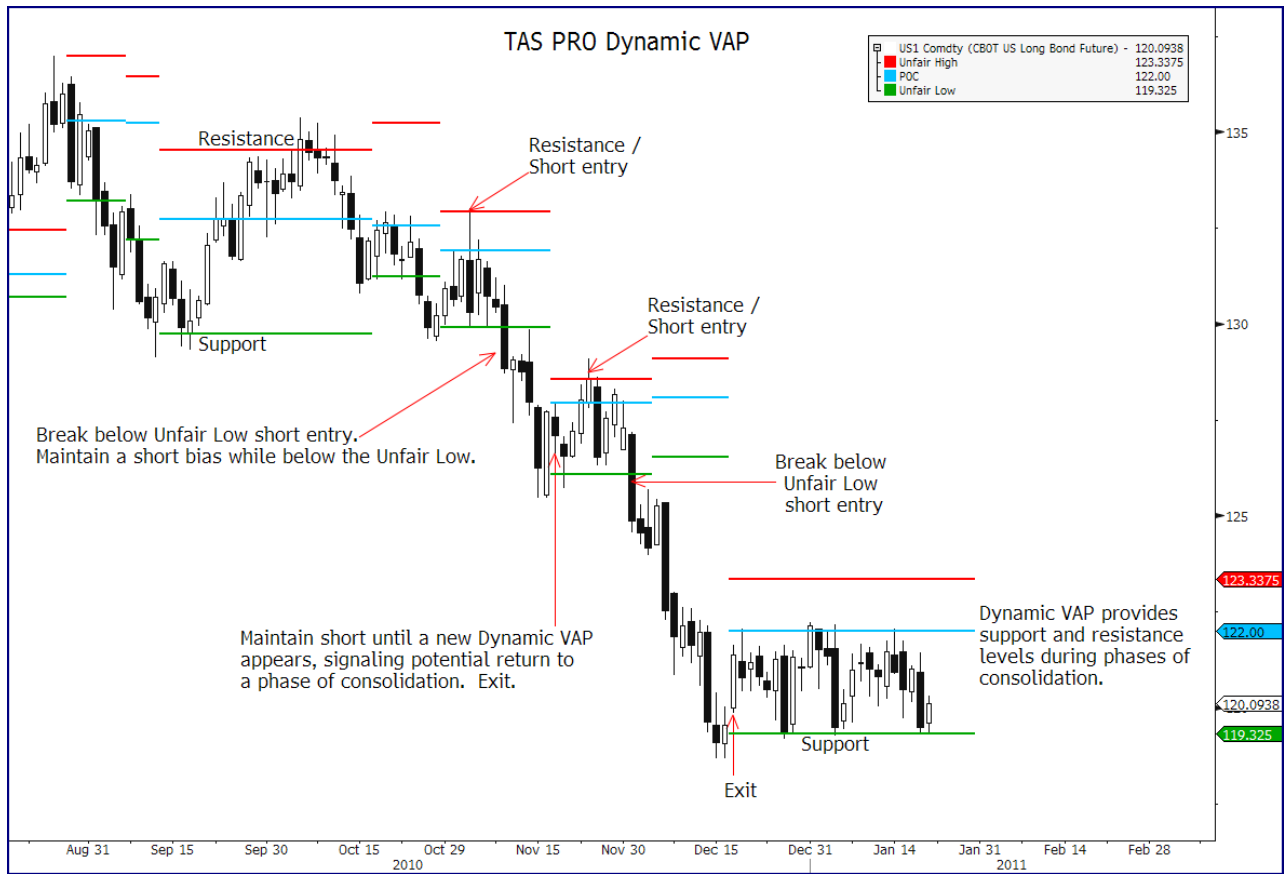

*Chart 13: **TAS PRO Dynamic VAP** on daily US Long Bond futures illuminating dynamic support and resistance areas*

TAS PRO Navigator Specifications and Applications

Navigator is a versatile indicator that combines several signals to assist in managing trades. **Navigator** provides several types of actionable information about underlying trading conditions. **Navigator** is a composite indicator that combines classic trend and volatility indicators to highlight trend, non-trend, momentum, potential exhaustion, and reversal points.

- Rich colorful display of multiple algorithms that is usable on any time frame

- Indicates which side of the trade to be on where there is the highest probability of going in the direction of capital flow—and which side to avoid where there is lesser capital flow

- Measures momentum and relative strength or relative weakness of underlying trend

- Indicates price divergence and peak conditions

- Shows shifts in market conditions from one phase to the next: uptrend, countertrend short, downtrend, and countertrend long
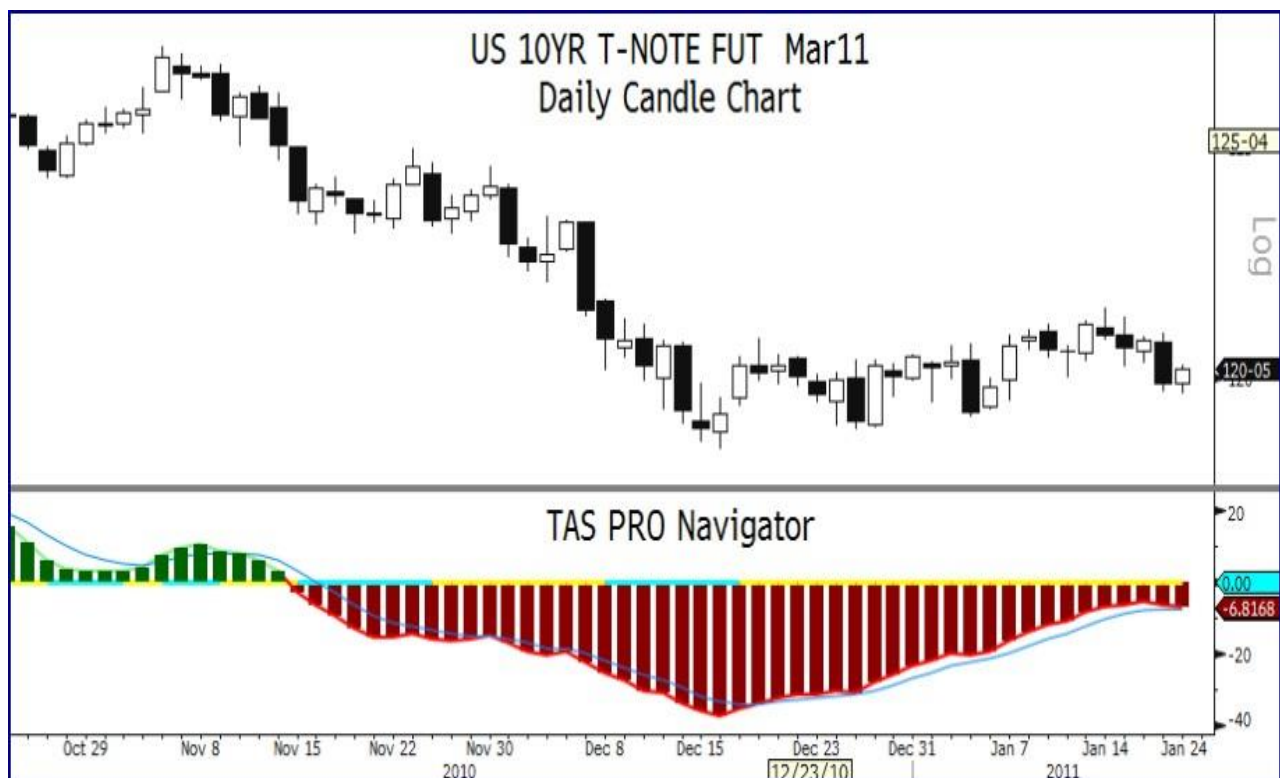

Chart 16: TAS PRO Navigator on daily 10-year T-note futures

Navigator Configurable Inputs

Look Back Period	Sets the look-back period for the *histogram*. Default = 25
Smoothing Slow Average	Slow smoothing factor for *histogram*. Default = 13
Consolidation Look Back	Sets the look-back period for calculating market consolidation state which is displayed on center, zero-line. Default = 10
Consolidation Standard Deviation	Sets the standard deviation for calculating market consolidation state which is displayed on center line. Default = 2

Navigator Display Settings

Trending vs. Consolidating	Provides a reference point for larger momentum shifts. **Aqua** indicates the market is supply *imbalanced* and is trending; **yellow** indicates that the market is supply *balanced* and moving sideways.
Momentum Histogram	*Histogram* displaying trend vs. non-trend states plus momentum. Refer to the following **Momentum Histogram** color legend.
Momentum Line	Momentum confirmation line that changes from **green** to **red** to give early warning of trend direction shift from long to countertrend short— and short to countertrend long.
Histogram Moving Average	Slow moving average of the *histogram* that displays a relative measure of the overall levels of buying and selling. (**blue**)

Momentum Histogram Color Legend: The *histogram* is comprised of vertical bars plotted above and below a horizontal ‒zero-line‖ that are color-coded to provide the following information:

GREEN	Confirmed uptrend: Higher highs in the *histogram* indicate that the current directional move to the upside is continuing to gain momentum.
RED	Confirmed downtrend: Lower lows in the *histogram* indicate that the current directional move to the downside is continuing to gain momentum.
DARK GREEN	Upside momentum is slowing. Potential countertrend short area.
DARK RED	Downside momentum is slowing. Potential countertrend long area.
MAGENTA	High probability peak uptrend or peak downtrend condition, following uptrends or downtrends, respectively.

Navigator Applications

- When the **Navigator** *histogram* is **green** or **red**, a long or short trend, respectively, is in place.

- When the **Momentum Histogram** switches color from **green** to **dark green**—or **red** to **dark red**, trend momentum is slowing and countertrend trade opportunities may be indicated.

- **Magenta** bars indicate trend exhaustion / peaking trend conditions and potentially indicate the end of a trend. This is a relatively high probability event however, traders may want to time their exits using other **TAS PRO Indicators**, such as **Dynamic VAP** or **Dynamic TAP**.

- Use the color-coded zero line to quickly assess relative volatility as well as identify broader areas of support and resistance. **Yellow** indicates a market that is supply *balanced*; **cyan** indicates a market that is supply *imbalanced*.

- Relative peaks of the **Momentum Histogram** will provide further insight on momentum. Consecutive *histogram* peaks further away from zero line indicate increasing momentum where consecutive peaks closer to the zero line indicate decreasing momentum.
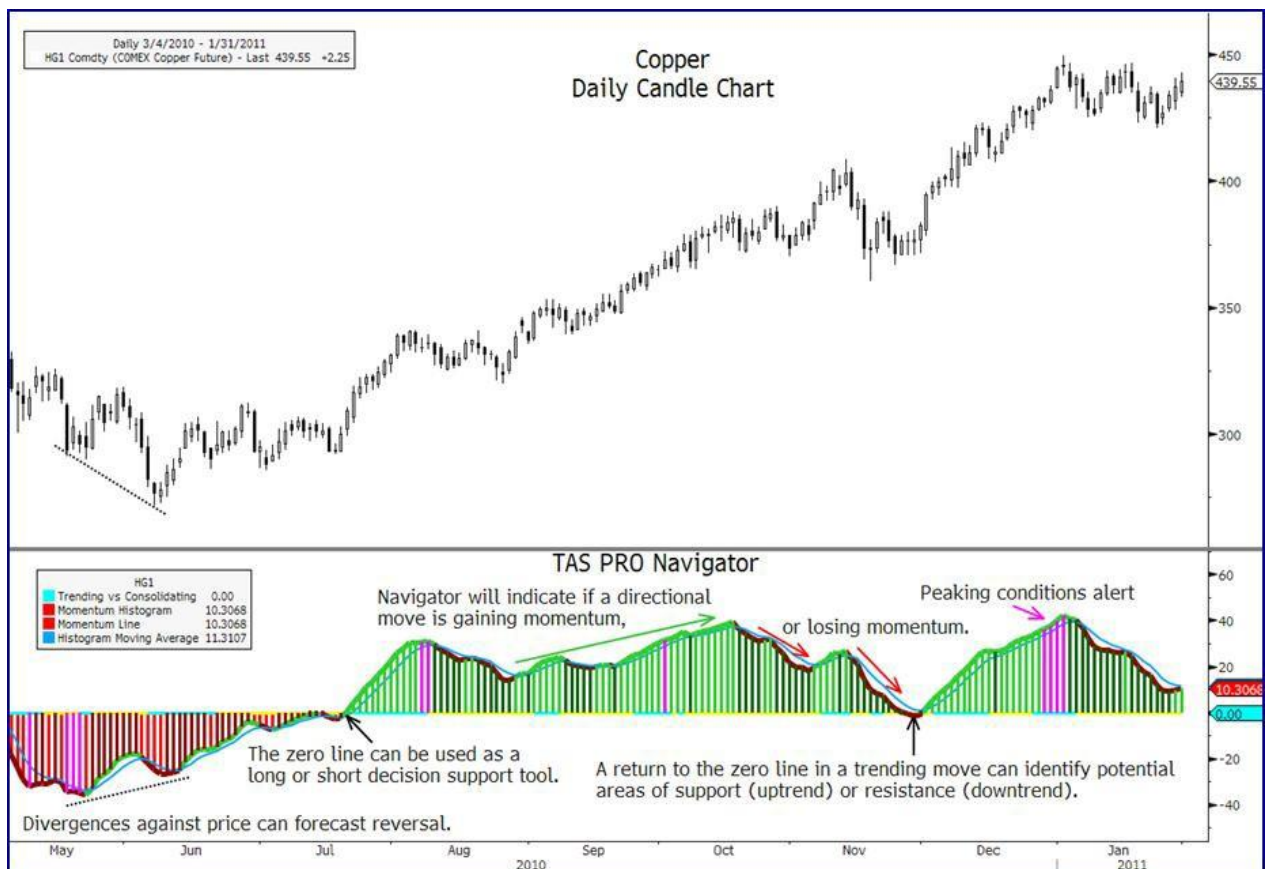

*Chart 17: **TAS PRO Navigator** on daily DJIA illuminating directional bias and momentum indications*

TAS PRO Statics Specifications and Applications

Statics *(Static Price Compression Levels)* use price and volume analysis, volume aggregation, and multiple time frame confluence to calculate and display multiple areas that have a high probability of providing support and resistance. These levels of support and resistance are appropriate for use as intraday entry levels as well as intraday exit targets.

- **Static** levels are set upon the open of the trading session and remain at the same levels (hence, –static) throughout the session

- **Static** levels are algorithmically determined using daily data or a defined time range within a 24-hour period

- Applicable only to intraday charts of all time frames

- Provides information for determining support and resistance levels, as well as potential intraday trading targets in either direction
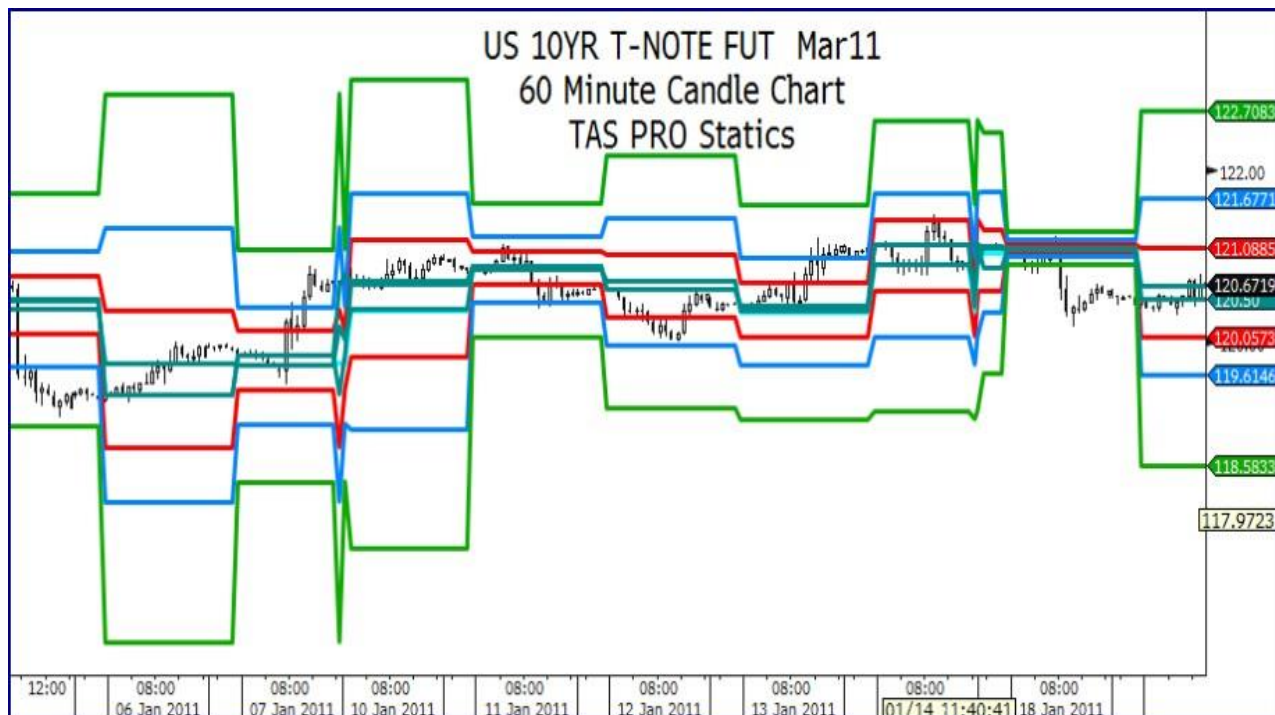

*Chart 18: **TAS PRO Statics** on intraday US 10-year T-note futures*

Statics Configurable Inputs

Exclude Weekends	Sets toggle to exclude or include weekends. Default = checked

Configuration Notes:

- Statics are only affected by changing the opening and closing time parameters for the trading session displayed or by toggling the **Exclude Weekends** setting

Statics Display Settings

Resistance 1	Displays first resistance line (**red**)
Resistance 2	Displays second resistance line (**light blue**)
Resistance 3	Displays third resistance line (**light green**)
Support 1	Displays first support line (**red**)
Support 2	Displays second support line (**light blue**)
Support 3	Displays third support line (**light green**)
Pivot Price Projection	Displays a price *pivot* projection (**cyan**)
Today's Open	Displays today's open (**aqua**)
Yesterday's Close	Displays yesterday's close (**aqua**)
TAS PRO Pivot	Displays a modified *pivot* point calculation (**aqua**)

- **Statics** display up to 10 user-selectable horizontal lines of trading information

- The first areas of support and resistance are plotted as **red** lines on either side **Pivot Price Projection** line

- **Light blue** lines above and below the **red** lines are the next projected resistance and support areas, respectively

- **Light green** lines above and below the **light blue** lines are the next projected resistance and support areas, respectively

Statics Applications

- **Note:** We collectively refer to **Pivot Price Projection, Today's Open, Yesterday's Close, and TAS PRO Pivot** (the four center **cyan** / **aqua** lines) as **"Center Lines"**

- When price is trading *inside* **Center Lines**, a market is said to be balanced.

- When price is trading *below* **Center Lines**, market bias is anticipated be to the downside.

- When price is trading *above* **Center Lines**, market bias is anticipated be to the upside.

- Use **Statics** as a guide to multiple intraday support and resistance levels for both entries and targets.

- **Red Statics** are projected rotational highs and lows. When price is trading outside **red Statics**, markets are considered to be trending.

- A tightly compacted concentration or overlapping of **Center Lines** designates an area of particularly strong support/resistance levels that provide a high probability, lower relative risk area for entries of extended directional moves.

- When **Center Lines** are spread out over a wider range, watch for a more rotational and less directional trading session.

- If a **Center Line** is plotted outside of a **red** line, the market will often be biased in the same direction as that **Center Line**.
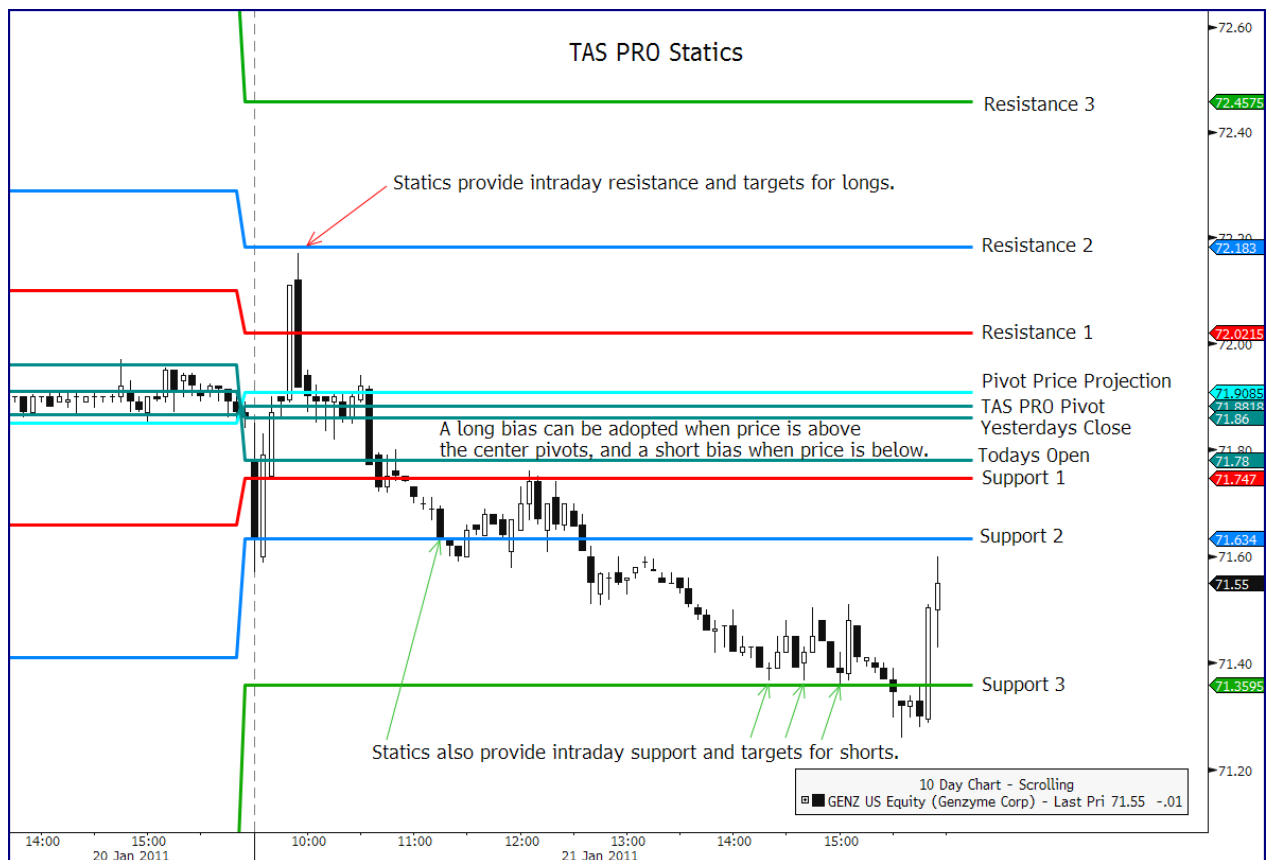

*Chart 19: **TAS PRO Statics** on intraday US 10-year T-note futures highlighting various trading tactics around the levels*

TAS PRO Floaters Specifications and Applications

Floaters *(Floating Dynamic Profiles)* are dynamic indications of support and resistance which self adjust and adapt to varying market conditions. **Floaters** are calculated from current price where a swing is occurring back to the price at the last swing. **Floaters** adjust based on a proprietary swing and momentum algorithm that dynamically calculates the next **Floater** levels.

- Use to determine dynamic –floating support and resistance
- Applicable to charts of any time frame
- Provides information for determining potential day trading targets in either direction
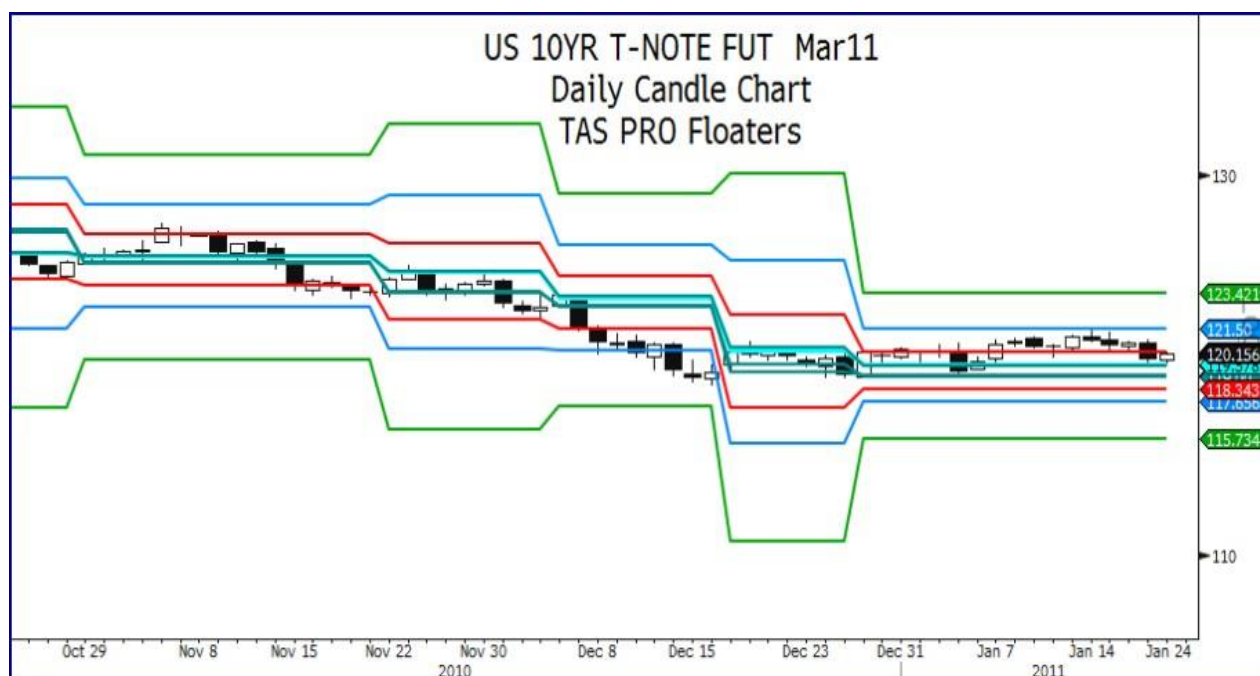

*Chart 20: **TAS PRO Floaters** on daily US 10-year T-note futures*

Floaters Configurable Inputs

Signal Strength	Sets the signal strength to be considered when forecasting market *swings*. 1 = weak; 2 = medium; 3 = strong. Default = 1
Momentum Look Back	Sets look-back period for the momentum oscillator from which *swings* are derived. Default =8

Floaters Display Settings

Resistance 1	Displays first resistance line (**red**)
Resistance 2	Displays second resistance line (**light blue**)
Resistance 3	Displays third resistance line (**light green**)
Support 1	Displays first support line (**red**)
Support 2	Displays second support line (**light blue**)
Support 3	Displays third support line (**light green**)
Pivot Price Projection	Displays a price *pivot* projection (**cyan**)
Current Swing Open	Displays the open of current swing (**aqua**)
Prior Swing Close	Displays the close of the prior swing (**aqua**)
TAS PRO Pivot	Displays a modified *pivot* point calculation (**aqua**)

- **Floaters** display up to 10 user selectable horizontal lines

- The first areas of support and resistance are plotted as **red** lines on either side of the **Pivot Price Projection** line

- Outside the **red** lines, support and resistance areas are designated by **light blue** lines

- Outside the **light blue** lines, support and resistance areas are designated by **light green** lines

Floaters Applications *(Also see Trading Applications for Floaters Section)*

- **Note:** We collectively refer to **Pivot Price Projection, Today's Open, Yesterday's Close, and TAS PRO Pivot** (the four center **cyan**/**aqua** lines) as **"Center Lines"**

- Use **Floaters** as support and resistance areas for both entries and targets.

- When price is trading inside **Center Lines**, the market is said to be balanced.

- When price is trading below **Center Lines**, the market bias should be to the downside.

- When price is trading above **Center Lines**, the market bias should be to the upside.

- When **Center Lines** are spread out over a wider range, watch for a more rotational and less directional trading session.

- A tightly compacted concentration or overlapping of **Center Lines** designates an area of particularly strong support/resistance levels that provide a high probability, lower relative risk area for entries of extended directional moves.

- **Red Floaters** are projected rotational highs and lows where. Anticipate buying the lows and shorting the highs of the range, giving preference to the trend in the next higher time frame(s).

- Above **Resistance 1** and below **Support 1** (**red Floaters**), markets are considered to be trending.
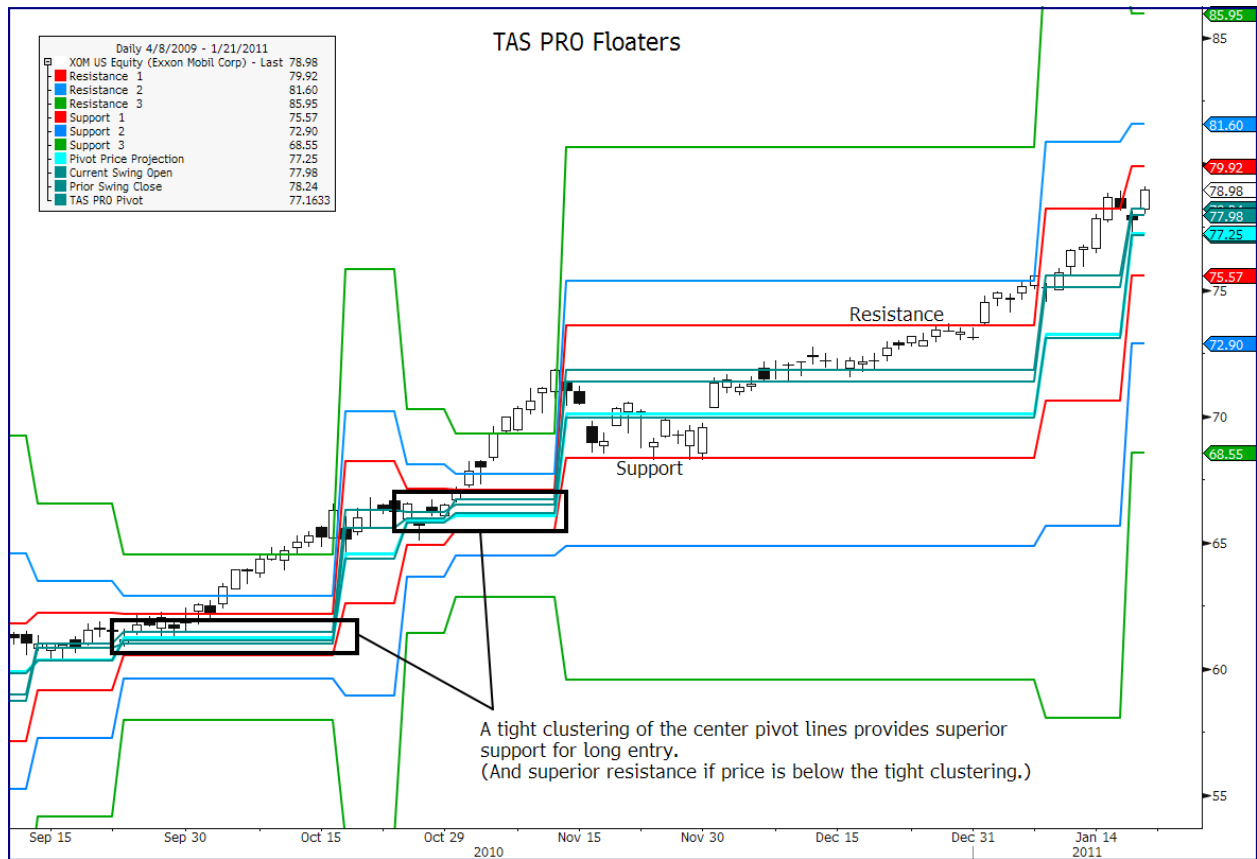

Chart 21: ***TAS PRO Floaters*** *on daily XOM US Equity displaying* ***TAS PRO Floating Walls*** *(the clustered support levels)*
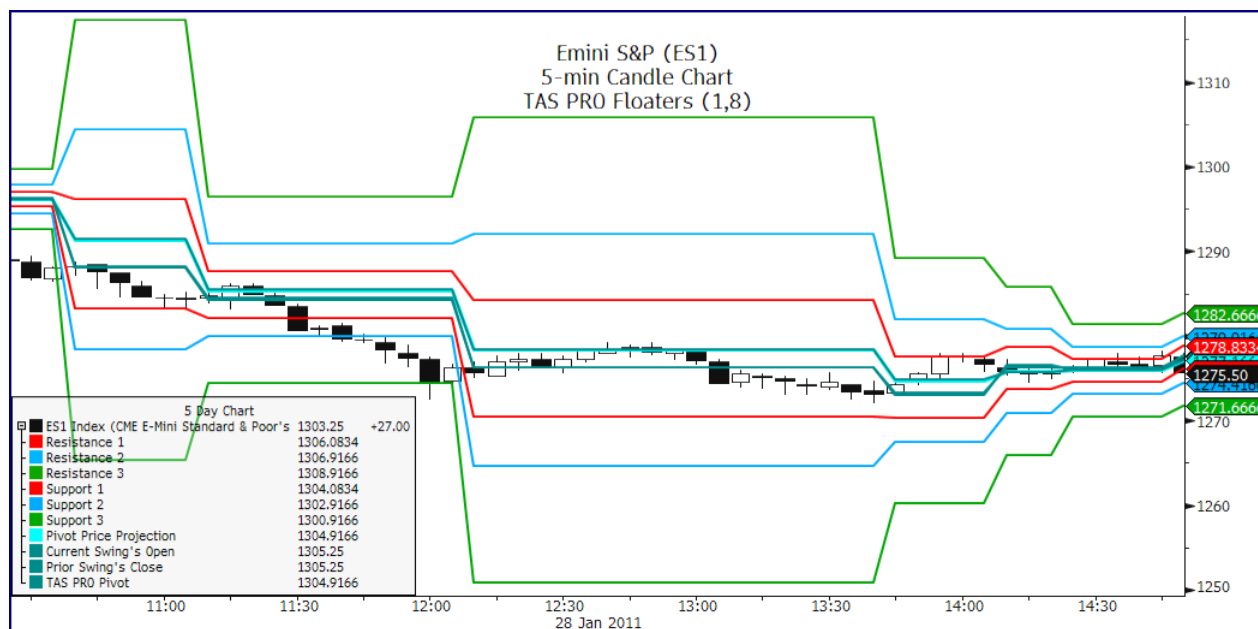
Trading Applications for TAS PRO Floaters

*Chart 22: **TAS PRO Floaters** on 5-minute S&P futures*

Floaters Floating Wall Trading Concept

- **Trading Concept:** We collectively refer to **Pivot Price Projection**, **Current Swing Open**, **Prior Swing Close**, and **TAS PRO Pivot** as **"Center Lines".** A **TAS PRO Floating Wall** formation takes place when all of the **Center Lines** converge in a very tight range creating a very narrow price range and give the effect of a ―wall‖ / ceiling of resistance (supply) or a ―wall‖ / floor of support (demand).

- **Long Entry:** If price is trading above a **Floating Wall**, then we observe price action as it comes into this support (demand) area. If the market is up trending, then an entry would be to buy the security when it trades into or at the **Floating Wall**.

- **Short Entry:** If price is trading below a **Floating Wall**, then we observe price action as it comes into this overhead resistance (supply) area. If the market is in a down trending day, then an entry would be to sell the trading instrument when it trades into or at **Floating Wall**.
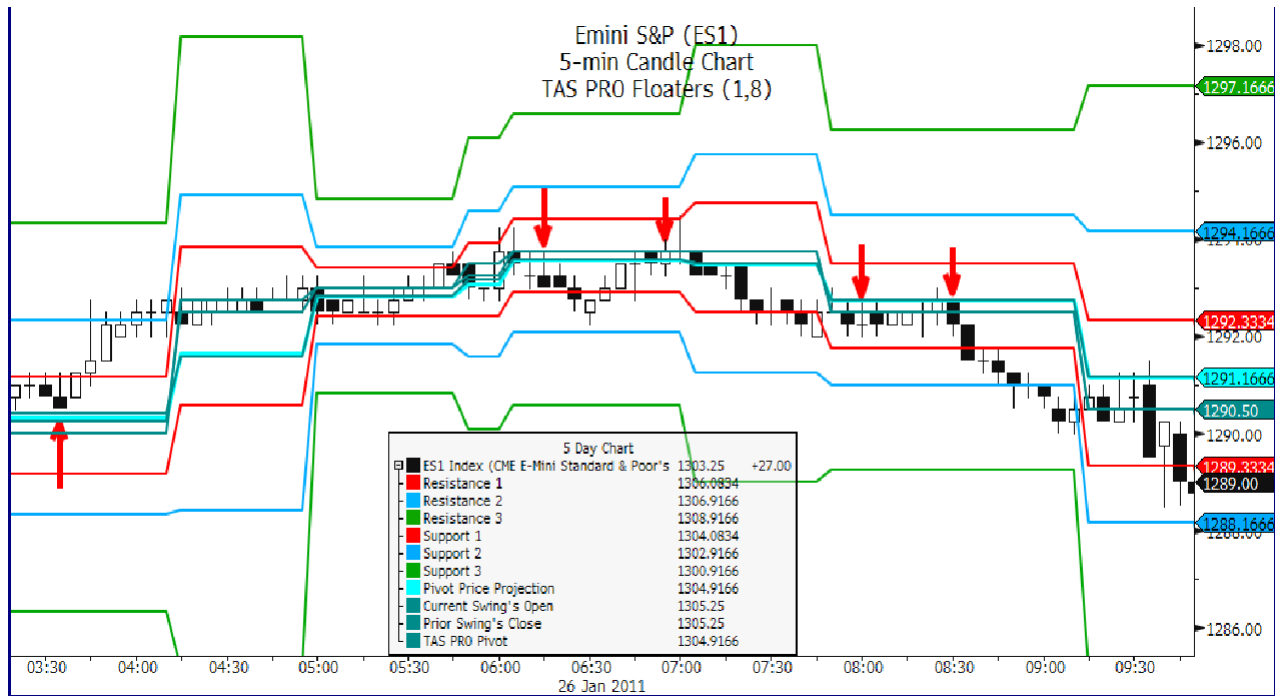
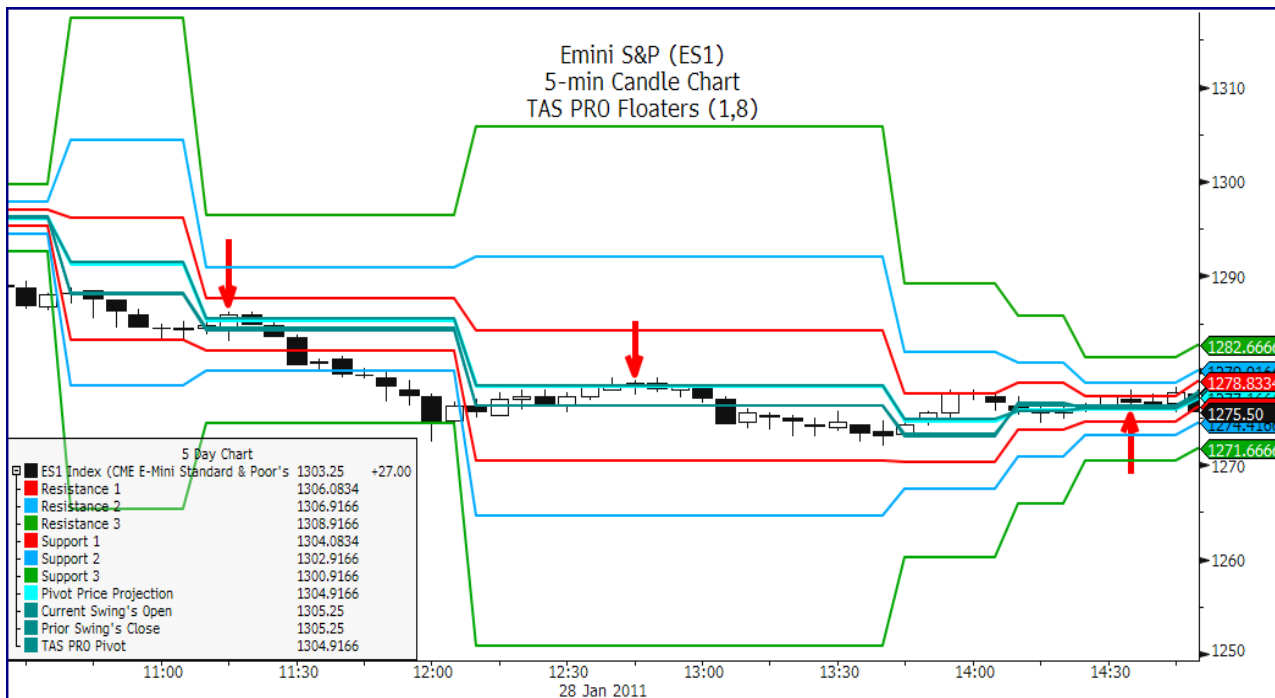*Chart 23: **TAS PRO Floaters** with **TAS PRO Floating Wall** formation (see **red** arrows) on 5-minute S&P futures*

*Chart 24: **TAS PRO Floaters** with **TAS PRO Floating Wall** formation (see **red** arrows) on 5-minute S&P futures*

Floaters Step-up Trading Concept

- **Trading Concept:** In a strong up trending market, **Floaters** lines will each step up (shift to higher price values) when a new indication is triggered by the algorithm. This means that each **Floater** will move to a higher value than the previous one.

- **Long Entry (a):** If the market is in a very strong uptrend, consider a long entry when the security trades pulls back into the **Price Pivot Projection** line from above.

- **Long Entry (b):** In a step up condition on an average strength day, consider a long entry when the security pulls back to **Support 1** from above which the first major support (demand) area.
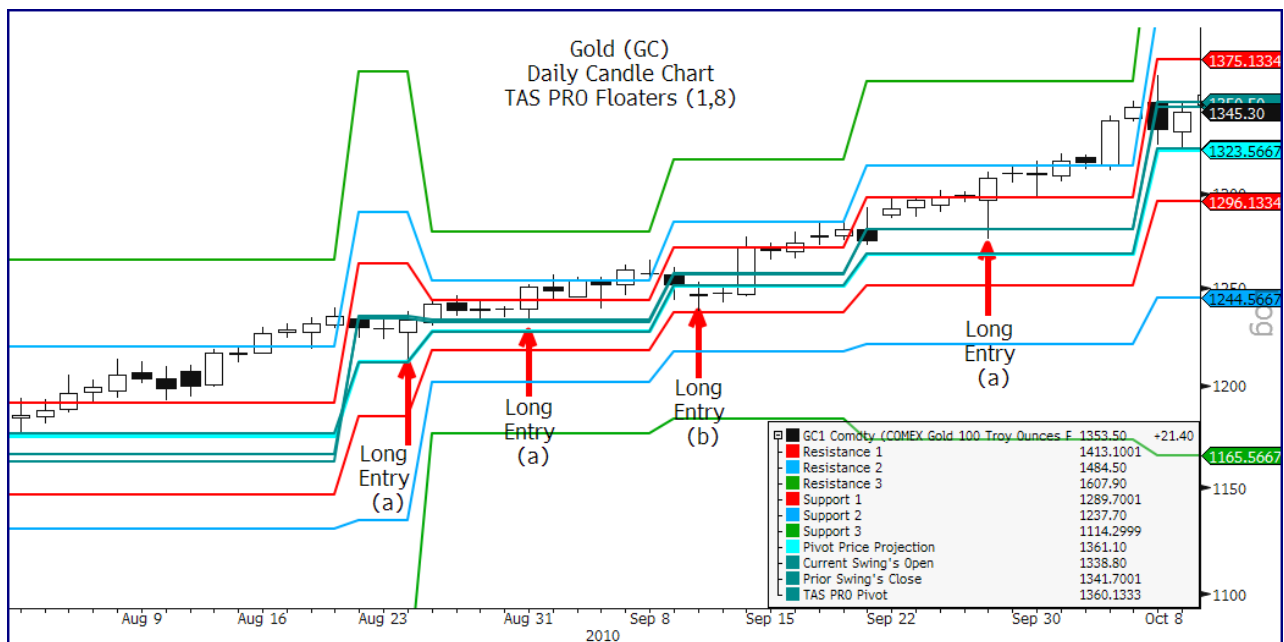

*Chart 25: **TAS PRO Floaters** with Step-up Concept (see **red** arrows) on daily chart of gold futures*

Floaters Step-down Trading Concept

- **Trading Concept:** In a strong down trending market, **Floaters** lines will each step down (shift to lower price values) when a new indication is triggered by the algorithm. This means that each **Floater** will move to a lower value than the previous one.

- **Short Entry (a):** If the market is in a very strong downtrend, consider a short entry when the security rallies into the **Price Pivot Projection** line from below.

- **Short Entry (b):** In a step down condition on an average strength day, consider a short entry when the security rallies into **Resistance 1** from below which the first major resistance (supply) area.
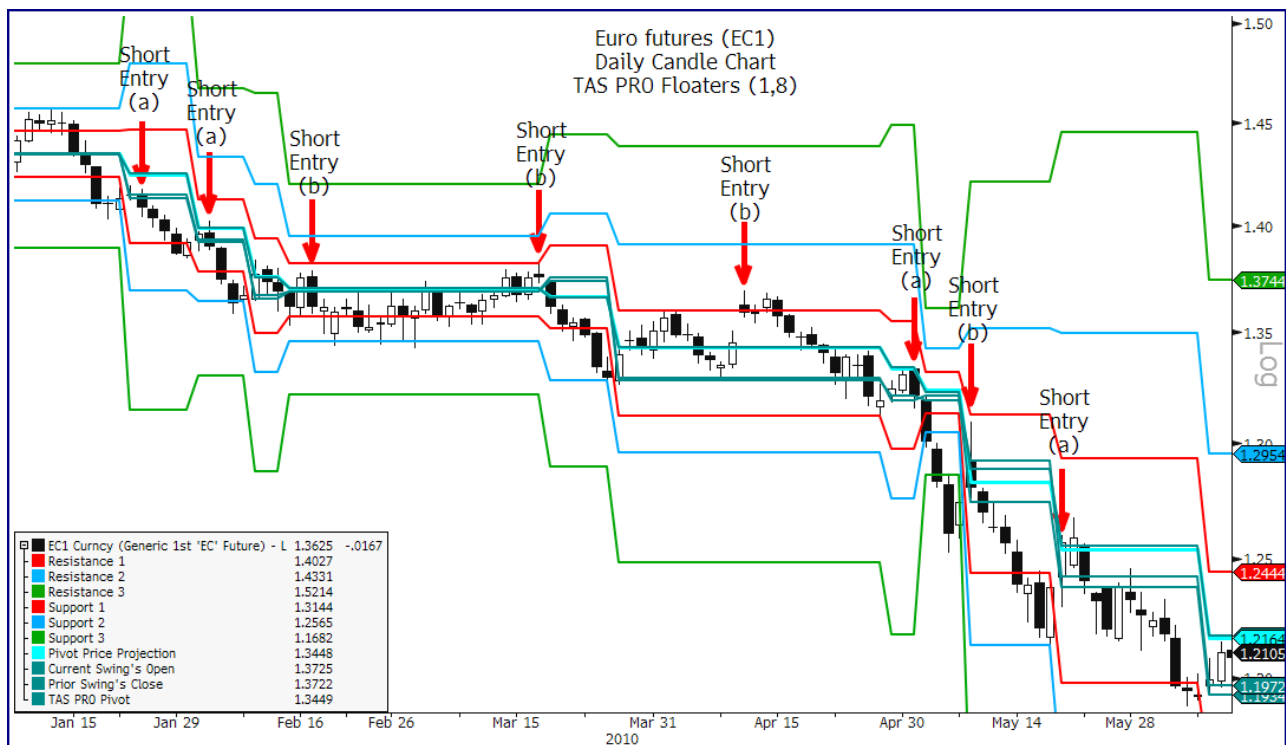

*Chart 26: **TAS PRO Floaters** with Step-down Concept (see **red** arrows) on daily Euro futures*

Floaters Key Area Trading Concept

- **Trading Concept:** A simple way to identify key trading areas in advance is to use the **Market Map** or the **Dynamic VAP** indicators on a higher time frame. When a key area is defined but counter to the trend underway, **Floaters** can help you determine the best entry—or whether or not to pass on entering a trade at that key area.

- **Long Entry (a):** When a key trading area from a higher time frame aligns with either **Support 1** or **Support 2**, a long entry is indicated when price pulls back into these areas from above.

- **Long Entry (b):** When a key area defined on a higher time frame is in between any two **Floater Support** levels, then waiting for a new set of **Floaters** and for price to trade above the **TAS PRO Pivot** first is recommended.

- **Short Entry (a):** When key trading areas from a higher time frame align with either **Resistance 1** or **Resistance 2**, a short entry is indicated when price rallies into these areas from below.

- **Short Entry (b):** When a key area defined on a higher time frame is in between any two **Floater Resistance** levels, then waiting for a new set of **Floaters** and for price to trade under the **TAS PRO Pivot** first is recommended.
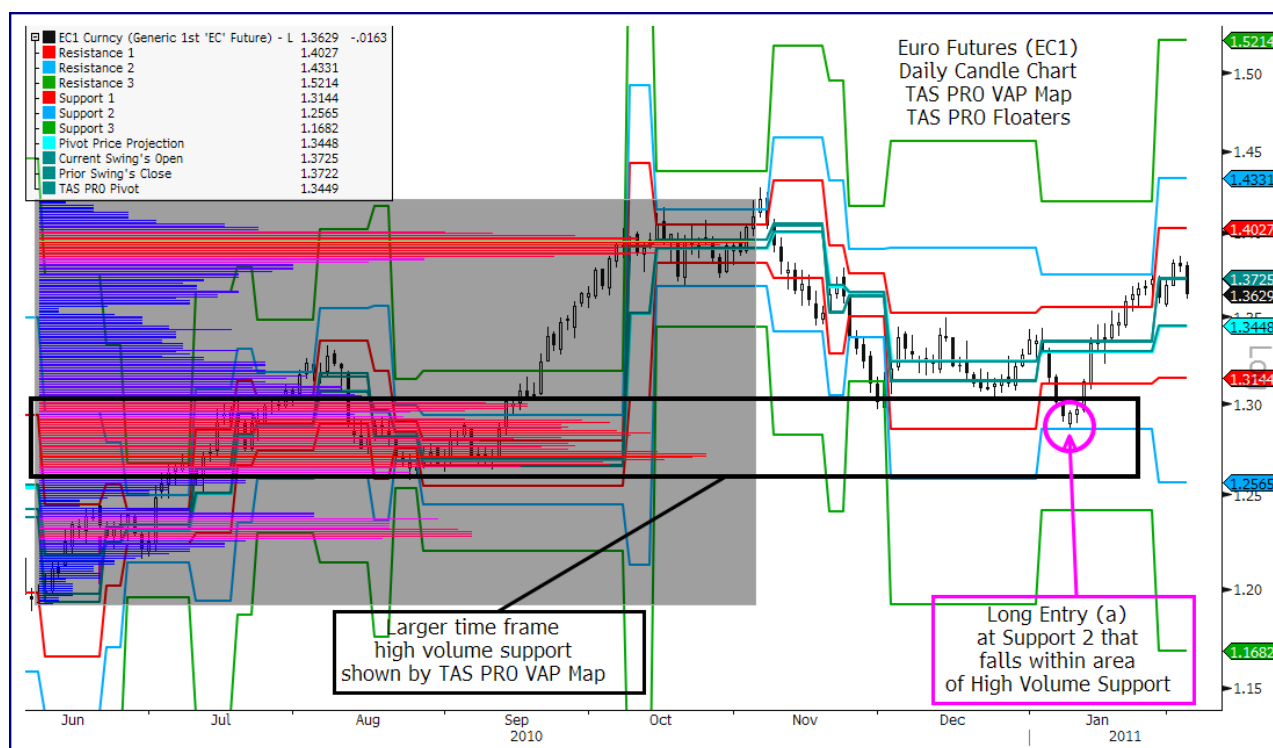

Chart 27: TAS PRO Floaters combined with TAS PRO MARKET MAP to locate key area on daily Euro futures

Floaters Rotational Market Entry Trading Concept

- **Definition:** A *rotational market* is defined as a market that moves back and forth between two supply and demand areas creating a trading range.

- **Entries (a):** A sign of a rotational market is when **Floaters** do not change values but remain horizontally fixed in place over a relatively long period of time. Depending on the height of the **Floater's** range, entries can be timed to sell at or near **Resistance 1** (supply) and buy at or near **Support 1**.

- **Entries (b):** If the height of **Floaters** range is narrow or contracted, then time the entry to sell at or near **Resistance 2** and to buy at or near **Support 2.** When the range is narrow, the probability of price breaking out of the **Floater's** range increases.
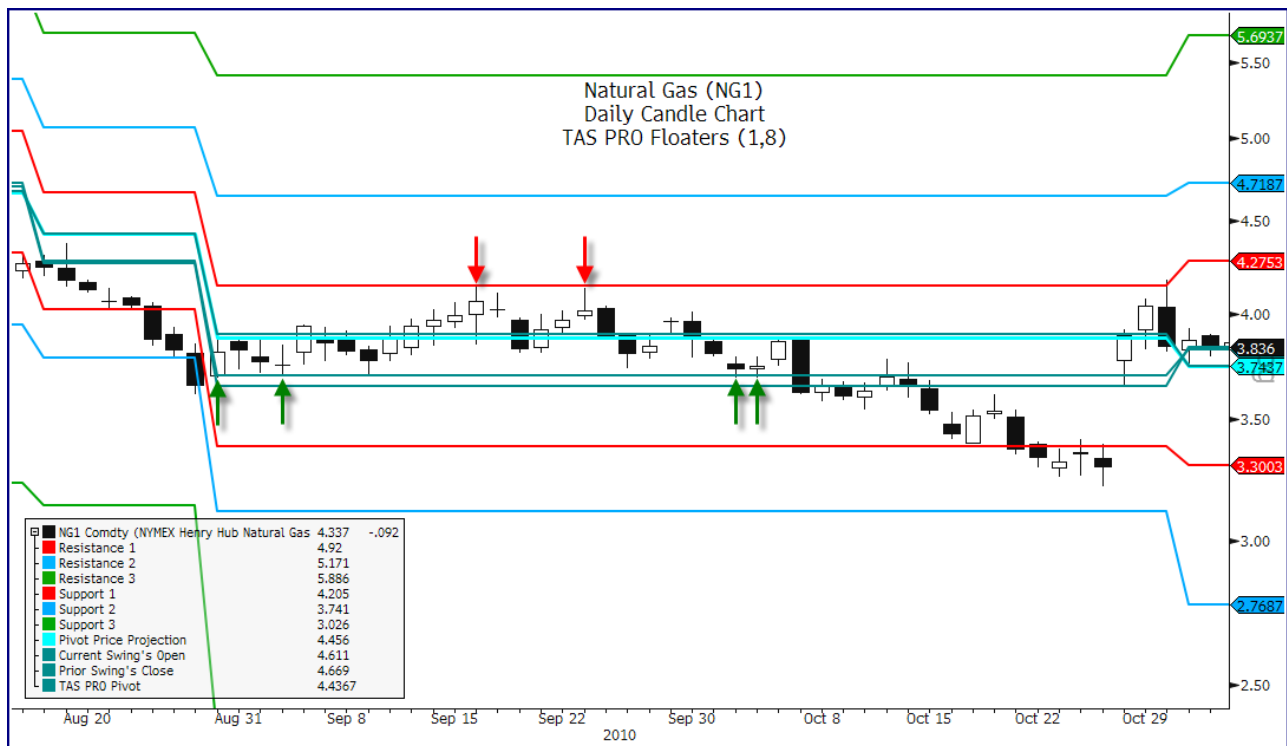

*Chart 28: **TAS PRO Floaters** on daily Natural Gas futures highlighting rotational market trading tactics*

TAS PRO i-Ratio Specifications and Applications

i-Ratio is a leading indicator which helps with the forecasting of short-term price movements. It is best used for gauging target areas for entry and exits points.

- Designed to identify when price movement is not confirmed by volume and volatility in market moves where price lacks momentum, conviction, and follow through.

- Levels are determined using daily data or a defined time range within a 24-hour period. However, **i-Ratio** is applicable for intraday charts only.

- Provides helpful information for determining potential day trading targets in either direction.
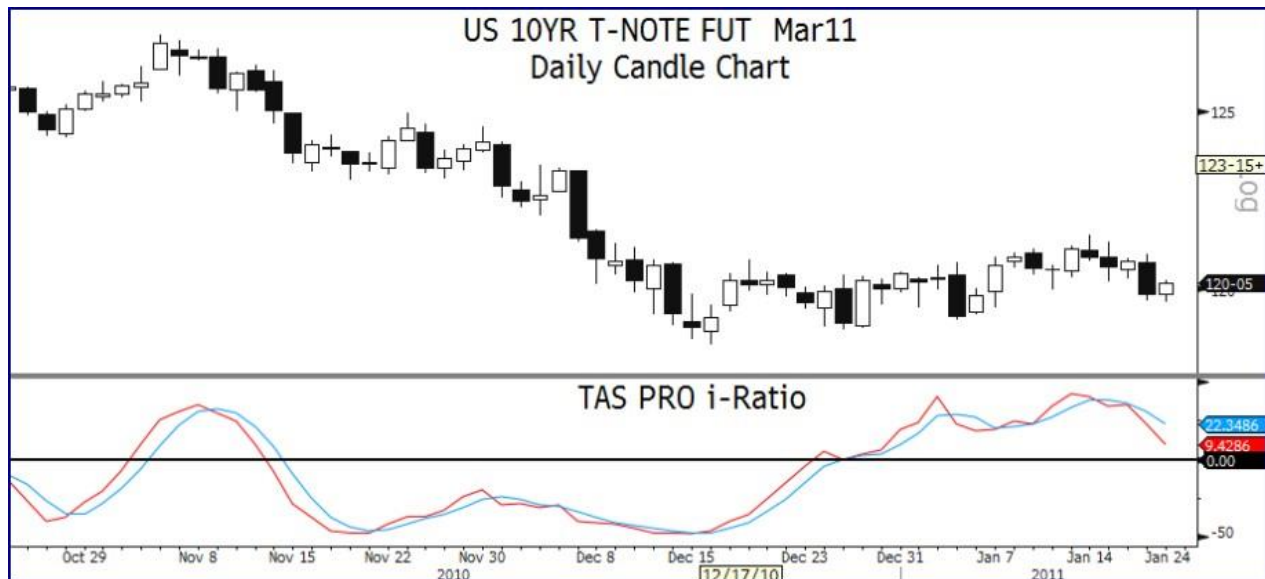
Chart 33: TAS PRO i-Ratio on daily US 10-year T-note futures

i-Ratio Configurable Inputs

Look Back Period	Sets the desired look-back period. Default = 10
Moving Average	Smoothing factor. Default = 3

Configuration Notes:

- As a rule of thumb, **Look Back Period** should be twice (or more) the **Moving Average** setting, for example 6/3 or 8/4.

- Faster time charts may prefer slower indicator settings for smoother readings, for example, on 30-minute charts the settings for **Look Back Period** and **Moving Average** could be 10/5 or 16/8, respectively.

i-Ratio Display Settings

Ratio	Displays the i-Ratio (red)
Moving Average	Displays the moving average of i-Ratio (light blue)

- **i-Ratio** is displayed in the form of a stochastic indicator format using the overbought/ oversold scale reading. Readings of +40 are considered overbought, -40 as oversold.

- i-Ratio is best used in conjunction with our other indicators for maximum accuracy.

- **i-Ratio** is effective for traders trying to identify entry points in live active trade where price is making a new higher low or lower high. This is especially true for securities that are notorious for –camouflaging subtle areas that often offer relatively lower-risk entry points.

i Ratio Applications *(refer to Chart 34 on the following page)*

- **i-Ratio** is most helpful at confirming price when price may be at an area of divergence to locate and target higher probability entries and exits.

- As a rule of thumb, price should move freely in same direction of indicator and in proportionate range of movement.

- When price fails to move proportionately, as much as **i-Ratio** moves or stalls, then look for divergence relative to other key areas of support or resistance using other **TAS PRO Indicators** such as **Navigator**, **Statics**, **Market Map**, etc.

- When **i-Ratio** reaches an overbought reading, be on the alert for price to follow through—or not. Moreover, watch for price to stall in choppy *rotational* trade until the inflection point is reached.

- When price stalls and **i-Ratio** does not stall, this is a good indication to seek other confirming factors for a counter-trend trade. Use other **TAS PRO Indicators** for confirmation such as **Navigator**, **Statics**, and **Market Map**.

E-mini S&P (ES)
5 minute Candle Chart

5 Day Chart
ES1 Index (CME E-Mini Standard & Poor's 1282.25 -7.25

TAS PRO i-Ratio

ES1
Ratio   40.3226
Moving Average 45.7641

i-Ratio not
confirming
new price high

i-Ratio not
confirming
new price low

20 Jan 2011

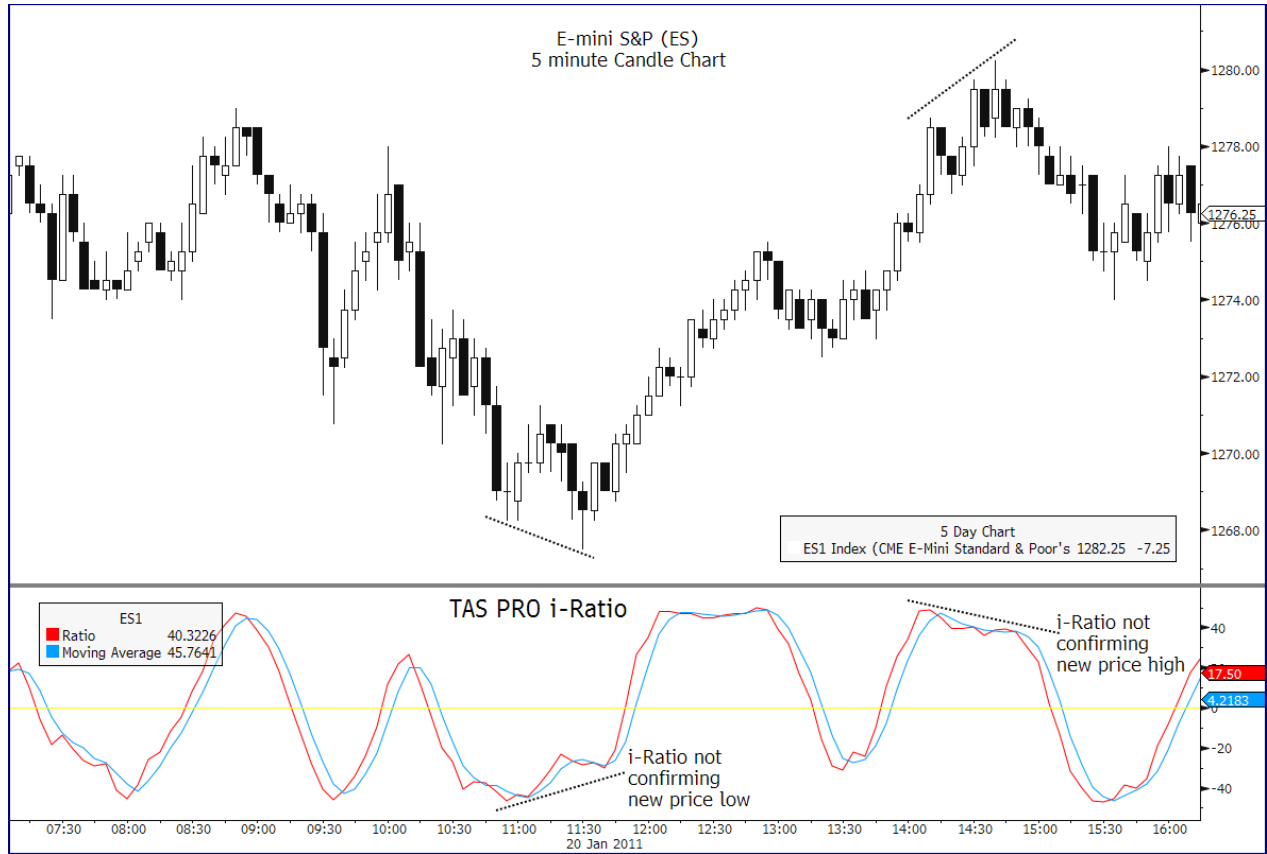*Chart 34: **TAS PRO i-Ratio** on 5-minute S&P futures highlighting potential long and short areas*

TAS PRO Vega Specifications and Applications

Configurable Inputs

Lookback period	Sets the number of bars of data used to create the parameters of the Dynamic Boxes profile. Default = 7
Signal Strength	Sets the signal strength to be considered when forecasting market swings. 1 = weak; 2 = medium; 3 = strong. Default = 2
Velocity Lookback	Sets the look back period for the momentum oscillator from which swings are derived. Default = 7
Boxes Back	This setting determines how may Dynamic Boxes are used to look back for the range of the breakout. Default = 3

Compression Threshold	Set the compression threshold when VEGA is searching for breakout/breakdown opportunities. Default = 100
Profits ATR Pct	Allows for users to specify the required move above/below the initiation level to turn-on the **TAS ProfitWatch Scanner**. Lower inputs will force VEGA to close a position that is unprofitable more quickly, preventing false breakouts/breakdowns from being held. Higher inputs will allow for a bit more noise in the price and fewer trades, but may also cause higher losses as stop losses may come into play more often. (The shorter the timeframe, the lower the desired input. As an example, you may choose to use 0.10 for a 60 minute chart) Default = .25
Stops ATR Pct	Allows for users to specify the risk for moves against the trend. This will set how much downside risk is allowed before a stop is initiated. Default = 2.5
ATR Length	The average true range length period used for volatility Default = 27
Long Trades On	Choose to show Long Trading Trends. Default = TRUE
Short Trades On	Choose to show Short Trading Trends. Default = TRUE
Stop on Touch	This is allows the users to choose if Stop Loss levels are set on the Close of the bar on a touch. Set this to TRUE for Touch or FALSE for Close. Default = False

Trading Application Concepts Using the TAS PRO Indicator Suite

In this section we will review a variety trading applications using the **TAS PRO Indicator Suite**. Each application article uses a consistent format that overviews the trading situation and premise, as follows:

Trading Concept	**Trading a Balanced Profile**
Instrument Traded / Time Frame	EURUSD / 240-minute chart
Indicators Used	TAS PRO VAP Map, TAS PRO Floaters, and TAS PRO Navigator
Market Characteristics	The market is exhibiting a multi-day *balanced* stated that is denoted by a wide-range VAP Map that has an evenly distributed *high volume node*
Trading Premise	Until the next market *imbalance* occurs, trade the established range

Then, following an annotated chart of the trading application, each article discusses the following concepts related to the application:

- Trading Concepts
- Market Observations
- Trading Plan
- Trading Timing

We will be adding to this section periodically in the printed version of this manual as well as posting new application articles as they become available.

Trading Application: Trading a Balanced Profile

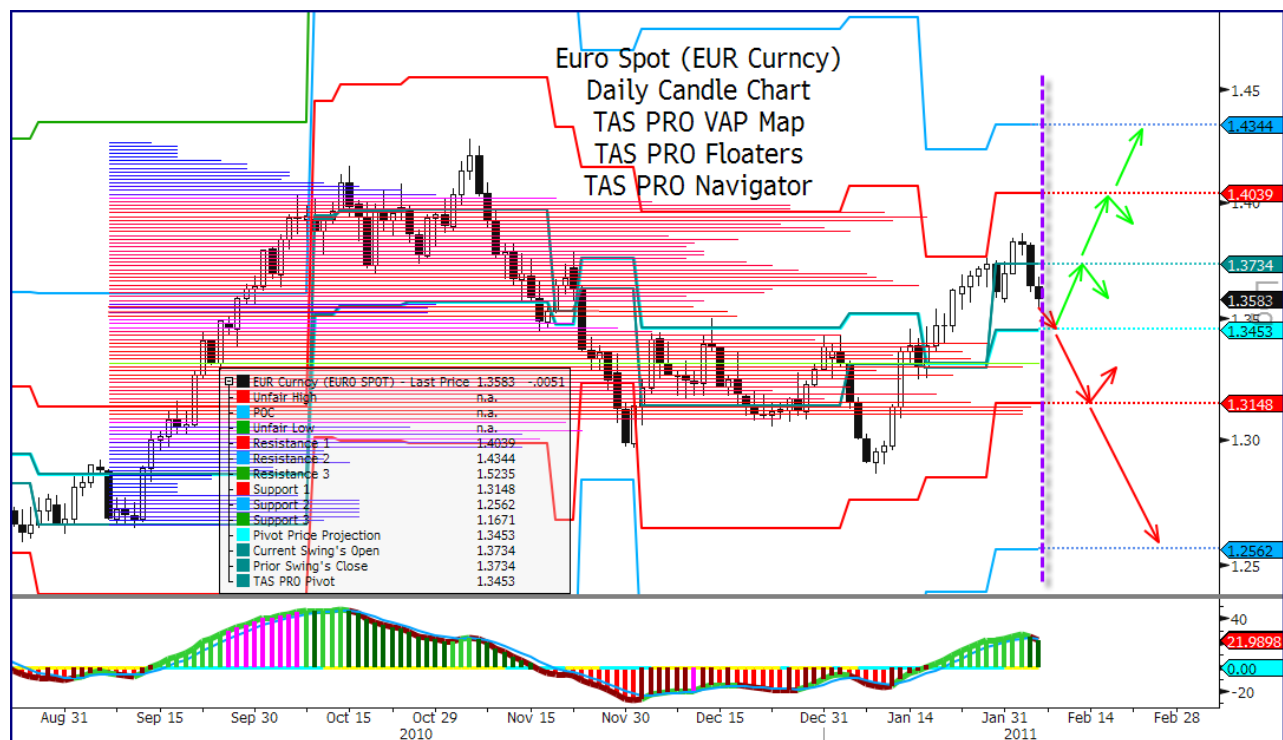| Trading Concept	Trading a Balanced Profile
Instrument Traded / Time Frame	EURUSD / 240-minute chart
Indicators Used	**TAS PRO Market Map**, **TAS PRO Floaters**, and **TAS PRO Navigator**
Market Characteristics	The market is exhibiting a multi-day *balanced* stated that is denoted by a wide-range **Market Map** that has an evenly distributed *high volume node*
Trading Premise	Until the next market *imbalance* occurs, trade the established range

*Chart 40: **TAS PRO Market Map**, **TAS PRO Floaters**, and **TAS PRO Navigator** daily chart of Euro Spot showing hard right edge of screen (magenta dotted line) and projection area to the right of the line*

Trading Concepts

Markets are either *balanced* or *imbalanced* and **Market Map** clearly illuminates these two conditions by exhibiting ―fat‖ and ―skinny‖ profiles. Fat profiles reflect a market that is moving slowly and horizontally through time in a well defined price range—a *balanced* market. Skinny profiles reflect a market that is rapidly and vertically through price—an *imbalanced* market.

Clearly knowing which of these two mutually exclusive states the market is in dictates our basic trading tactics. In a *balanced* market, we buy the lows and/or short the highs; and in an *imbalanced* market, unless we are attempting a counter-trend trade, we trade in the direction of the major capital flows that are propelling the market vertically.

Market Observations

- **Market Map** is displaying a *balanced* market state

- The first red support floater is demarcating support at the unfair low of the **Market Map** profile.

- We currently have a relatively wide-range down candle that has so far not closed below the confluent areas of the **Market Map** and the first **Floater** support line

Trading Plan

1. On the right side of the chart, we have extended the **Floater** lines to establish a short-term trading plan with a contingency of how price may respond to these confluent levels

2. We will be looking exclusively for one of the following events and taking the following action with respect to the current bar and the **red** first support **Floater**:

   a. A **red**-bar close *above*

      - **Tactic:** Wait for the next bar to trade above the current bar's high and take the long entry. Stop is below the current bar's low.

   b. A **red**-bar close *below*

      - **Tactic:** Wait for the next bar's close. (a) If it closes below the current bar, consider shorting the market as this is the area that the market has potential to move fast to the downside since we know that the area below *balance* is *imbalance*. Stop is above the current bar's high; (b) If it closes with an inside bar—*wait* for more information and ideally, a close of the *next* bar above the prior bar's high.

   c. A **green**-bar close *above*

      - **Tactic:** Take the long trade when price trades above the current bar's high. Stop is below the current bar's low with discretionary trail stops (*see Trade Management*).

Trading Timing

To the long side, use **Navigator** to time your trades when **Navigator** indicates the first momentum reversal signal. To the short side, Navigator will likely continue to exhibit **red** *histogram* bars and **Histogram Moving Average** that is below the *histogram* bars.

Trade Management

Since exiting trades is discretionary, long trade targets to the upside will be in the areas of the prior **Floaters**, giving weight and attention to a high-potential pause in price at **Market Map's** *point of control (POC)*.

Trading Application: Trading a Breakout from a Balanced Profile

| Trading Concept	Trading a Breakout from a Balanced Profile
Instrument Traded / Time Frame	**S&P 500 E-MINI GENERIC FUTURES CONTRACT (ES1) / DAILY**
Indicators Used (Settings)	**TAS PRO Dynamic VAP (2,7,7), TAS PRO Market Map (50,0,100)**
Market Characteristics	The market is breaking out of a multi-day *balanced* state that is denoted by a narrow-range **Dynamic VAP** in the area of an *unfair high* that Is exhibited by **Market Map**
Trading Premise	Trade the direction of the *breakout* using shorter time frames for entry
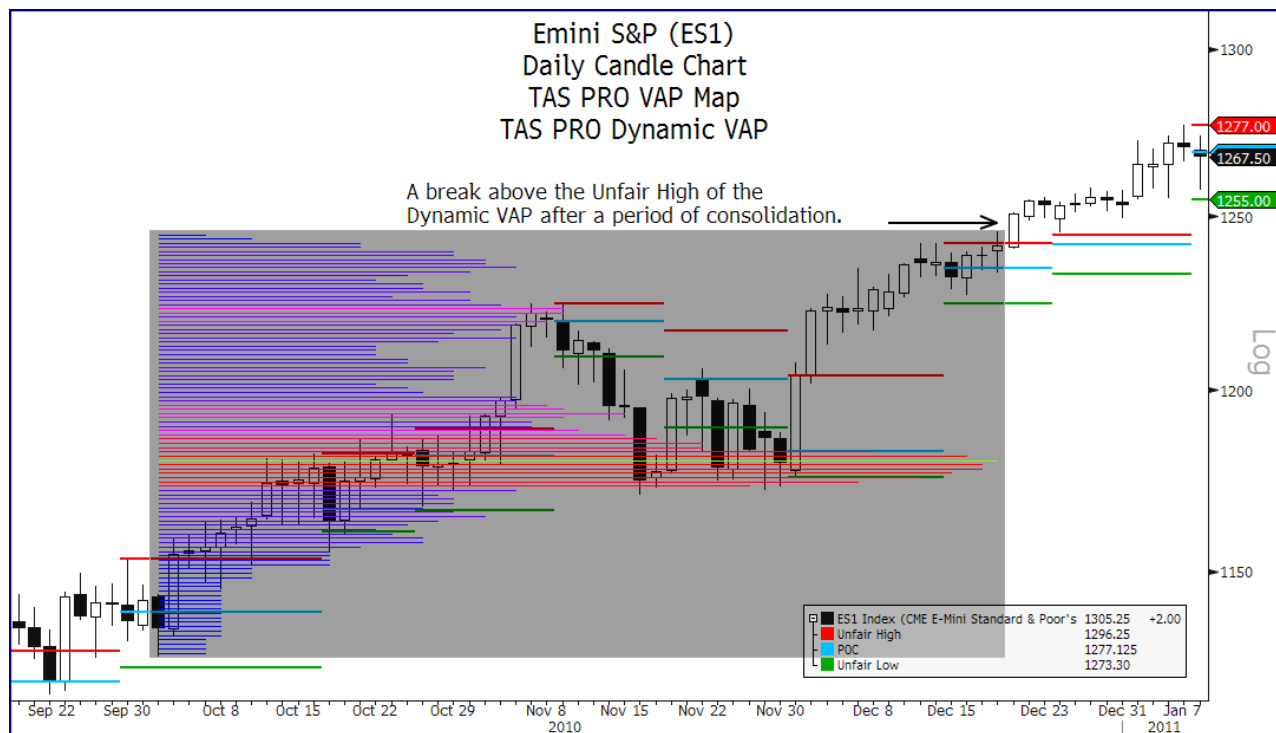
*Chart 41: **TAS PRO Market Map and TAS PRO Dynamic VAP on** daily chart of e-mini S&*

Trading Concepts

Markets are either *balanced* or *imbalanced* and the **MARKET MAP** and the **Dynamic VAP** clearly show these two conditions by exhibiting ‒fat‖ and ‒skinny‖ profiles. *Fat profiles* reflect a market that is moving slowly and

horizontally through time in a well defined price range—a *balanced market*. *Skinny profiles* reflect a market that is rapidly and vertically through price—an *imbalanced market*.

Clearly knowing which of these two mutually exclusive states the market is in dictates our basic trading tactics. In a *balanced* market, we buy the lows and/or short the highs; and in an *imbalanced* market, unless we are attempting a counter-trend trade, we trade in the direction of the major capital flows that are propelling the market vertically.

Market Observations

- **Market Map** exhibits a *skinny profile* in the upper portion of the map and therefore is in a trending market state

- Current **Dynamic VAP** has clear defined range

- The top of the **Dynamic VAP** (**red** line at 1255.75) has been clearly broken to the upside with a wide-range bar that closes near its high

Trading Plan

1. Using support and resistance levels on shorter-term time frame, in this case both a 60/15-minute time frame (not shown) is suggested for entry

2. We will be looking exclusively for one of the following events and taking the following action with respect to the current support and resistance on 60-minute chart (not shown)

    a. Long entry is taken at the bottom of the current 60-minute **Dynamic VAP** as long as price is also equal to or higher than the *point of control (POC)* on **Market Map**.

    b. Long entry can be taken on breakout of current 60-minute **Dynamic VAP**

    c. Long entry can be taken immediately if price is already above current 60-minute **Dynamic VAP** using 15-minute time frame or lower

Trading Timing

To the long side, in this case, use shorter time frame **Dynamic VAP and MARKET MAP** to time your trades when daily time frame is trading vertical to the current **Dynamic VAP** and current *POC* on the **Market Map**.

Trade Management

Exiting trades is discretionary. Long trade targets to the upside should be considered at previous **Market Map** *points of control*. A new **Dynamic VAP** will appear when price is turning into a horizontal or consolidating state from a trending or vertical state. When this occurs at a previous **Market Map's** *POC*, it is an excellent area to consider taking profits. Initial stops on trade should be just below top of the daily **Dynamic VAP**. 60- minute time frames should be used to move stops as price moves more in favor of the trade.

Trading Concepts

Markets are either *balanced* or *imbalanced* and **Market Map** clearly illuminates these two conditions by exhibiting ‒fat‖ and ‒skinny‖ profiles. *Fat profiles* reflect a market that is moving slowly and horizontally through time in a well defined price range—a *balanced* market. *Skinny profiles* reflect a market that is rapidly and vertically through price—an *imbalanced* market.

Clearly knowing which of these two mutually exclusive states the market is in dictates our basic trading tactics. In a *balanced* market, we buy the lows and/or short the highs; and in an *imbalanced* market, unless we are attempting a counter-trend trade, we trade in the direction of the major capital flows that are propelling the market vertically.

Floaters change when new *swings* in price are detected. We use center **Floaters** to determine direction with price trading above center F**loaters** being bullish and below center **Floaters** being bearish.

When combining the new swing detection of the **Floaters** and the *balanced* or *imbalanced* information provided from the **Market Map**, we can detect high-probability reversal *swings* in any market.

Market Observations

- **Market Map** is displaying a *balanced area* of high volume accumulation
- Price clearly breaks below high *value area* and back inside

- At same time new **Floaters** appear with price above center **Floaters**

- The lower center **cyan** support **Floater** is demarcating the bottom of the unfair low of the **Market Map** profile with price above lower center **cyan Floater**

- Center **Floaters** are supporting price at same area of low end of high *value area* on **Market Map**

Trading Plan

1. Wait until new **Floaters** appear and price is above center **Floaters** as opposed to below. This is the most critical step.

2. We will be looking for support on the **Market Map** at either the unfair low or the *POC*.

3. We will be looking for one of the following to occur for entry

   a. Look for a price close above top center **Floater** then look to enter long on retrace to top center **Floater**.

   b. Enter long on break of previous bar high

4. Initial stop loss is below bottom center **Floater**.

Trade Timing

Use **Floaters** to time trades to either the long *or* the short side. When price first flips position with respect to center **Floaters**, a new potential *swing* reversal is in play. Price needs to stay above the lower center **Floater**. The trading opportunity has a higher probability outcome when **Floaters** are narrow range (high-to-low) as opposed to wide.

Trade Management

Since exiting trades is discretionary, long *or* short trade targets to the upside will be in the areas of the prior *POCs* on the **Market Map** or new **Floaters** flipping price to the other side of the center **Floaters**. Give extra weight and attention to a high-potential pause in price at **Market Map's** *POC* and most importantly, a change in **Floaters**.

Trading Application: Managing a Swing Position

Trading Concept	Managing a Swing Position
Instrument Traded / Time Frame	BPH11 (GBPUSD Future) / 120-minute chart
Indicators Used	TAS PRO Dynamic VAP and TAS PRO Navigator
Market Characteristics	Market starts a new potential uptrend after several days in a *balanced state* which follows a downtrend that had lost momentum
Trading Premise	Look for long exposure based on shift in momentum from downtrend to *balance* then back to potential uptrend

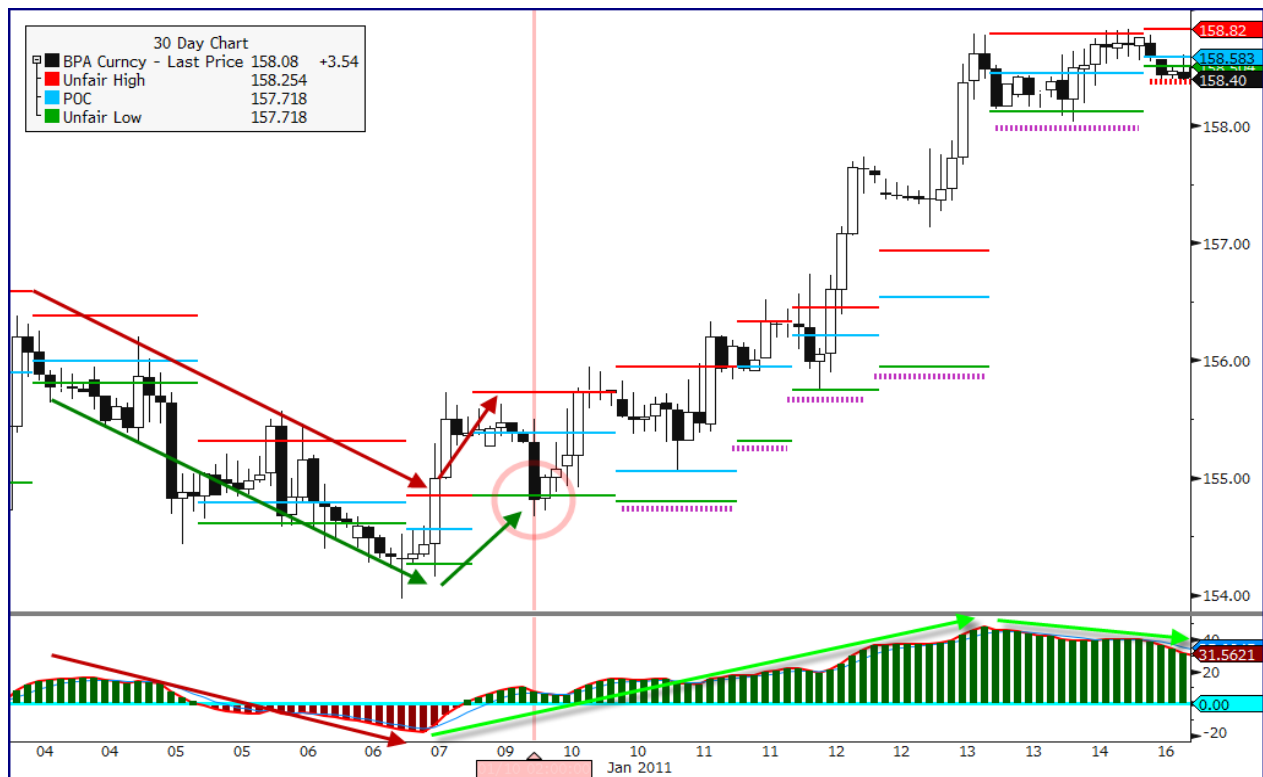

*Chart 43: **TAS PRO Dynamic VAP** and **TAS PRO Navigator** on 30-day chart of BPA currency*

Trading Concepts

Markets trade in only one of two mutually exclusive two states: *horizontally* (sideways) or *vertically* (directional). The astute trader has trained his eye to recognize which of these two states the market is in and use that as a primary input to almost all trading decisions.

However, when there is a transition from *vertical* to *horizontal* from which traders will look for the next *vertical*, there is often not enough information in just price alone to make an accurate assessment. Precision indicators can pave the way to helping traders seeing what is already there in the price-volume relationship in a clearly presented, graphical format.

We use **Dynamic VAP** to identify trends and reversions by keying off of how price responds to both *unfair highs* and *unfair lows* of each profile (the upper and lower boundaries). When a new unfair high/low appears above a series of down trending *unfair highs*/*lows* movement in tandem with **Navigator** rising from below zero to above zero, that situation constitutes a high probability opportunity for a new trend in the opposite (up) direction.

Market Observations (*refer to the following chart*)

a)   **Navigator** provided an earlier clue on January 8th by retracing from below the zero line to above it

b)   Two bars later, a new **Dynamic VAP** profile appears on January 8th[th] with both *unfair high* and *unfair lows* at higher levels than in the previous profile

c)   Price finds higher support at higher unfair low levels that previously was an *unfair high* as we can see from the first pullback in price after **Navigator** had turned **green**
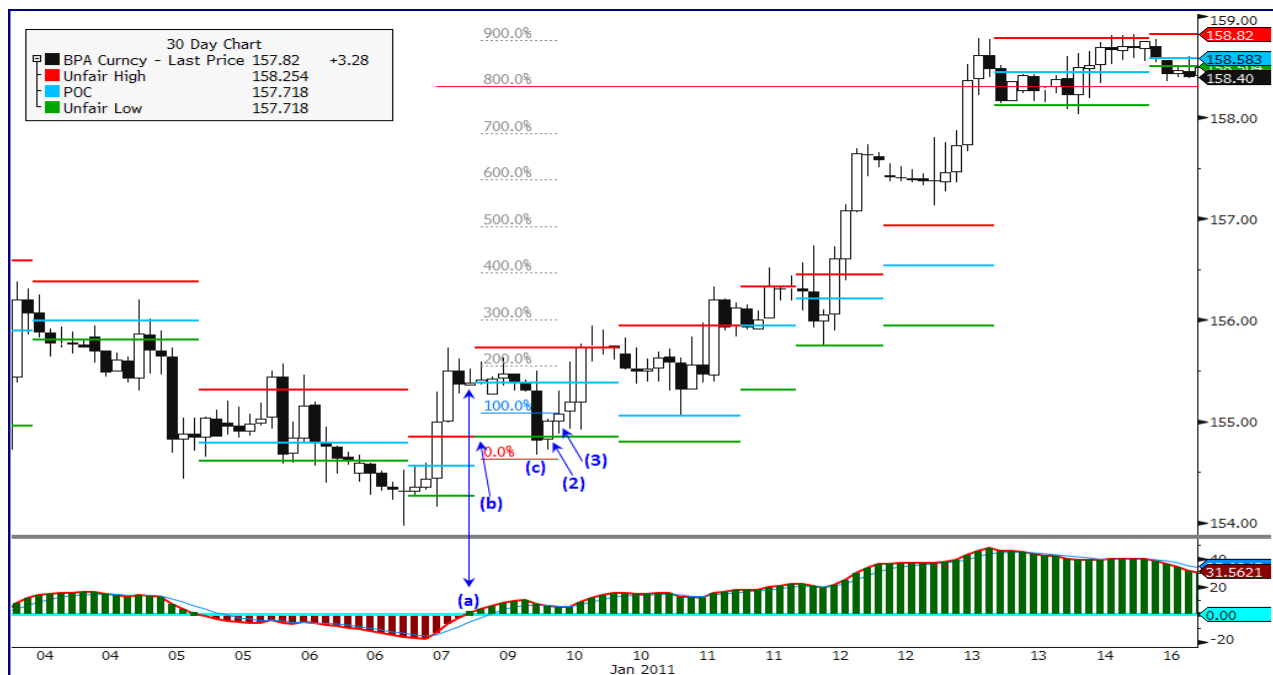

*Chart 44: **TAS PRO Dynamic VAP** and **TAS PRO Navigator** illustrating trading setup (refer to Trading Plan, next page)*

Trading Plan (*refer to Chart 44 on the preceding page*)

Since this is only the first sign of market strength, the position size will be 50% of the regular pre-defined risk exposure.

1. The first evidence we have of market support at a higher **Dynamic VAP** level is when we get the first close of a white bar above the *unfair low*. This is the ―*get ready"* part of our trade.

2. The entry triggers around mid-day on January 9th when price trades above the first white candle after finding support on the *unfair low*.

3. The stop is below the bottoming tail of the black candle (c) which is the first higher low price *pivot* support that is coincidental with the *unfair low* that is demarcated by **Dynamic VAP**. We hold the position until price breaks 5 pips below the *unfair low*.
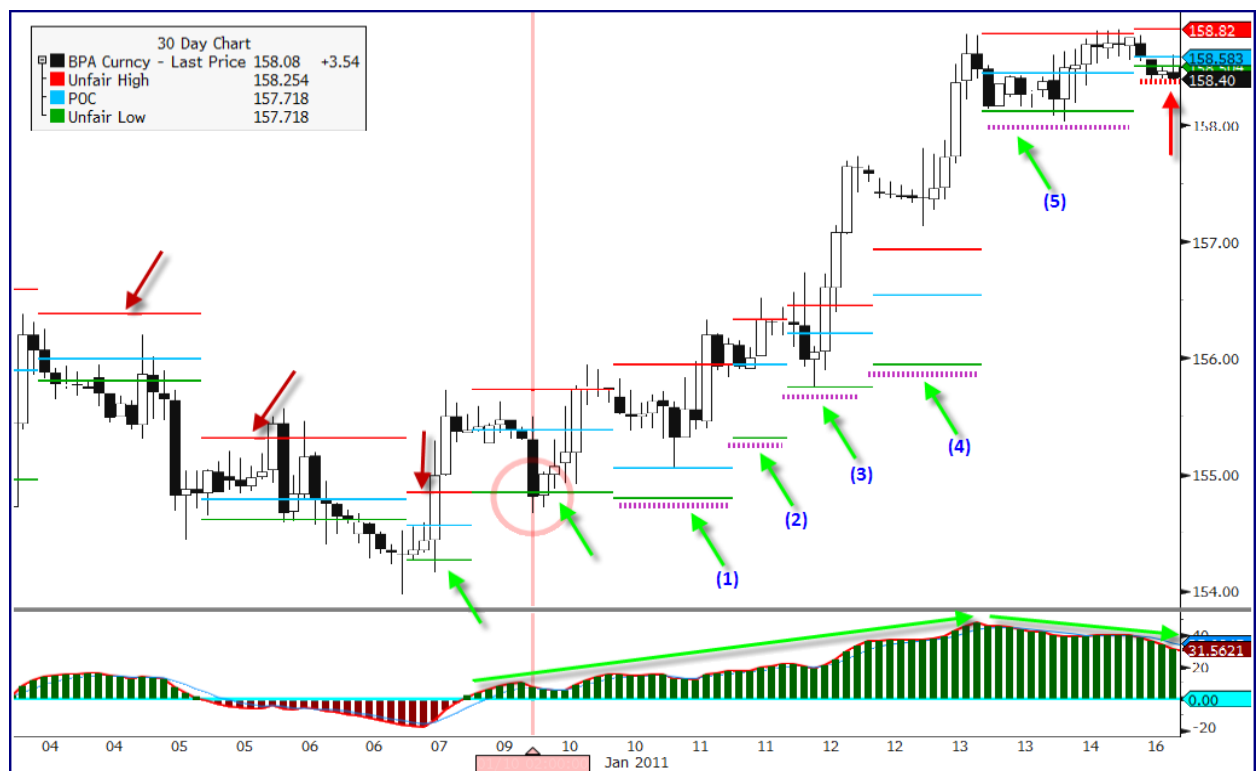
*Chart 45: **TAS PRO Dynamic VAP** and **TAS PRO Navigator** illustrating trade management*

Trade Management (*refer to Chart 45*)

Since this is the earliest moment to enter a long in a beginning uptrend, we will look to hold the position as long as possible, potentially for as long as 3 − 5 new higher **Dynamic VAP** profiles after the entry profile before momentum begins to decrease and a new larger balance area is established.

For that purpose, we will trail stop the order 5 pips below each new *unfair low* that appears on the way up. Once we reach a reward to risk on the trade of 5:1, we scale out half of the position and then set our stop to breakeven.

In this case, the rightmost **Dynamic VAP** profile (see **red arrow**) shows that no significant new *unfair highs* are reached, the range is narrower and **Navigator** is decreasing with its first lower *pivot* high from the +0 side. The stop is placed 5 pips below the last *unfair low* and volatility stops out the remaining position with a respectable R:R nearing 7:1.

Trading Application: Trading into a Profile "Hole"

| Trading Concept	Trading into a Profile "Hole"
Instrument Traded / Time Frame	Gold (GC1) / Daily Chart
Indicators Used	TAS PRO Market Map, TAS PRO Dynamic VAP
Market Characteristics	Gold has been in a multi-month consolidation and is testing the *unfair lows* of the rotation/distribution. A *hole* in the Market Map is highlighted below.
Trading Premise	Buying *unfair lows* for *rotational* long or selling short a break into a *hole*
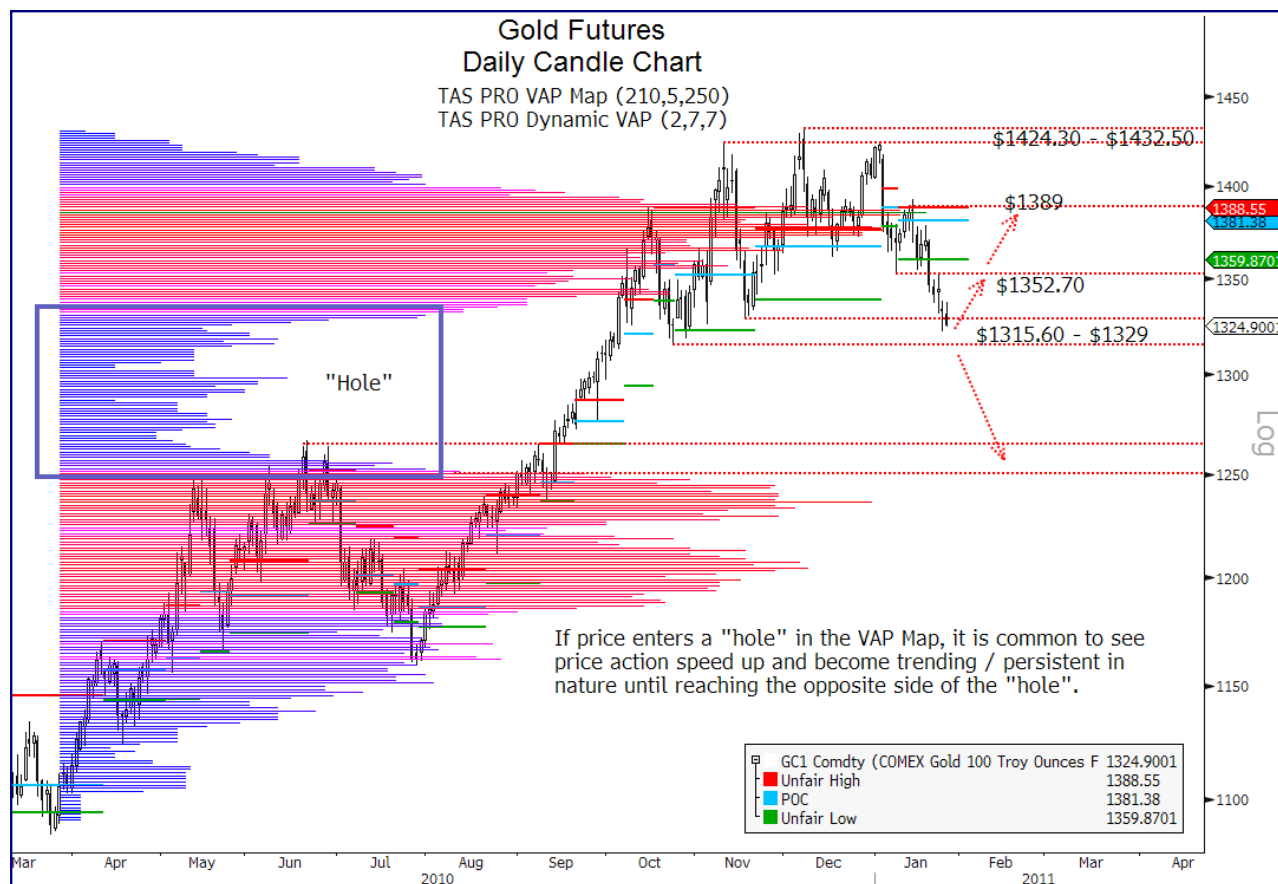
Chart 46: **TAS PRO MARKET MAP** and **TAS PRO Dynamic VAP** illustrating hole in profile

Trading Concepts

Markets are either *balanced* or *imbalanced* and **Market Map** clearly illuminates these two conditions by exhibiting *fat profiles* and *skinny profiles*.

- Fat areas in profiles reflect a market that is moving slowly and horizontally through time in a well defined price range—a *balanced* market. These are the areas of the market that lend technical support once revisited.

- Skinny areas in profiles reflect a market that is moving rapidly and vertically through price—an *imbalanced* market. These are the areas of the market where there is a lack of technical support.

These skinny areas are known as *holes* in the market in the sense that where price / volume did not accumulate and develop horizontally, it leaves a *hole* in the chart. A *hole* in a chart is an area that expresses an *absence* of *horizontal development*.

A characteristic of *holes* is that when price revisits these areas, it more often than not tends to move rapidly and vertically since there are few technical support areas. *Holes* offer superior opportunities for directional trades.

Market Observations

- **Market Map** is displaying two distinct areas of *horizontal development* that envelop a distinct *hole* in the market—an area where there was a prior *absence horizontal development*

- The market is trading in the range of the upper *balance area*, exhibiting a mature market state

- Price is very near to entering a low volume-at-price *hole* as shown by the **Market Map** profile

- After eight consecutively higher **Dynamic VAP** profiles, the current profile is lower indicating a pause or stall in the market

- Price has broken below the *unfair low* of the current **Dynamic VAP** putting the market in a short-term downtrend as it approaches the intermediate term *unfair lows*

Trading Plan

1. Enter long

    a. Entry should be as close to $1,315 as possible and only if shorter term charts such as the 60-minute or 15-minute indicate that the short-term downtrend is pausing (which will become apparent because a new **Dynamic VAP** on the 60- or 15-minute chart will form, identifying supporting volume entering the market).

    b. Stop loss and/or stop-and-reverse below $1,315, at $1,309.85.

2. Enter short

    a. On a break below the $1,315 support, the bias becomes bearish and the expectation is that the *hole* will be traversed. Entering short on a break or using similar tactics on a 60- or 15-minute chart once below $1,315 is appropriate.

    b. Stop loss would be above $1,315 and preferably above the high of the *breakdown* bar.

Trade Timing

Smaller time frame charts such as the 60- or 15-minute can be used to further refine an entry but the idea would be to act in the zone of opportunity which is nearest $1,315.

Trade Management

The target to the upside would be for trade back to the upper region of the *high volume area* (**red**) shown by the **Market Map** or at least to the *point of control (POC)*.

The target to the downside would initially be to the *high volume area* below the *hole* and then to the lower end of that *high volume area* as a second target

Glossary of Terms

Terminology used in this manual is printed throughout using *italic characters in dark blue*.

Auction Market Theory
An applied branch of economics that deals with the properties and inner workings of auction markets and in particular, how people act in isolation and in crowds.

balanced profile
A balanced profile is a horizontal consolidation with a relatively equal amount of trading above and below the *point of control*. This is a "fair" area to trade for both buyers and sellers as the market exhibits relatively equal highs and lows in a visibly well defined price range.

b-formation
A *balanced* price consolidation area after a *step one* vertical move. In a profile map, it resembles the letter "b."

breakout
A breakout is a technical condition of demarcating when a market moves from *balance* to *imbalance* to the upside. **Dynamic VAP** and **Dynamic TAP** clearly highlight this condition when price moves from trading inside the *dynamic profiles* to above the *unfair high*, the uppermost of the three lines of a *dynamic profile*. *(Also see *breakdown*)*

breakdown
A breakdown is a technical condition of demarcating when a market moves from *balance* to *imbalance* to the downside. **Dynamic VAP** and **Dynamic TAP** clearly highlight this condition when price moves from trading inside the *dynamic profiles* to below the *unfair low*, the lowermost of the three lines of a *dynamic profile*. *(Also see *breakout*)*

confirmation bias
A common cognitive error where traders to favor data and information that *confirms* their preconceived notions or hypotheses about the market—regardless of whether the information is true. As a result, traders selectively gather and recall information and interpret it in a biased way.

constrained by liquidity
A relatively equal amount of trade occurring on both the long and short side of the market causes the market to trade horizontally through time in a relatively fixed price range. A market is thus constrained by liquidity because buying is met with selling—and selling is met with buying—in near-equal amounts. Non-trending markets are constrained by liquidity. *(Also see unconstrained by liquidity)*

dynamic profile
Dynamic profiles are a **TAS PRO** proprietary method for displaying *Market Profile®*-based information in a simple screen-based display metaphor. Dynamic profiles feature three horizontal lines which, from top to bottom, are: the *unfair high*, the *point of control*, and the *unfair low*. **Dynamic VAP** and **Dynamic VAP** feature dynamic profiles.

*fat profile (see *balanced profile*)*

Floaters

An abbreviated form of **TAS PRO Floaters**, a **TAS PRO Indicator** that displays price compression levels that adjust based on time or swings depending on the indicator.

Four Steps of Market Activity

The sequence of events that leads to any market movement

Step 1: A vertical move either up or down is initiated by a market imbalance

Step 2: Stopping price to end the vertical move, indicating that the last of the supply imbalance or demand is in place

Step 3: Development around the stopping price that formed in *Step 2*

Step 4: The market rebalances the inefficiency of the prior vertical move

high-volume node

The price point where the most volume or trade has occurred at price in a profile. *(Also see point of control, POC)*

histogram

In statistics, a histogram is a graphical representation that displays the distribution of data and is an estimate of the probability of the distribution of the data being measured. Histograms display tabular frequencies over discrete intervals (bins), with an area equal to the frequency of the observations in the interval. **Market Map** displays its data using histograms.

hole:

Markets are either balanced or imbalanced. Balanced profiles are visibly "fat" in profile maps as price develops slowly and horizontally through time accumulating volume in a well defined price range. Imbalanced profiles are visibly "skinny" as price moves rapidly and vertically through price levels reflecting an absence of accumulating volume at price. These skinny areas in profile maps are known as *holes*. *(Also see Trading Application Concepts Using* **TAS PRO Indicators**: *Trading Into a Profile Hole)*

horizontal market

A market that is developing horizontally over time (contrasted with a *vertical market*) that is characterized by a series of relatively equal level price *pivot* highs and price *pivot* lows.

imbalanced profile

An imbalanced profile refers to an area of a map, such as **TAS PRO Market Map** where price moves rapidly and vertically through price levels, leaving an absence of horizontal market development.

inverted V-pivot

A technical market formation where a rapid move to the upside is immediately followed by an equal or near-equal retracement to the upside, leaving a chart formation resembling and upside down letter "V." *(Also see V-pivot)*

Market Profile®

Designed to help technicians understand the internal structure of the markets, Market Profile® is the statistically based, graphical organization of price, time, and volume information into visibly informative distributions. Market Profile® is a registered trademark of the CME.

p-formation

A balanced price consolidation area that forms after a *Step 1* vertical move to the upside. In a profile map, it resembles the letter "P."

pivot

A pivot is a simple technical formation that depicts a turning point in the supply-demand or demand-supply equation. A pivot low is formed when one or more higher lows and higher highs are on both sides of a bar. A pivot high is formed when one or lower highs and lower lows are on both sides of a bar.

POC

Acronym for point of control (*see point of control*)

point of control

The point of control is the area where the most volume or trade had occurred at price in a profile. On a rotational day, the market will trade up and down around this point. It's important to remember that from an intraday context, the point of control is dynamic in that it determined as profiles build. The **blue** line on the **Market Map** is the point of control.

price pivot [high or low] (see pivot)

profile

Profile is synonymous with a histogram generated by **Market Map**. *(Also see histogram)*

rotational day

In *Market Profile®* nomenclature this is a non-trend day, a market day that is *balanced* or trading in a range and is characterized by a *fat profile*.

skinny profile (see imbalanced profile)

swing (see swing high and swing low)

swing high

The traditional technical definition of a [price] swing high is a price formation where a peak high in price is preceded and followed by a lower high on both sides of a peak price high. *(Also see pivot)*

swing low

The traditional technical definition of a [price] swing low is a price formation where a peak low in price is preceded and followed by a higher low on both sides of a peak price low. *(Also see pivot)*

TPO

From classic *Market Profile®* theory, an acronym for Time Price Opportunity or "That Price Occurred." A TPO is a letter designation in a Market Profile® chart that shows at which prices trade occurred, thereby building out the statistical distribution *histogram*.

trend day

In *Market Profile®* nomenclature, a market day that is *imbalanced* on the daily time frame.

two phases of market activity

A simple model for describing the only two mutually exclusive movements a market can make: *horizontal* or *vertical* movements.

unconstrained by liquidity

When there is excess liquidity in the market favoring either the long side or the short side of the market enough to cause a vertical move, we say the market is unconstrained by liquidity. Trending markets are unconstrained by liquidity. *(Also see constrained by liquidity)*

unfair high

The unfair high is the area where price rallies to the up side to shut off buying. It is an area where buyers feel the price is too expensive.

unfair low

The unfair low is the areas where price rallies to the down side to shut off selling. It is an area where buyers perceive the price is inexpensive.

value area

From classic *Market Profile®* theory, the value area of a profile map (e.g., **Market Map**) contains ~70% of the volume transacted in that particular developed section. It is measured as one standard deviation of all data above and below the *point of control (POC)*.

V-pivot

A technical market formation where a rapid move to the downside is immediately followed by an equal or near-equal retracement to the upside, leaving a chart formation resembling the letter "V." *(Also see inverted V-pivot)*

VAP (see volume-at-price)

vertical market

A market that is up trending through price (contrasted with a *horizontal market*) that is characterized by a series of relatively higher price *pivot* lows and price *pivot* highs.

volume-at-price (VAP)

A method for dynamically calculating and displaying aggregated trading data based on how much volume is trading and accumulating at discreet price levels. Based on *Auction Market Theory* and *Market Profile®*, volume-at-price is a core concept that is used to create frequency distribution histograms.