

IBKRWEBINARS.COM



June 7, 2023

Market Structure EDGE

Trade Supply and Demand – Not Price

Tim Quast

Founder & CEO
Market Structure EDGE

Exchange and Industry Sponsored Webinars are presented by unaffiliated third parties. Interactive Brokers LLC is not responsible for the content of these presentations. You should review the contents of each presentation and make your own judgment as to whether the content is appropriate for you.

Interactive Brokers LLC does not provide recommendations or advice. This presentation is not an advertisement or solicitation for new customers. It is intended only as an educational presentation.



Disclosure:

Options involve risk and are not suitable for all investors. For information on the uses and risks of options, you can obtain a copy of the Options Clearing Corporation risk disclosure document titled [Characteristics and Risks of Standardized Options](#) by calling (312) 542-6901.

Mutual Funds are investments that pool the funds of investors to purchase a range of securities to meet specified objectives, such as growth, income or both. Investors are reminded to consider the various objectives, fees, and other risks associated with investing in Mutual Funds. Please read the prospectus accordingly. This communication is not to be construed as a recommendation, solicitation or promotion of any specific fund, or family of funds. Interactive Brokers may receive compensation from fund companies in connection with purchases and holdings of mutual fund shares. Such compensation is paid out of the funds' assets. However, IBKR does not solicit you to invest in specific funds and does not recommend specific funds or any other products to you. For additional information please view our Mutual Fund Product Listings.

Any discussion or mention of an ETF is not to be construed as a recommendation, promotion or solicitation. All investors should review and consider associated investment risks, charges and expenses of the investment company or fund prior to investing. Before acting on this material, you should consider whether it is suitable for your particular circumstances and, as necessary, seek professional advice.

Futures are not suitable for all investors. The amount you may lose may be greater than your initial investment. Before trading futures, please read the [CFTC Risk Disclosure](#). For a copy visit interactivebrokers.com.

There is a substantial risk of loss in foreign exchange trading. The settlement date of foreign exchange trades can vary due to time zone differences and bank holidays. When trading across foreign exchange markets, this may necessitate borrowing funds to settle foreign exchange trades. The interest rate on borrowed funds must be considered when computing the cost of trades across multiple markets.

The Order types available through Interactive Brokers LLC's Trader Workstation are designed to help you limit your loss and/or lock in a profit. Market conditions and other factors may affect execution. In general, orders guarantee a fill or guarantee a price, but not both. In extreme market conditions, an order may either be executed at a different price than anticipated or may not be filled in the marketplace.

There is a substantial risk of loss in trading futures and options. Past performance is not indicative of future results.

Any stock, options or futures symbols displayed are for illustrative purposes only and are not intended to portray recommendations.

- IRS Circular 230 Notice: These statements are provided for information purposes only, are not intended to constitute tax advice which may be relied upon to avoid penalties under any federal, state, local or other tax statutes or regulations, and do not resolve any tax issues in your favor.

- Interactive Brokers LLC is a member of [NYSE FINRA SIPC](#)

Trading Supply and Demand – Not Price

**Tim Quast, founder and CEO of
Market Structure EDGE
June 7, 2023**

BENZINGA

Winner: Market Structure EDGE
Best Day Trading Software

Take Gains, Not Chances

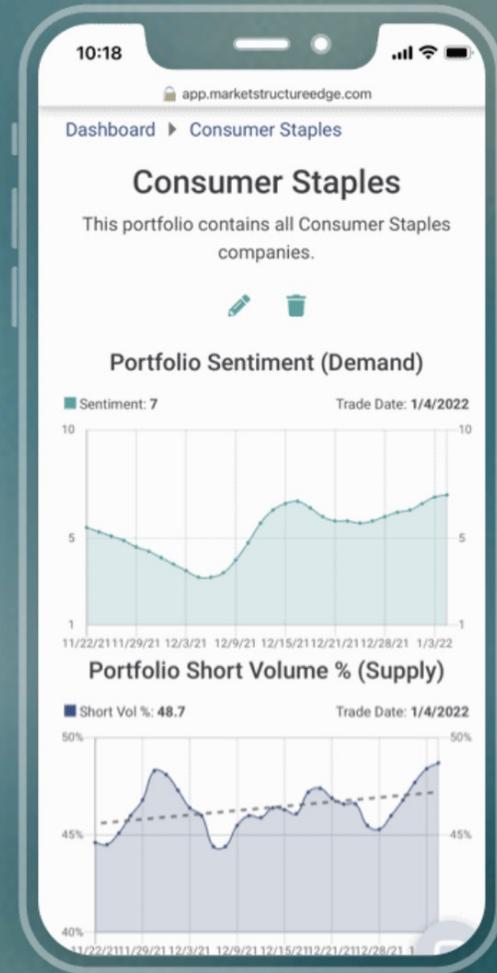
The only trading decision-support platform built on stock market behavior and rules. Sign up for a free 30-day trial, no credit card needed.



Free Trial

Request a Demo

30D Free Trial through your IB Account



- Market Structure EDGE: *The New Way to Trade*
- Sister Co ModernIR.com largest provider of quantitative equity Market Structure Analytics to US issuers
- Market-structure experts, build software, algorithms, based on market rules

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.

Market Structure

The behavior of money behind price and volume, in context of rules.

...And Here's How It's Changed



circa 2000:

Winning stocks: The ones the best stock-pickers buy.



This is 2023:

The ones the best stock-pickers buy have a 1-in-10 chance of winning.

Sources: 2000 data are estimated based on firms making markets at the time, Investment Co Institute data on fund assets. 2023 data from ModernIR models.



Market Structure makes winning harder

Reg NMS requires stocks to trade between the best Bid and Offer

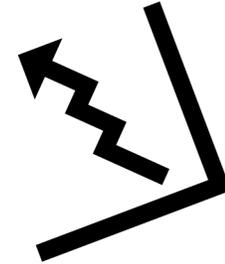
- The Average

Passive Investment tracks averages, prices between Bid and Offer

- The Average

A few big brokers execute most trades and rules require matches between Bid and Offer

- The Average



Stock-pickers seek **OUTLIERS**, rules force prices toward the **AVERAGE**

Tracking the Mean



Sources: ModernIR reviews of market rules, data, analysis 2005-2023.

Long Secular Decline for Stock Picking

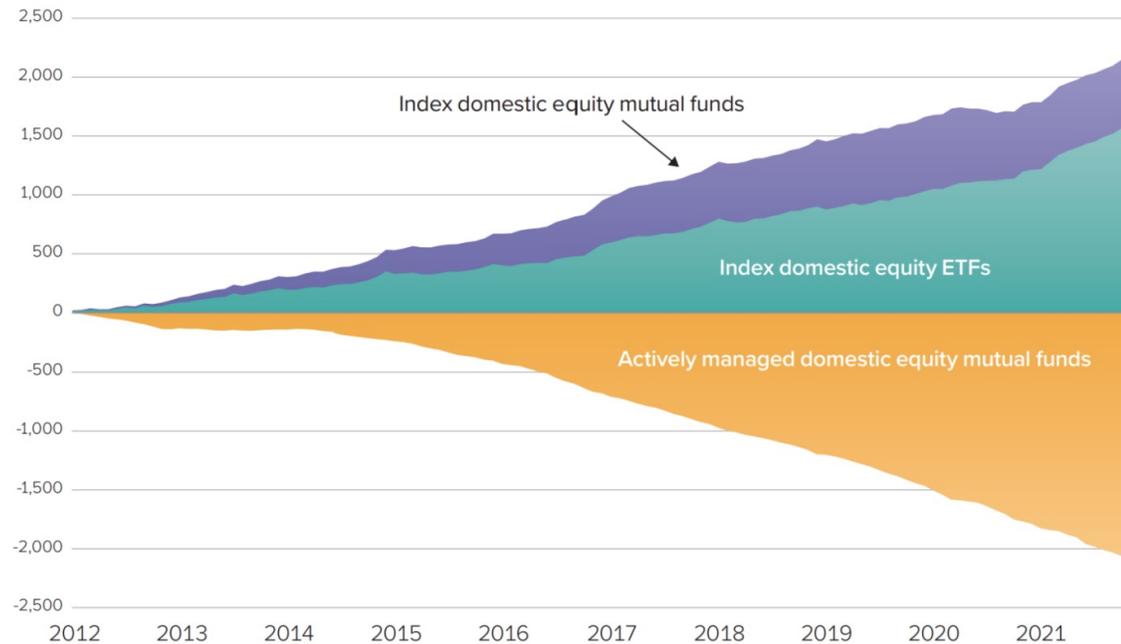
Page 54, ICI 2022 Factbook:

“...Demand for ETFs has been very strong over the past decade. Domestic equity ETFs had net creations in every month of 2021, which resulted in \$520 billion in net share issuance. In contrast, domestic equity mutual funds had net outflows of \$419 billion over the same period.”

FIGURE 3.16

Some of the Outflows from Domestic Equity Mutual Funds Have Gone to ETFs

Cumulative flows to domestic equity mutual funds and net share issuance of index domestic equity ETFs, billions of dollars, monthly



Source: Investment Company Institute 2022 Factbook

Note: Mutual fund data include net new cash flow and reinvested dividends; ETF data for net share issuance include reinvested dividends.

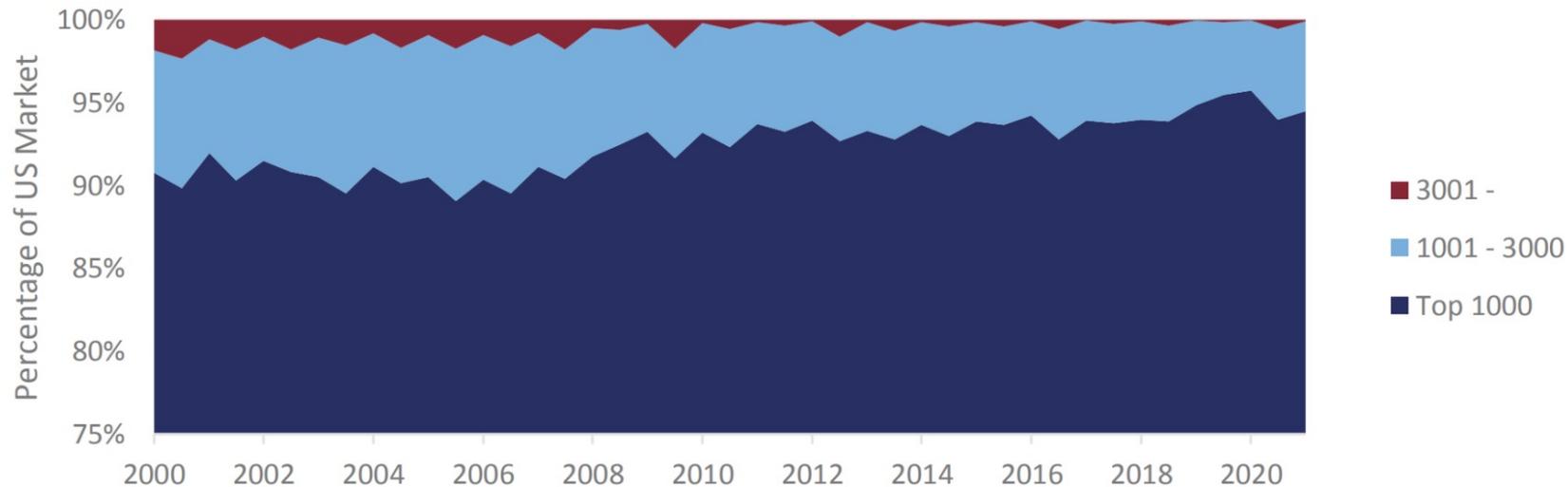
Wilshire 5000: 90+% in Top 1000

Stability of Size Segments through time

For both schemes one could argue that the breakpoints are somewhat arbitrary, however, the choice of one or the other has dramatic consequences for the stability of what constitutes the Large, Small and Micro Cap universes. Figure 3 shows how the split of the total US market has varied over the last two decades for count-based and cumulative market cap-based schemes:

Figure 3: Segmentation of the US Market by Stock Count and Cumulative Market Capitalization

Segmentation by stock count

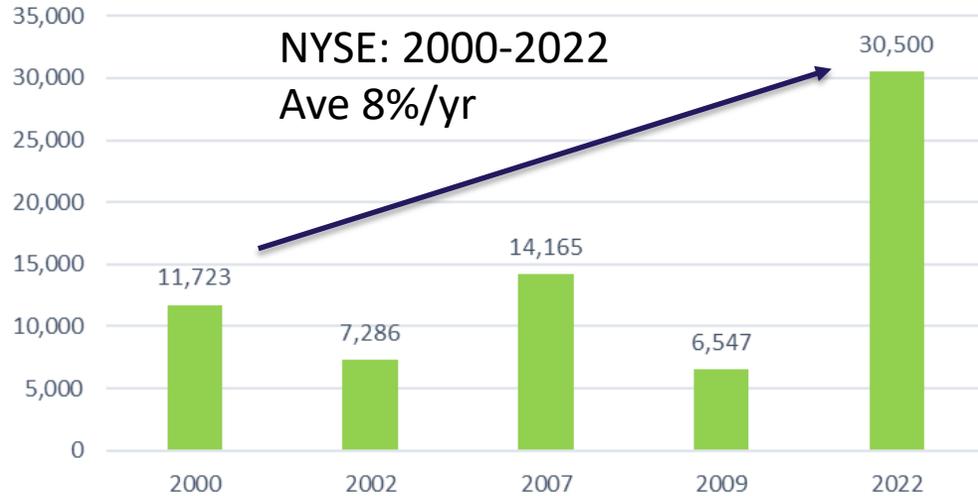


Index characteristics - Weights

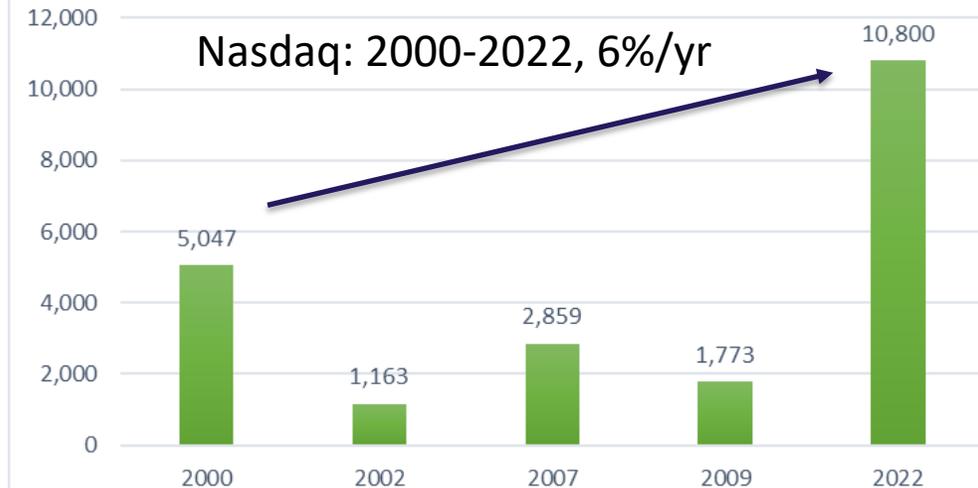
| | Number of stocks |
|--------------------------|------------------|
| FT Wilshire 5000 Index | 3525 |
| FT Wilshire US Large Cap | 496 |
| FT Wilshire US Mid Cap | 289 |
| FT Wilshire US Small Cap | 1272 |
| FT Wilshire US Micro Cap | 1757 |

<800 stocks are
MOST of the
market

DJIA: Milestone Levels - 2000-2022



Nasdaq: Milestone Levels - 2000-2022

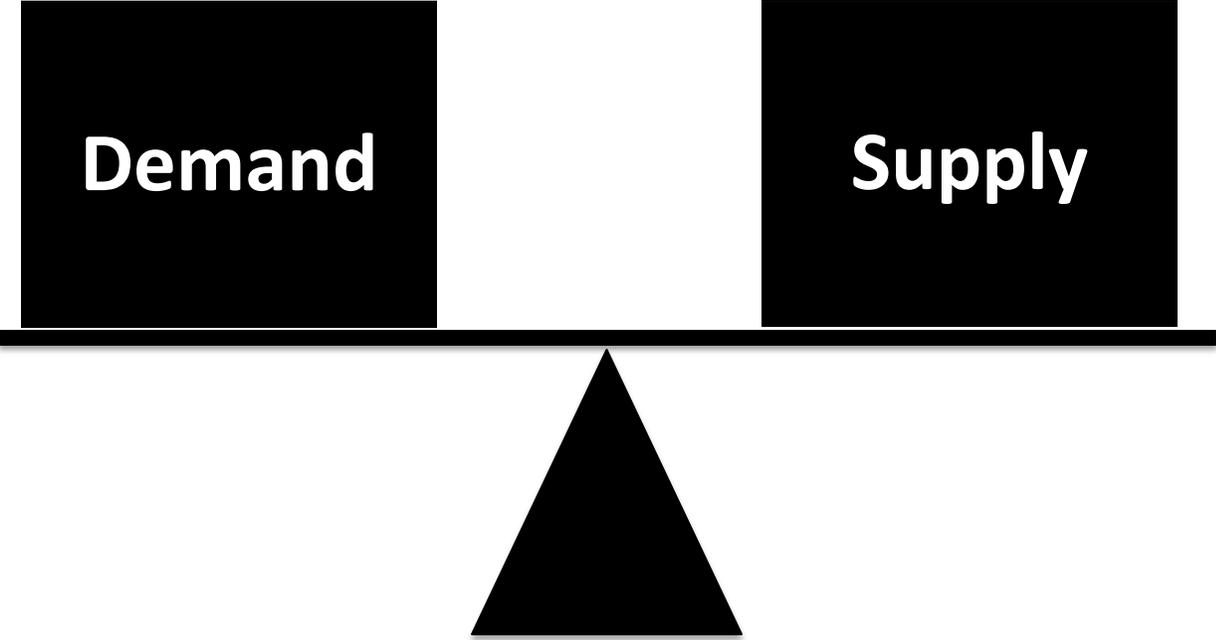


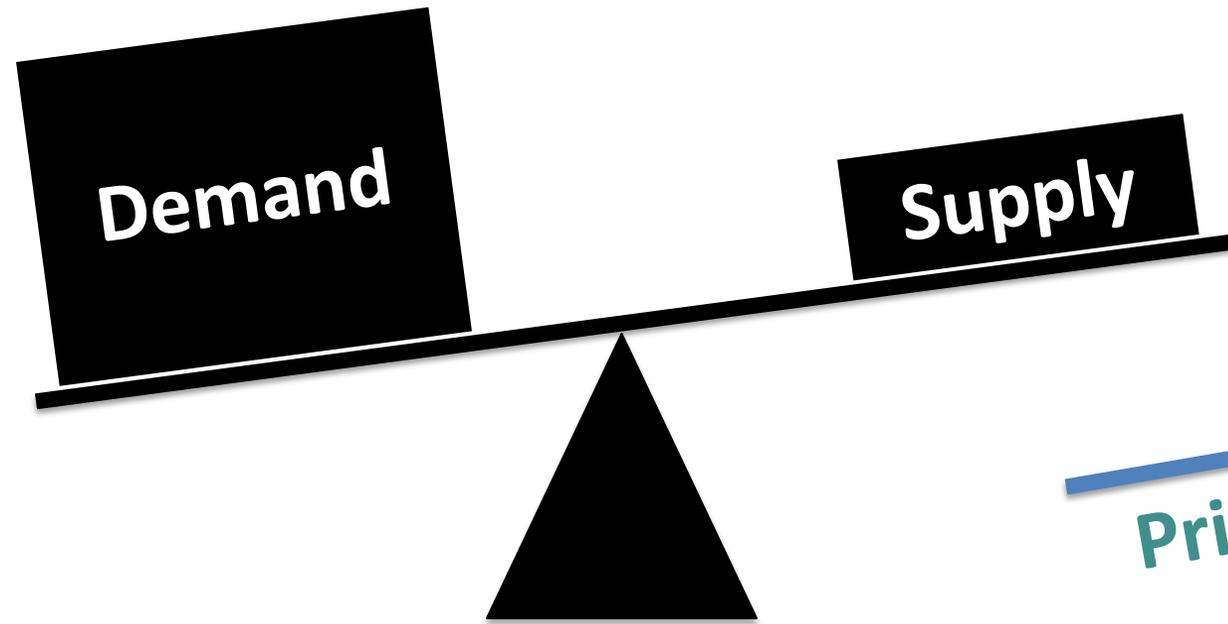
- DJIA fell 54% 2007-09
- Nasdaq fell 77% 2000-02
- Markets 2023-4?

Markets do not deliver the results you think, especially if you need your savings when stocks are falling.

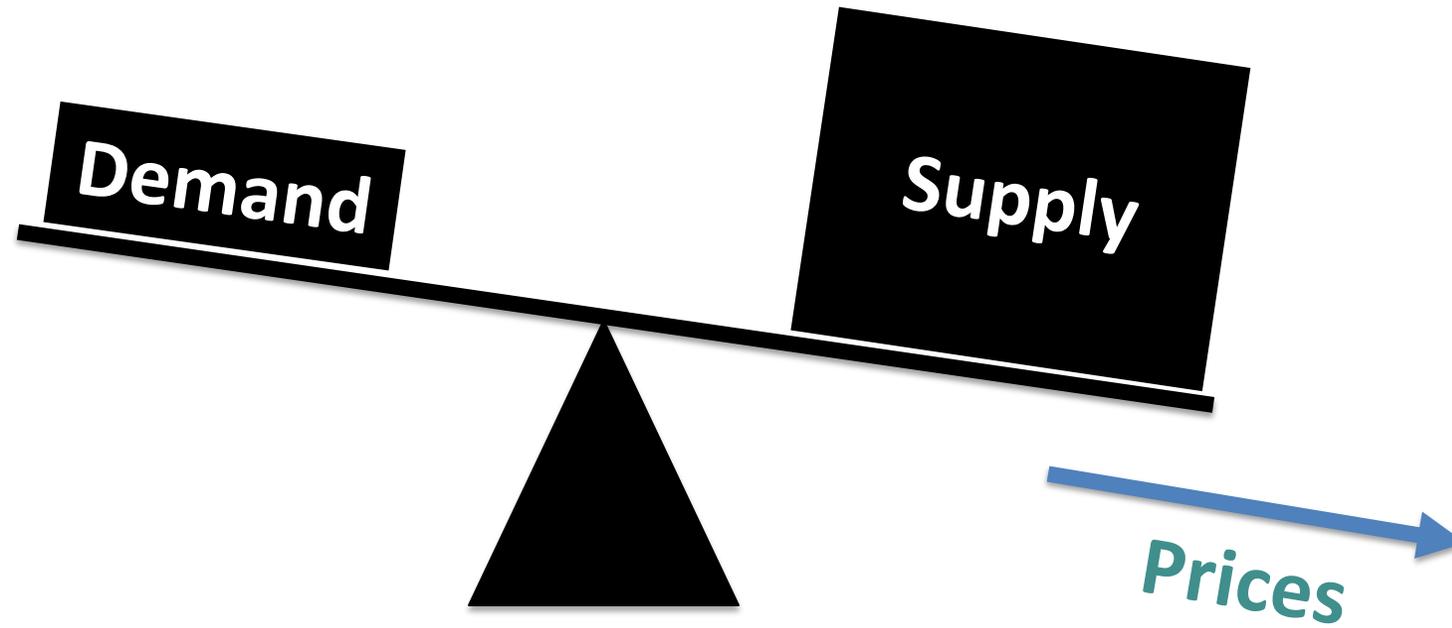
So, what are we traders and investors to do?

**Price, Fundamentals, Technicals, aren't by themselves
reliable.**





Prices



Three rules:

1. **Beware Broad Sentiment** because of Market Structure.
2. **Beware Context: Options-expirations, earnings, month-ends.**
3. **Trade diverging Supply/Demand.**

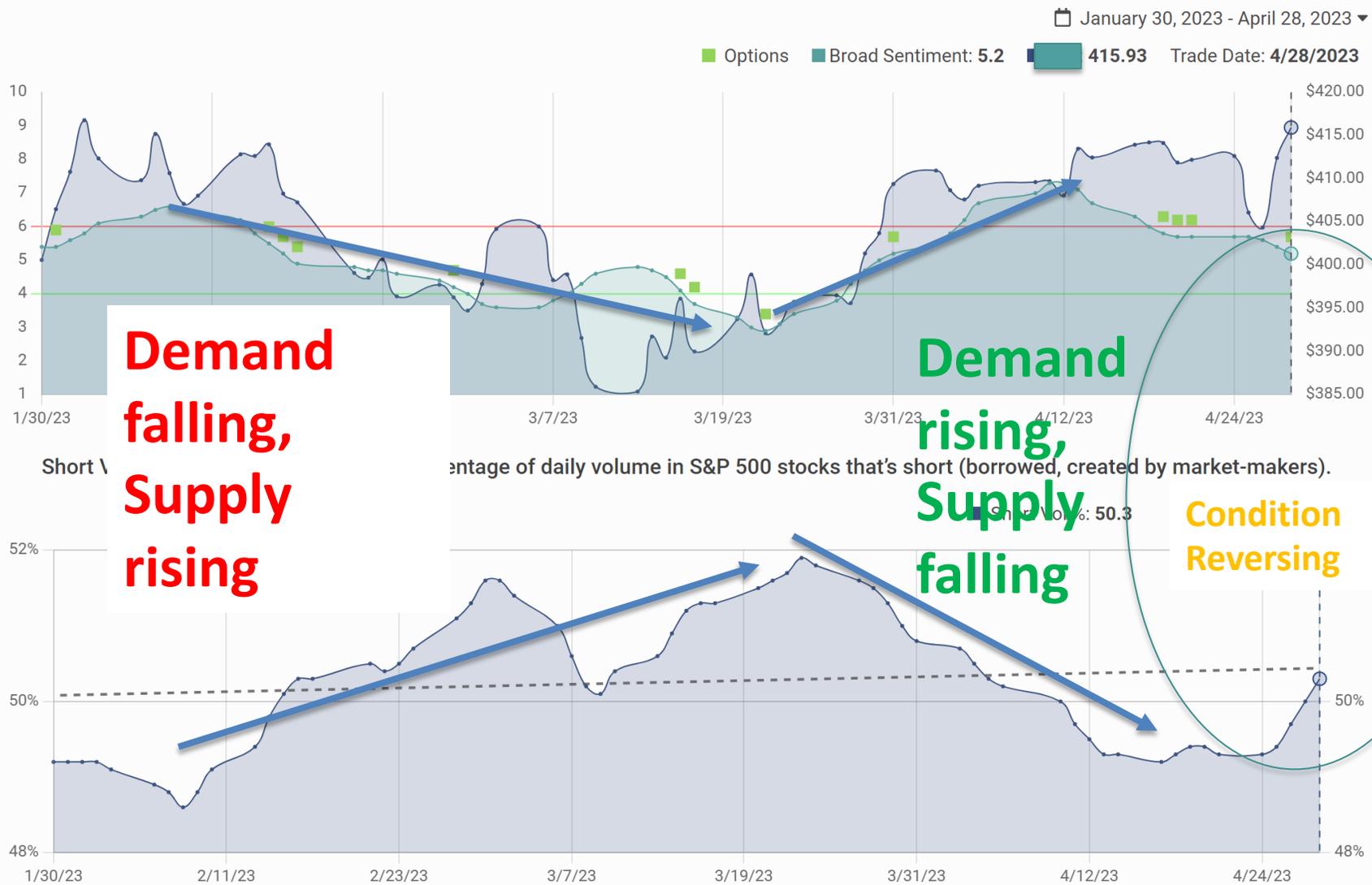
What Are “Supply” and “Demand”?

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).

Broad Sentiment for Risk Management

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

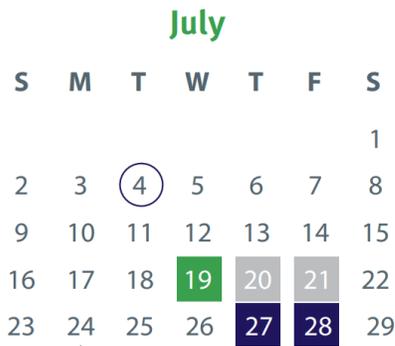
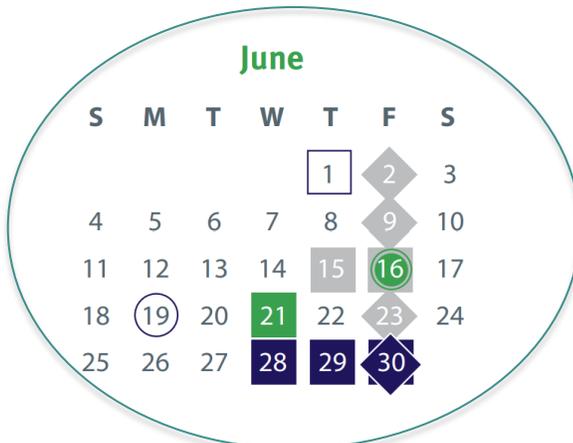
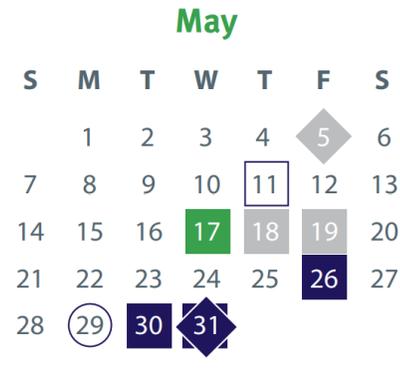
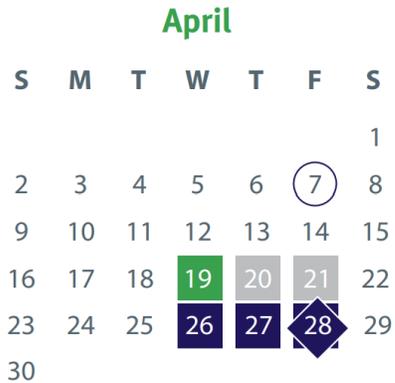
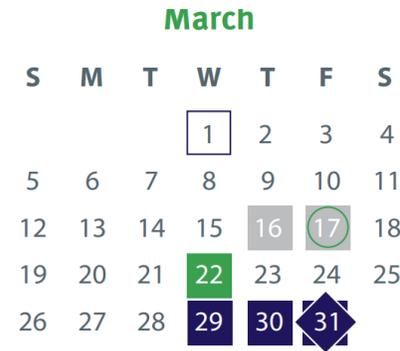
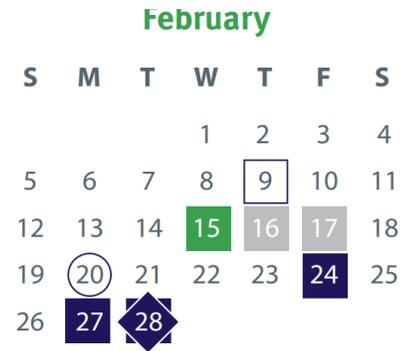


Rule #1

Manage Risk with
Broad Sentiment
(the engine of the
stock market).

*Prices constantly
change, always
RELATIVE.*

Source: Market
Structure EDGE LLC.
Data are illustrative,
not advice.



- 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

Rule #2: Context Matters

MarketStructureEDGE.com, under "Resources"

Options expirations

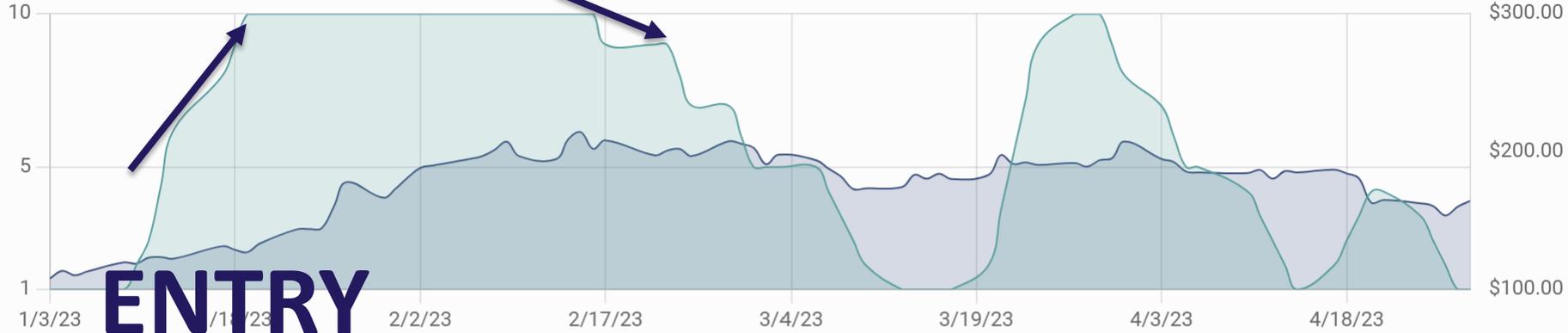
Plus: Fed, VIX, quad-witching, index rebalances, LEAPS

Source: Data compiled by ModernIR.com from S&P, Russell FTSE, Nasdaq, CBOE, MSCI

TSLA Market Structure Sentiment™ (Demand) vs. Closing Price

January 1, 2023 - April 28, 2023

Market Structure Sentiment™: 9 Closing Price: 208.31 Trade Date: 2/17/2023



ENTRY

**Demand over 5.0,
Supply flat**

EXIT

**TSLA Short Volume % (Supply)
Demand ticks down
(Supply above trend)**

Short Vol %: 63.3 Trade Date: 2/17/2023



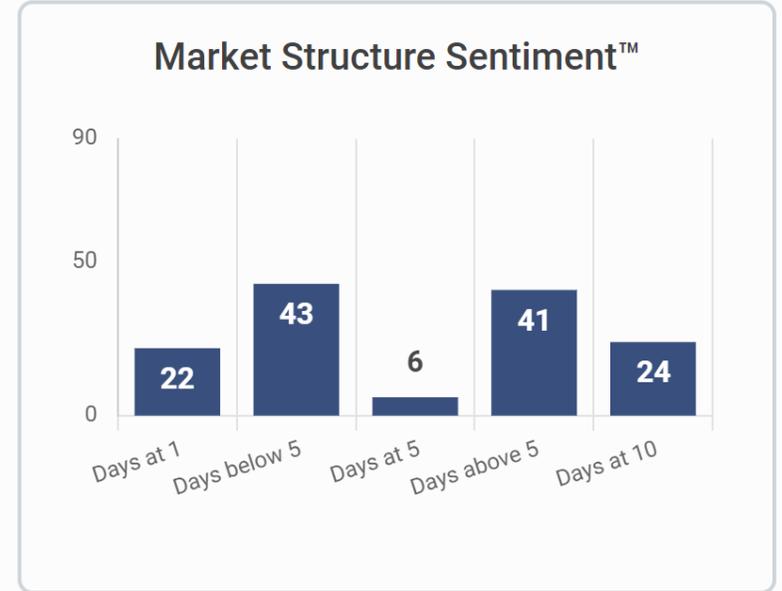
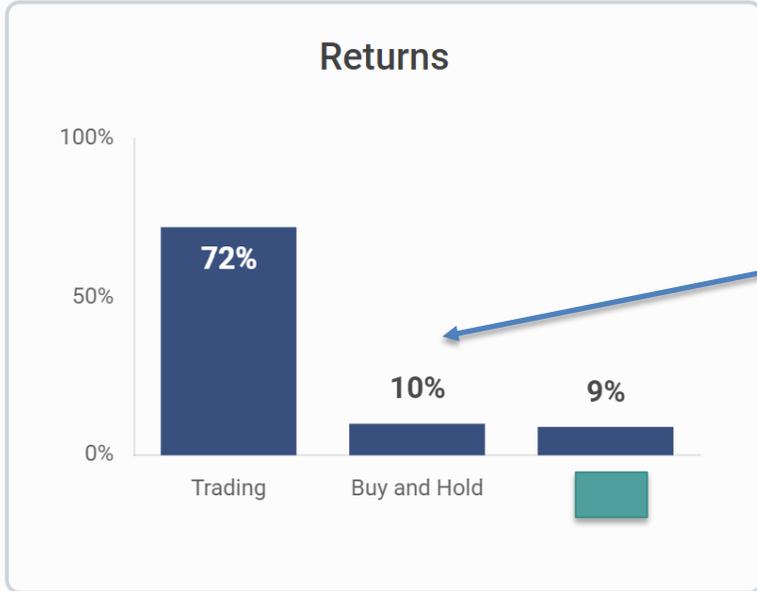
Rule #3

**Use diverging
Supply and
Demand for
entries, the
reverse for
exits.**

Source: Market
Structure EDGE LLC.
Data are illustrative,
not advice.

Trading TSLA

Tesla Motors (TSLA)



Company: TSLA

Start date: 12/19/2022 | End date: 04/28/2023

Sentiment buy threshold: 5

Sentiment sell threshold: []

Buy uptick | Buy 1's

Sell downtick | Sell 10's

Illustration: TSLA returns Dec 19-Apr 28 (90 days). Buying and holding TSLA: 10% (9%). Past performance is not indicative of future outcomes.

Entry on rise over 5.0, exit on Demand downtick: 72% in 32 days.

Source: Market Structure EDGE LLC.
Data are illustrative, not advice.

Let's go to marketstructureedge.com...

Momentum vs Low Volatility (EDGE math)

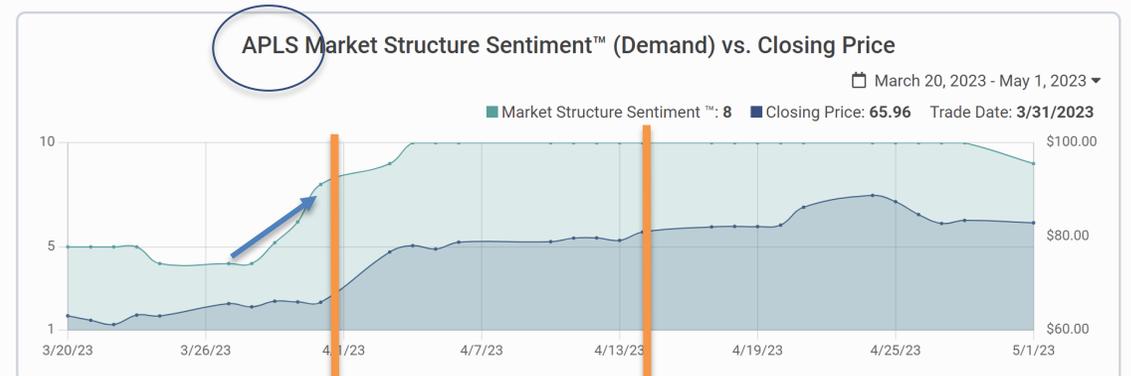
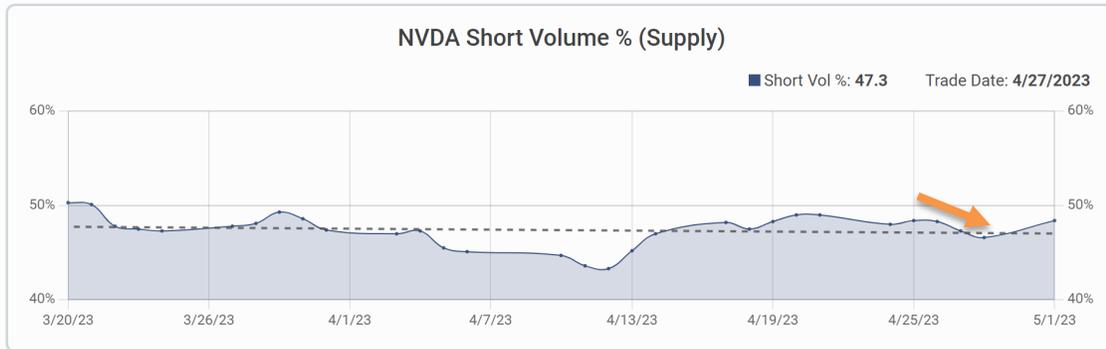
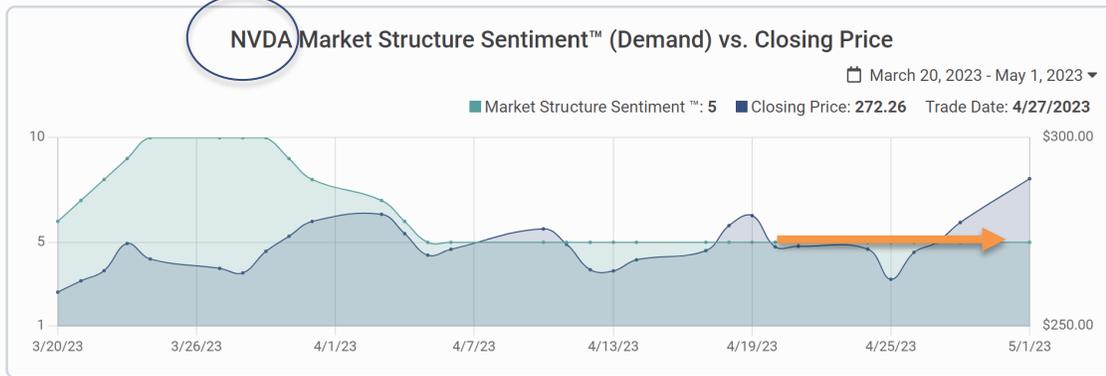


**Low Volatility
stocks exhibit
STABLE Demand,
falling Supply**

Momentum typified by diverging Demand (Market Structure Sentiment) and Supply (Short Volume)

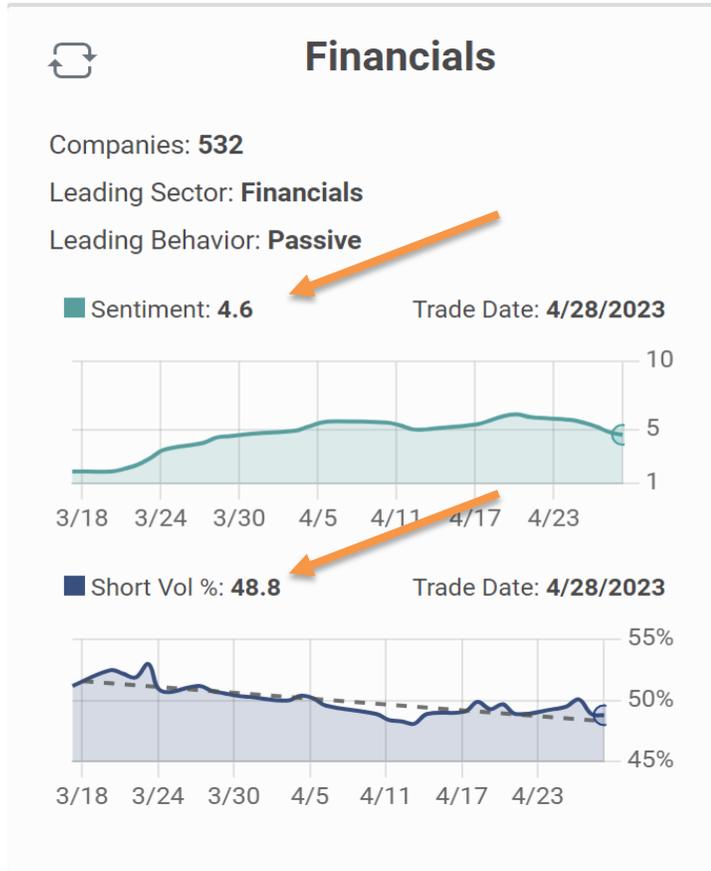
Source: app.MarketStructureEDGE.com

Divergences



Source: Market Structure EDGE LLC. Data are illustrative, not advice.

Are Banks in Trouble?



| | | | | | | | | | | | | |
|--------------------------|---------|-----|------|------|------------|------|---------|---------|-----------|----------|------------|---|
| <input type="checkbox"/> | .. CACC | 7 | | Down | \$489.50 | 2.5% | \$9,068 | 43.26K | \$6.28B | Fast Trd | Financials | ▼ |
| <input type="checkbox"/> | .. WTBA | 3.4 | | Up | \$17.23 | 2.7% | \$666 | 19.69K | \$286.71M | Passive | Financials | ▼ |
| <input type="checkbox"/> | .. CMTG | 5 | T | Up | \$11.96 | 3.8% | \$873 | 211.6K | \$1.65B | Passive | Financials | ▼ |
| <input type="checkbox"/> | .. NNI | 9 | D | Down | \$96.30 | 1.6% | \$2,230 | 34.78K | \$3.59B | Fast Trd | Financials | ▼ |
| <input type="checkbox"/> | .. WRLD | 10 | To | Down | \$100.90 | 4.7% | \$3,310 | 69.25K | \$628.47M | Passive | Financials | ▼ |
| <input type="checkbox"/> | .. MKL | 5 | Bo | Up | \$1,368.53 | 3% | \$8,477 | 52.26K | \$18.31B | Fast Trd | Financials | ▼ |
| <input type="checkbox"/> | .. RF | 2.6 | Dow | Up | \$18.26 | 3% | \$3,338 | 8.92M | \$17.07B | Fast Trd | Financials | ▼ |
| <input type="checkbox"/> | .. HWC | 5 | Bot | Up | \$36.52 | 2.6% | \$1,908 | 577.29K | \$3.14B | Active | Financials | ▼ |
| <input type="checkbox"/> | .. SSB | 5 | Top | Up | \$68.98 | 3.4% | \$3,744 | 864.08K | \$5.23B | Active | Financials | ▼ |
| <input type="checkbox"/> | .. OPOF | 4.2 | Down | Up | \$22.00 | 2.6% | \$633 | 1.84K | \$110.01M | Active | Financials | ▼ |

79.1%

78.2%

76.5%

76.3%

76%

75.6%

74.3%

73.8%

73.7%

73%

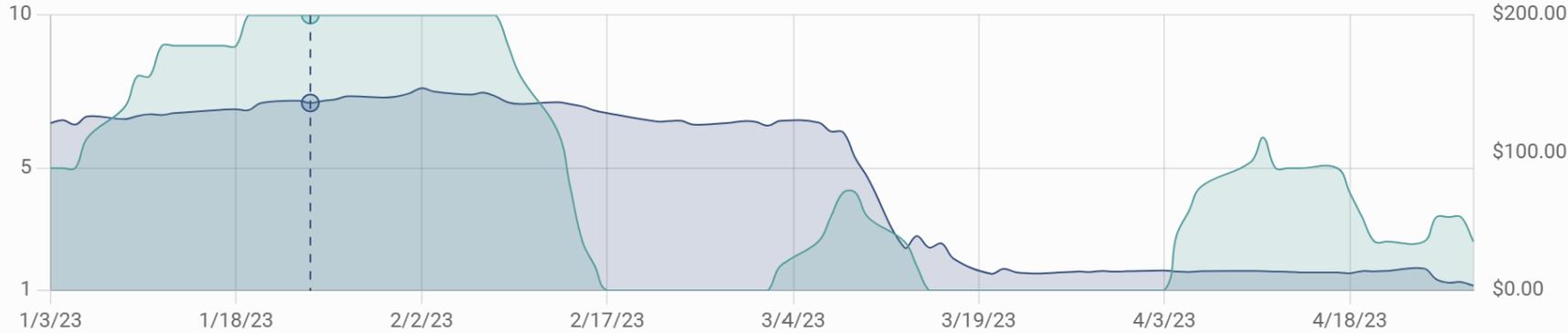
In Apr 2023, Financials don't signal high risk in Demand or Supply. But drilling down, we can keep track of rising Short Volume (Supply) in small banks (WAL PACW, etc.).

Note: High Short Volume can reflect lack of trading volume.

FRC Market Structure Sentiment™ (Demand) vs. Closing Price

January 1, 2023 - April 28, 2023

Market Structure Sentiment™: 10 Closing Price: 136.21 Trade Date: 1/24/2023

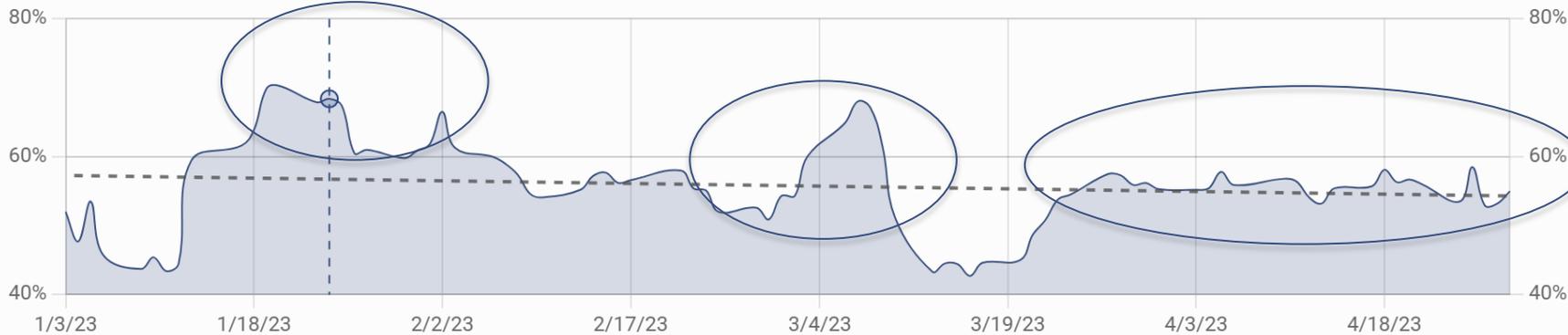


On May 1, 2023, FRC became the 2nd largest bank failure in US history.

The trouble was apparent at January options-expirations when Short Volume (Supply) neared 70%.

FRC Short Volume % (Supply)

Short Vol %: 68.4 Trade Date: 1/24/2023



It was nearly 70% again right before the early March crisis wiping out SIVB, SBNY.

And it remained high till the bank was sold.

Why Market Structure EDGE Works



- 1. Put math on your side.**
- 2. Time is risk.**
- 3. Market Structure rules stocks.**
- 4. Trading Supply and Demand is simple.**

PS - Beware human nature!

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](#)