



September 13, 2023

# Market Structure EDGE

## How Many Rich Technical Traders Do You Know? Why Market Structure Is Key Trader Knowledge

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**Tim Quast**

Founder & CEO  
Market Structure EDGE

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# How Many Rich Technical Traders Do You Know?

*Why Market Structure is Key Trader Knowledge*

**Tim Quast, founder and CEO of  
Market Structure EDGE**

**Sep 13, 2023**



**I don't know much. But I do know market structure!**

Image: Youtube, CNBC, Tim Quast's appearance on Last Call with Brian Sullivan, Aug 15, 2023

- **Tim Quast – founder of two market structure analytics firms**
- **ModernIR.com – Market leader, quantitative equity Market Structure Analytics for US issuers**
- **Market Structure EDGE – Only quantitative Supply and Demand data for traders**

# TRACK record

We are **nationally recognized experts on US equity market structure**, and have grown into industry educators and thought leaders. We frequently serve as financial media experts and have provided written testimony on market structure for Congress.



Longtime top national, chapter sponsors of the investor-relations professional association, NIRI.

**When you think of successful investors, who comes to mind?  
Warren Buffett? Someone else?**

**How about rich technical traders?**

**How about these people?**

**Ken Griffin, Jeff Yass, Tim Reynolds,  
Jim Simons, John Overdeck, David  
Siegel, David Shaw, Ed Bosarge**

# Trading. Research. Tech.

We are a global liquidity provider and trading firm that uses sophisticated quantitative analysis and a deep understanding of market mechanics to help keep prices consistent and reliable.

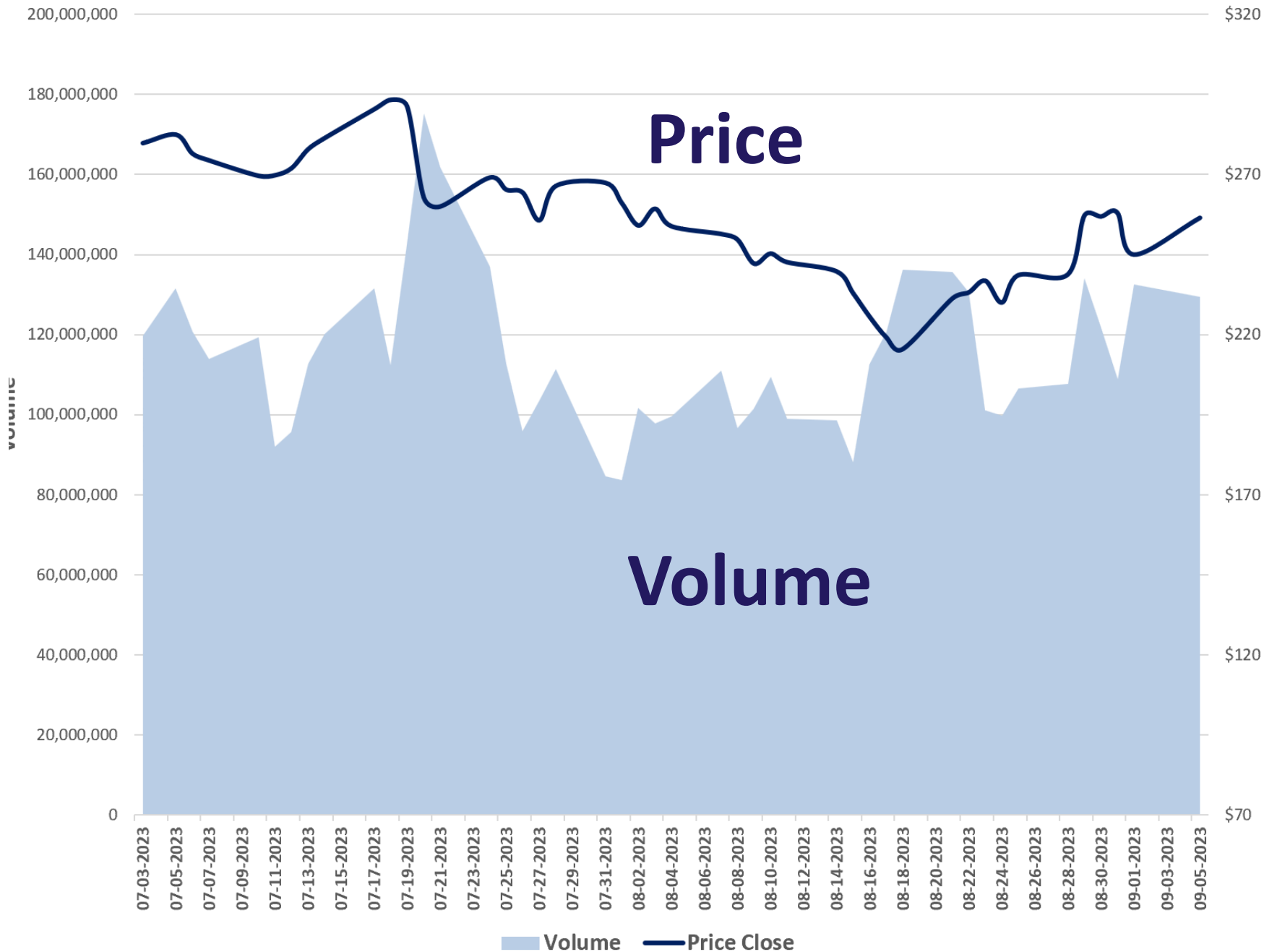
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**Deep understanding of market mechanics. Quantitative data.**

**The single most important  
question for all traders:**

***How does the stock market work?***



# TSLA price and volume Jul 3- Sep 5, 2023

What are price and volume?  
Consequences of behaviors behind them.

Chart data: QuoteMedia

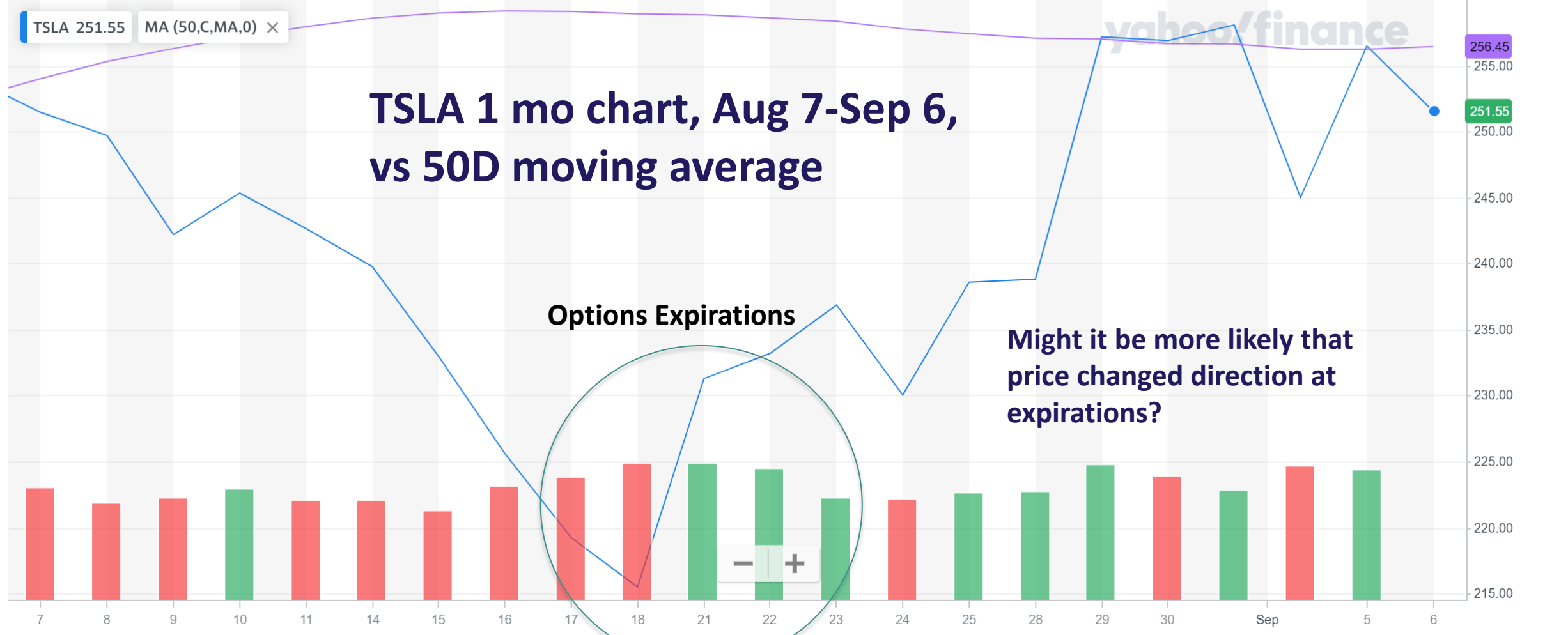
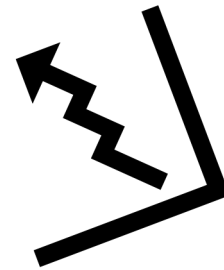


Chart: Yahoo! Finance

*Options involve risk and are not suitable for all investors.*

**There is little meaning in  
price, volume, moving  
averages, by themselves.**



# The Root Cause of Behavioral Change: Reg NMS

## Regulation National Market System (2007):

- Forced stocks to trade at a single best price marketwide: Nat'l Best Bid/Offer (NBBO)
- Eliminated exchange customer-preference
- Forced exchanges to share prices, customers
- Imposed rules that spawned a focus on selling data, and changing stock quotes, prices
- Imposed a **Continuous Auction Market**

## Regulates:

- Quotes
- Prices
- Data
- Access to all three

# Money is Motivated by Different Purposes, Horizons

**active**

Stock story

Horizon: 1-25+ yrs

**Active Investment (10%)**

Institutional Investors

Capital Research  
American Century  
Wellington  
T Rowe Price

**passive**

Characteristics similar  
to other stocks

Horizon: Weeks

**Passive Investment (20%)**

Index Funds, ETFs, Quant Funds

Blackrock  
Vanguard  
State Street  
Invesco  
UBS  
JP Morgan  
Morgan Stanley  
Fidelity  
Renaissance Technologies  
Worldquant

**fast trading**

Profit on price differences  
in securities

Horizon: A day or less

**Fast Trading (52%)**

High Frequency Trading Strategies

Citadel  
Jane Street  
Susquehanna  
Quantlab

**risk  
management**

Leverage/Protect  
with derivatives

Horizon: days to months

**Risk Management (18%)**

Options, forwards, futures

Millennium Partners  
Point72  
Bridgewater  
AQR

Source:  
ModernIR.com  
research

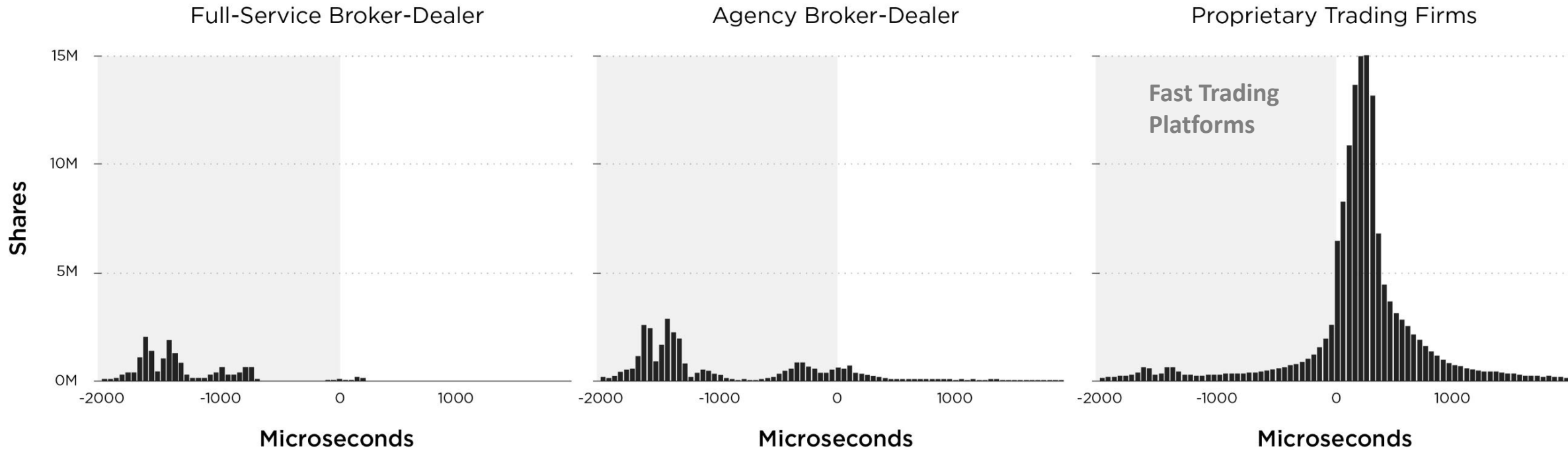
*The market is short-term, volatile, because 90% of the money buying and selling stocks has horizons ranging from a day to months.*





# Fast Traders Are Vastly More Responsive to Price Changes Than Brokers with Customers

## Aggressive Shares Within 2 Milliseconds of Signal Prediction



What matters is not why YOU buy or sell, but the motivation of the party buying from you, or selling to you.

Source: IEXTrading.com, Spring 2020

# S&P 500 Index: 1998-2023

## S&P 500 INDEX (^SPX)

Chicago Options - Chicago Options Delayed Price. Currency in USD

Follow

Quote Lookup



**4,465.48** -31.35 (-0.70%)

At close: 05:30PM EDT

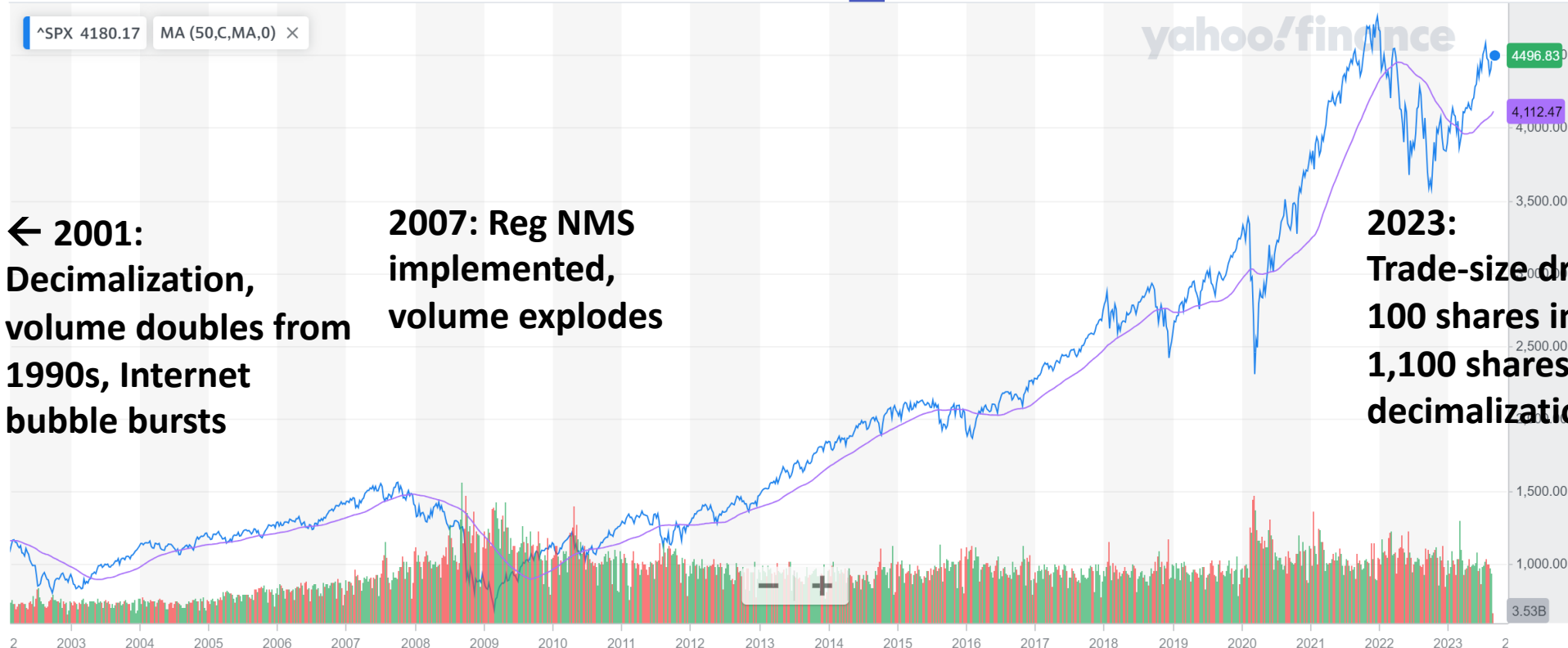
Summary **Chart** Conversations Historical Data Options Components

Full screen

Indicators Comparison Date Range 1D 5D 1M 3M 6M YTD 1Y 2Y 5Y **Max** Interval 1W Line Draw

^SPX 4180.17

MA (50,C,MA,0) X



← 2001:  
Decimalization,  
volume doubles from  
1990s, Internet  
bubble bursts

2007: Reg NMS  
implemented,  
volume explodes

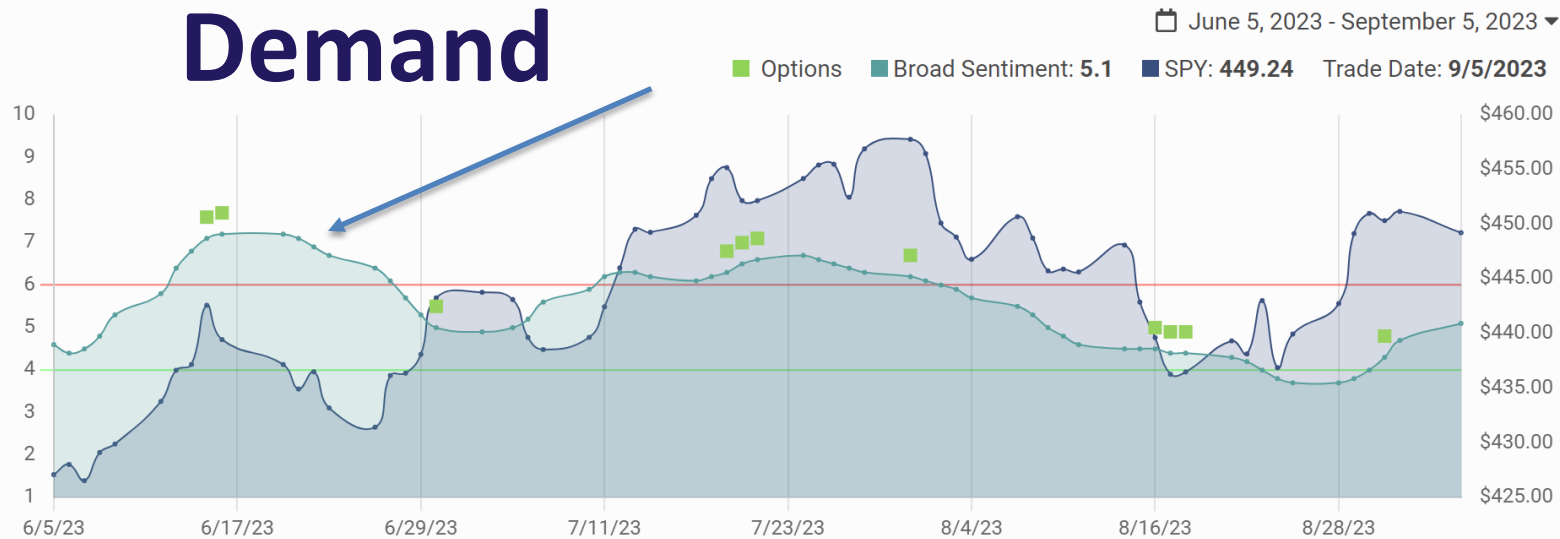
2023:  
Trade-size drops below  
100 shares in SPX (vs  
1,100 shares before  
decimalization)

*Technical signals lack reliable predictive value because they treat all PRICES as equal, and they don't account for modern market RULES.*

## Know these three things:

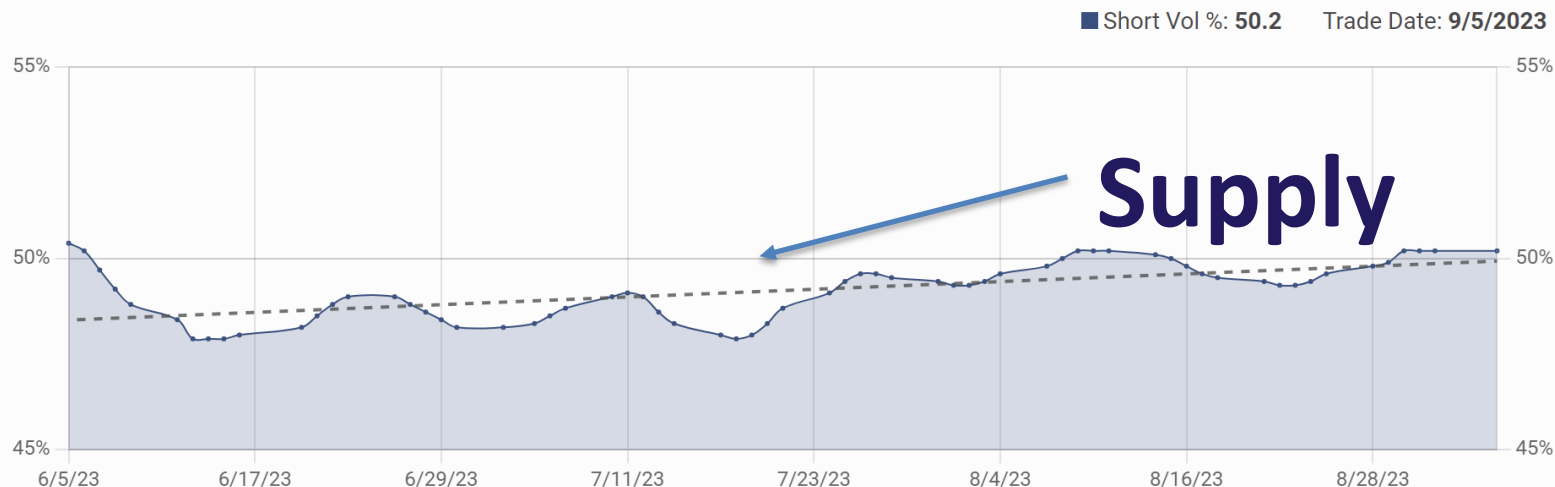
1. **Broad Market Demand and Supply**
2. **Context: The market's calendar**
3. **Demand/Supply divergences**

Broad Sentiment, the EDGE risk-management tool, reflects average Market Structure Sentiment™ (Demand) for composite S&P 500 stocks versus the price of SPY, the State Street S&P 500 ETF. Green squares show monthly options and futures expirations.

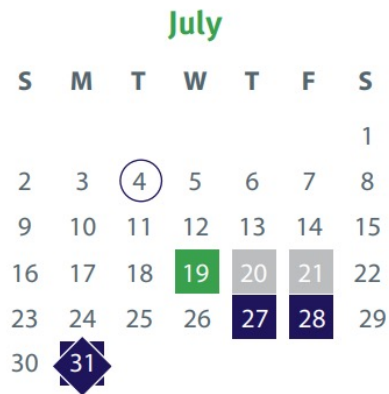


**PRICE** is not predictive. Supply and Demand are.

Short Volume (Supply) is the average percentage of daily volume in S&P 500 stocks that's short (borrowed, created by market-makers).



Options involve risk and are not suitable for all investors.



*Monthly expirations  
recalibrate hedges for  
about 18% of US  
equity market  
capitalization.*

*It's a BIG deal.*

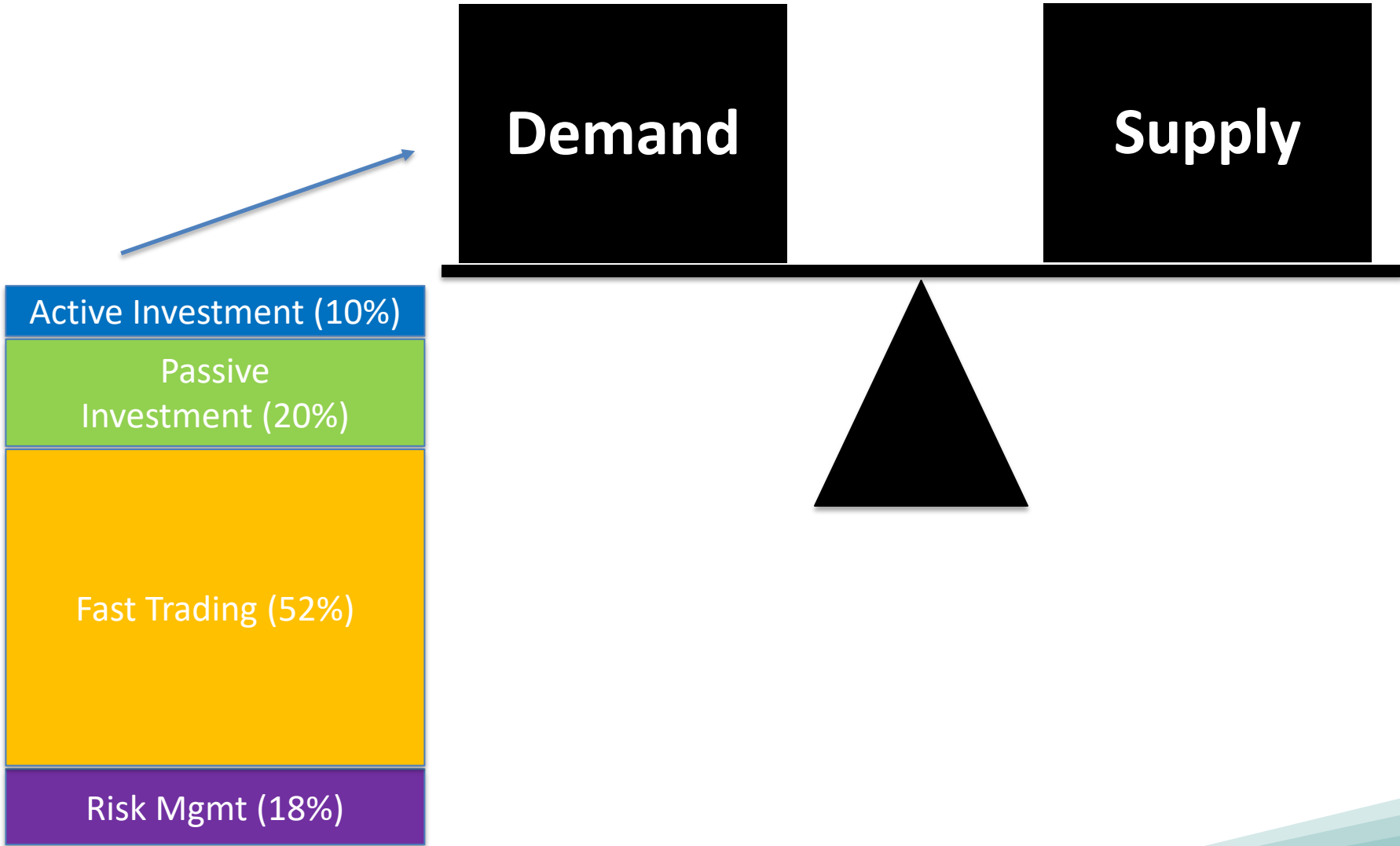
- Exchange holiday: markets closed
- Options expirations: stocks, indexes, currencies, interest rates, treasuries
- VIX (Volatility Index) options expirations
- S&P quarterly rebalances: quarterly share updates to S&P 500, Mid-cap 400, Small-cap 600, Total Market
- MSCI Barra Rebalances: announcement and effective date of quarterly changes to Morgan Stanley/Barra quantitative theme and strategy indexes
- ◆ Russell Rebalances: annual reconstitution of Russell indexes; rankings May, estimates early June, final late June
- Month-end portfolio balancing: poor time for good news/good time for bad news
- LEAPS expirations: S&P futures for long term portfolio hedges
- ◆ S&P 500 End of Month (EOM) options expire

*Options involve risk and are not suitable for all investors.*

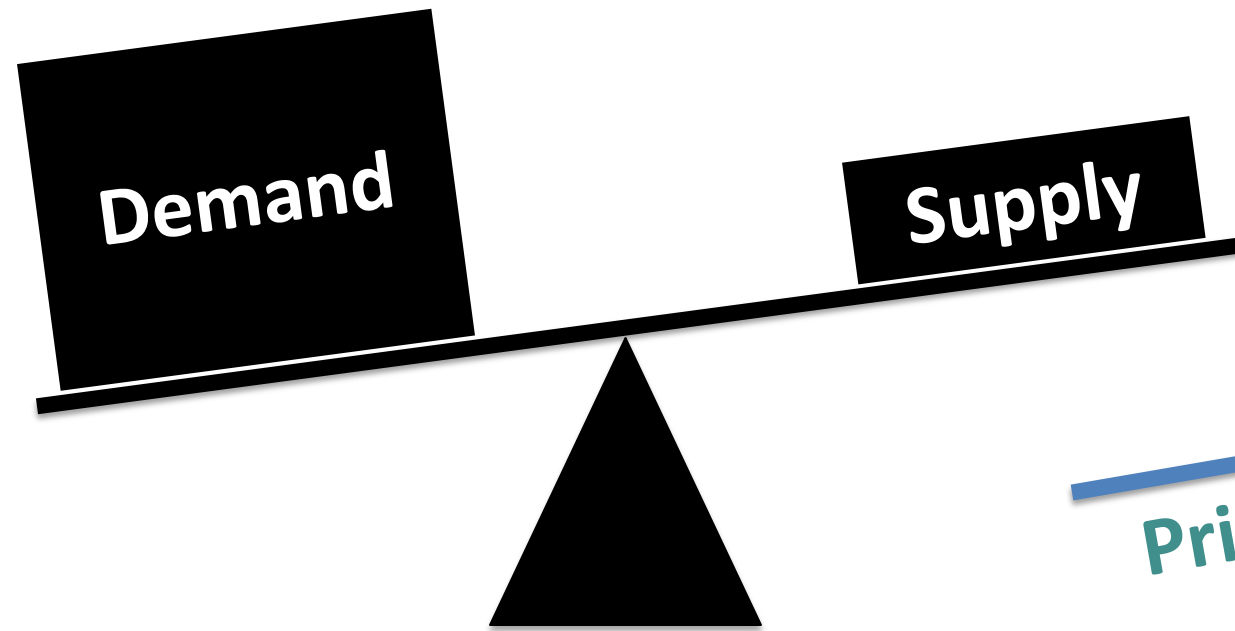
# What Are “Supply” and “Demand”?

**Demand.** An algorithm called “Market Structure Sentiment” metering buying and selling by investors under rules governing quotes and trades in US stocks. It’s a predictive mathematical calculation of the velocity of short-run price-movement driven by behavioral change and normalized to a scale of 1-10 with 1 being negative but oversold and 10 being positive but overbought. It’s the DEMAND read, and Demand over 5.0 tends to produce rising stocks and markets, and vice versa.

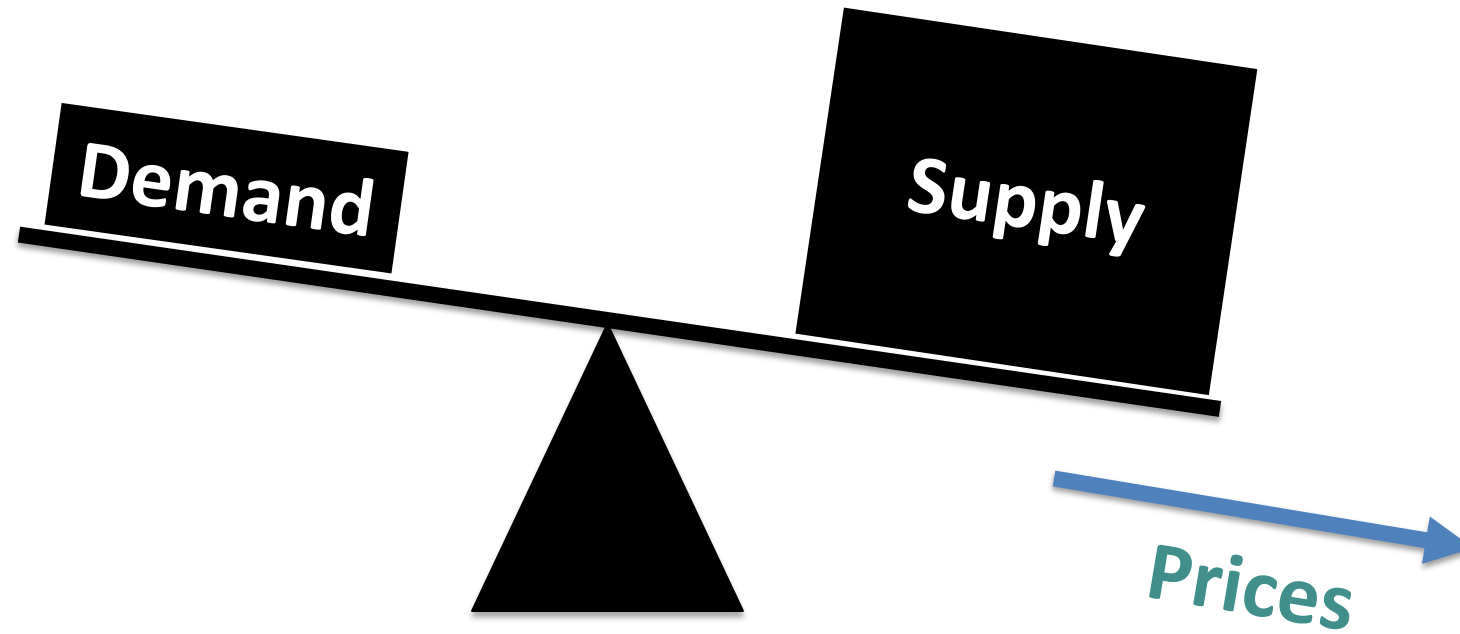
**Supply.** Short volume is the percentage of trading volume predicated on borrowed stock. It derives from 2010 Reg SHO modified-uptick rules for shorting stocks, is regulated by Finra, and includes market-making exemptions to short-locate rules under Reg SHO Rule 203b(2).







Prices



# Why Market Structure Knowledge is Key for Traders:



- 1. Technical indicators predate market rules**
- 2. 90% of volume has a horizon of a day to months**
- 3. What matters is the motivation of your counterparty – not YOUR motivation**

Past performance is no guarantee of future performance. Conclusions are not advice but statistical observations in data from Market Structure EDGE LLC.

Courtesy: Illustration [131636307](#) / [Thinking Man](#) © [OneLineStock](#) | [Dreamstime.com](#)

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**WINNER**

**2021**

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