

Short Interest: The Competitive Edge To Calculating Float

Adjusted Float = Shares Outstanding – Restricted Shares + Short Interest ...

A new equation to measure liquidity, position size, and the exact amount of executed short sales

Imagine trying to look through the window of a Ferrari dealership and half your view is blocked by some carelessly placed blackout curtains. Frustrating right? Yet, that is too often the limited perspective of traders, portfolio managers, analysts, bankers and risk professionals on both the buy-side and sell-side when calculating the float, or how many shares of a company's stock are available for trading. What's worse, and through no fault of their own, these participants in the capital markets don't know they're getting a partial view. And that's a problem. Because that partial view can cost a whole lot of money.

The reason for this blind spot is that the measure of float is antiquated. A recent analysis of the top thousand or so global stocks by market cap across major markets revealed a frequent divergence in float measures of over 10%. This skew of the view is particularly striking for short sellers, who, for too long now, have been underestimating float and needlessly handicapping their potential for optimal returns. Good financial data means a better vantage point of the trading and investing landscape. A quest to mine richer data led S3 Partners to the exciting discovery of a new and robust float equation on which to capitalize. The journey began with an exploration of the relationship between *shares outstanding*, *float*, *short interest*, and *opportunity*.

Shares Outstanding. Of all the metrics in financial analysis, shares outstanding seems the most straightforward. Shares issued to the public, in the initial and subsequent offerings, represent the bulk of this number. Issuances are filed with the SEC, the information is accessible, the math easy. Yet this simplicity is a deception. Even a widely used figure like earnings per share (EPS) isn't precise because the denominator, shares outstanding, has variations in reporting and classification of those shares. When analysts can't grasp who holds what, and if those shares are out in the market or locked up by owners, they can't properly assess float as an indicator of liquidity and risk.

Float. The float matters greatly to:

- Traders as a measure of liquidity, short crowding, and number of shares shorted in the marketplace;
- Risk Managers concerned with portfolio liquidity and stress testing;
- Capital Markets and Investor Relations Professionals mindful of an increased ownership base and volatility; and
- Securities Finance Teams that use float as a gauge of shares available to borrow and lend.

The conventional math goes like this:

$$\text{Float} = \text{Shares Outstanding} - \text{Restricted} + \text{Stagnant Shares}$$

Restricted and stagnant shares include shares in ESOPs (employee stock ownership plans), ESOTs (employee share ownership trusts), QUESTs (qualifying employee share trusts), employee benefit trusts, corporations not actively managing money, venture capital firms, and governments. Yet, this definition raises several questions about interpretation. For example, whether a corporation actively manages money is open to judgment. Similarly, some government entities, such as government pension plans and sovereign wealth funds, actually do move their stocks. Entities viewed as stagnant, but that in reality are actively buying and selling shares, are the stealthy players in the market increasing the volume of the float.

The hurdle to identifying, quantifying and assessing float, and hence the market liquidity of any given stock, can lead to overstating risk and losing out on opportunities. All of this not only disarms the potential for alpha generation, above market returns, but hampers market efficiency. This situation particularly affects security finance companies that facilitate short selling through stock loans.

Short Interest. The appropriate measure of short interest, the total shares comprising open short positions, is where the view into the Ferrari dealership narrows or widens. Hinderances include discrepancies in the timing of reporting and content of the data. The US exchanges report their data bimonthly, on a two-week delay, while some jurisdictions report daily or weekly short trading volume as opposed to the short interest positions. Others, like the EU, require reporting at specific thresholds. Additional challenges are the adverse selection, poor collection methods, and mischaracterization of contributed data. One widely cited data source collects data from beneficial owners, the ultimate lenders of shares, and their intermediary agents and prime brokers, to measure total shares on loan and shares available for loan, as proxies for short interest and borrowing capacity respectively. But shortcomings in this methodology can create a misleading impression of crowding in a short trade. Why? Because a significant proportion of shares loaned to prime brokers are not for open-market short sales. Examples of such internal utilization include hedging derivative positions; facilitating the creation or redemption of exchange-traded fund or note (ETF and ETN) units; and backstopping open client short positions in anticipation of a recall, or demands for the return of loaned shares. Another stumbling block to clarity is that data sources have contributors opt out in and out at will, creating selection bias as utilization increases.

Misunderstanding the metrics of supply in the capital markets can ring up significant opportunity costs. A perception of scarcity not only inflates financing fees, but fuels a fear of not being able to cover, i.e. getting squeezed. This can lead to shorts taking suboptimal positions that deflate profit potential.

Opportunity. The mechanism of a short sale, in which a stockholder loans shares through a custodian acting as agent and broker for the short seller, ends with a second buyer of the stock. That second buyer creates a synthetic parallel long position with the original owner of the stock because there are effectively now two owners and two potential sellers of shares in the market, where before there was one. It would be as if Fred at Ferrari was the custodian of a stock, but in this case, a car. Fred lends Sally, the short seller, a car to sell Bill the buyer. Fred is the only one who owns the pink slip, but both Fred and Bill own the car at that particular moment and could, if impelled, sell that car; Fred by calling for his asset back, Bill by selling it directly. While there is still only one car that gets sold, there are two players who, in the future, may be motivated by events to sell it. This gives any prospective buyer, such as Sally, two avenues to buy that car when she needs to. Similarly, once a short position is initiated, the shares available to trade, the float, is immediately increased by the size of the short sale trade. Recognizing that the appropriate measure of short interest is represented by the total shares comprising open short positions is like revealing a showroom floor with effectively twice as many cars because there are twice as many willing-to-deal sales folks eager to get you in the driver's seat.

S3's powerful combination of regulatory filings, proprietary data, and predictive modeling discloses short interest in real-time. Presenting an adjusted float alongside traditional metrics, S3 cuts through the murky waters of misinformation and underestimated availability to expose more clearly the volume of shares at-the-ready for short sellers. S3's cutting-edge data has shown that the difference in float definitions in heavily shorted stocks can approach 100% of the reported short interest. This means there is opportunity, value and trades to be made by utilizing more accurate definitions. With S3's improved equation, the traditional short interest to float ratio is nearly double its value. It's time to pull back the curtain from the store window, see two cars where everyone else sees only one, and put your trades in high gear for great value.