AES® Analysis

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What Happened When Traders' Shorts Were Pulled Down

Key points

- The recent restriction on all short selling caused some major changes in the marketplace
- We examine the early effects of this action on volumes, spreads and volatility
- Interestingly, we also find that:
  - short interest is rather low in the list of banned stocks and
  - few of the much-criticized hedge funds are strictly short only

Short Sell Rule Change: Analyzing the Aftermath

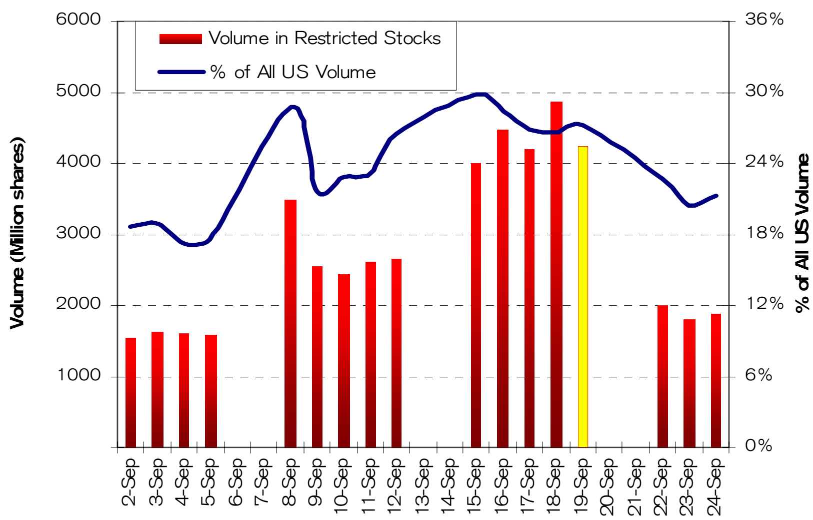
Capping off a week of unprecedented volumes and volatility as Wall Street was rocked by a Lehman Brothers bankruptcy; a near-collapse of the entire credit market á la AIG's diminishing capital base; the merger of behemoth Bank of America with investment bank Merrill Lynch; and a proposed $700 Billion taxpayer-funded government bailout of "troubled assets" on top of billions of dollars of liquidity injections by central banks around the word, the SEC issued a mandate on Friday, September 19 curbing the practice of short selling entirely in certain securities, even if the seller can find the stock to borrow.

So what has happened since the rule change? We find that in fact, it may have reduced liquidity and increased spreads in the restricted names. The effect on volatility is somewhat unclear as there were so many factors contributing to the week's unprecedented vol that it would be shocking if they did not come down, restriction or no.

Volumes Fall Off in Names Subject to Restriction

Following the restriction on short selling, liquidity has dried up substantially in names subject to the restriction. Whereas the restricted stocks accounted for approximately 28% of all US volumes in the week prior to Friday's rule change, they are now only around 20% of total volume. Many traders have simply stopped trading these names entirely, long or short.

Exhibit 1: **Volume in Restricted Stocks**



Source: Credit Suisse: AES® Analysis

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What Does the New Rule Mean?

Traders are no longer allowed to sell a stock that he doesn't own (known as "shorting" the stock), even if he is able to locate someone who does and is willing to lend it.

The SEC issued an exemption for registered market makers who are facilitating client orders. Without this exemption, market makers would not be able to hedge their exposure and may have forced clients to pay much higher prices in order to take on the unhedged risk.

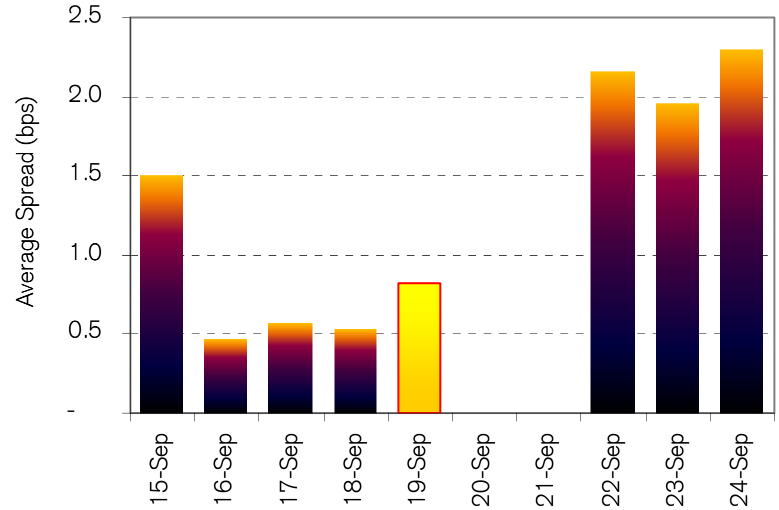
Restricted Stocks are More Costly to Trade

Average bid-ask spreads in the 950 restricted names are substantially wider this week than they were last week, amidst all the turmoil.

Typically, with more participants vying for a trade, they will keep bettering the quote in order to get their fill. By pulling bids up and asks down, the spread compresses. However, as we've seen that volumes are lower, there are fewer bids and offers in the market which means less quote competition.

It seems that the temporary restriction on short selling has made it more costly, on average, to trade these names.

Exhibit 2: Average Bid-Ask Spreads across Restricted Stocks



Source: Credit Suisse: AES® Analysis

Wall Street Meltdown: A Timeline of the Crisis

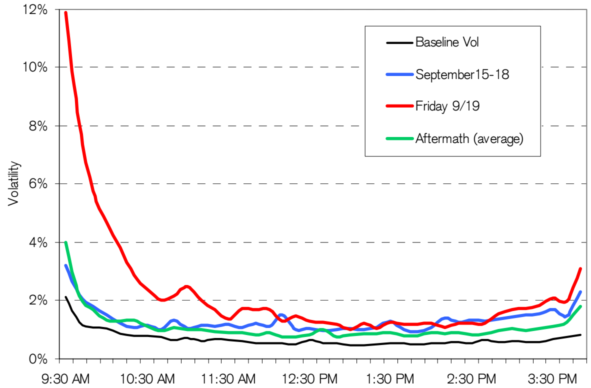
Monday Sept 15	• Lehman Brothers declares bankruptcy • Merrill Lynch merges with Bank of America
Tuesday Sept 16	• AIG, the worlds' largest credit default swap counterparty, faces a severe liquidity crisis with the potential to bring down the massive credit market. As markets speculate about potential collapse, Fed does not intervene
Wednesday Sept 17	• Fed officially steps in to take control of AIG; markets swoon as they anticipate further failures
Thursday Sept 18	• Fed injects additional $105Bn in temporary reserves, initiating a much-needed mid-day rally
Friday Sept 19	• SEC restricts short selling on certain securities • Treasury proposes $700Bn plan to bail out troubled assets and shore up banks' balance sheets

Volatility: A Mixed Bag

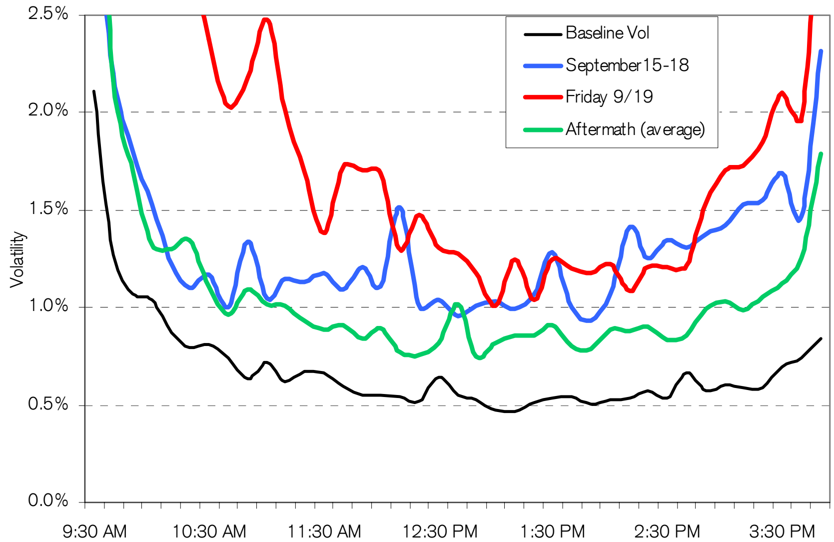
Volatility shot up almost across the board during the “crisis week” thanks to the barrage of gloomy headlines. It reached a pinnacle on Friday’s open (Sept 19) as the Wall Street turmoil piled on top of the quarterly index options and futures expiration (Triple Witching), already infamous for producing elevated vol levels. Following such a climax, it is no small surprise that we have seen vol back off. We do not view this as conclusive evidence that the restriction on short selling was effective in reducing volatility.

Almost all stocks, including both those with restrictions on short selling and those without, are still above what we consider to be “normal” vol levels.

Exhibit 3: **Intraday Volatility of Stocks Subject to the Short Sell Restriction (10 min Intervals)**



Source: Credit Suisse: AES® Analysis



Source: Credit Suisse: AES® Analysis

Hedge Funds May Contribute to Reduced Vol

While vol has come off from “crisis” levels, it still remains notably above our baseline (measured as the relatively normal August to the first 2 weeks of September). We attributed these heightened levels to a general pullback in hedge fund trading activity that is not confined to securities subject to short sell restrictions alone.

Many hedge funds specifically seek out mispricings and move quickly to eliminate them. This, theoretically, prevents prices from moving too far away from a stock's fundamental value and reduces large price swings (volatility). They carry this out by simultaneously going long in a basket of names and short in a related group in order to reduce exposure to the broad market's systematic moves and only capture price changes of the desired stocks.

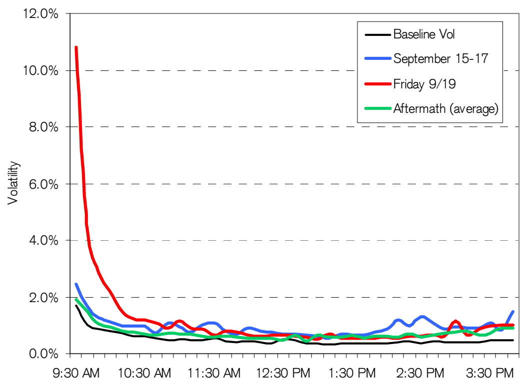
As hedge funds have been limited from taking the short side in certain securities, they can no longer execute these matched long-short trades. The upshot is a significant reduction in hedge fund participation (as we confirm with reduced volumes - see above). Thus, that large stabilizing force that eliminates mispricings is missing from the markets, keeping volatility elevated.

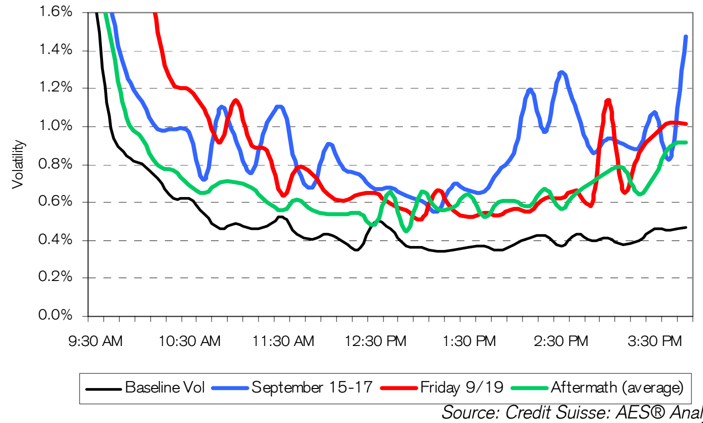
Large Cap Vol Caused by Fed – Not Short Sellers

We also find that much of the intraday volatility apart from the open in Large Caps NOT subject to the short sell restriction came on Thursday of that week. This was the day the Fed announced that they were injecting an additional $105 billion in temporary reserves into the banking system. The day began with a continuation of the week's sell-off and the S&P dropping 2%, but many stocks reversed following the announcement to rally by 6.5%. This steep turnaround made Thursday's intraday volatility particularly high.

When we therefore look at volatility over last week prior to the short sell announcement, the average is increased thanks to Thursday. Thus, when we see that vol is relatively lower than last week, it is actually rather close to Monday-Wednesday 9/15-9/18, implying that the restriction had little effect on reducing vol.

Exhibit 4: Intraday Volatility of Large Caps NOT Subject to Short Sell Restriction (10 min Intervals)



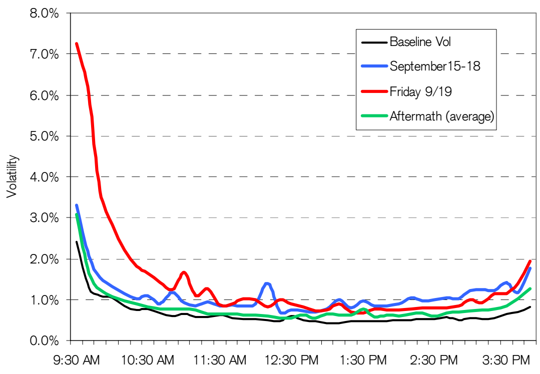


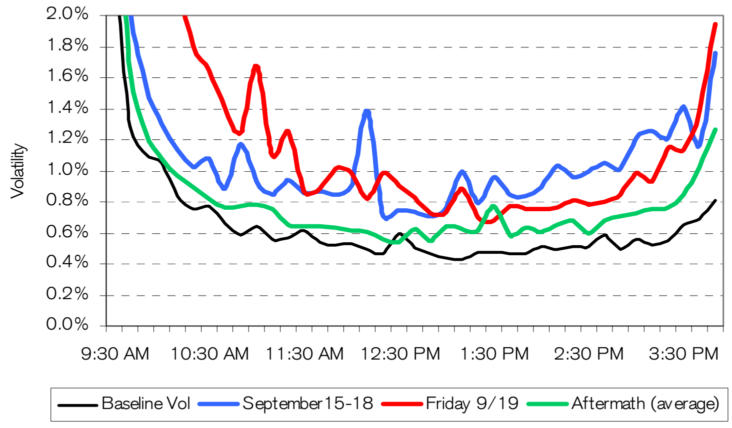
Source: Credit Suisse: AES® Analysis

Small Caps are Largely Unaffected

Similar to the large caps, small caps not included on the list seem to have been minimally affected by the short selling limitations. This is likely due to the fact that it is often much more costly to borrow small cap stocks to short, making hedge funds' long-short strategies less common. Pairs trades also require higher liquidity to facilitate getting in and out of both sides of the trade simultaneously, something more difficult in the small cap space. Thus, hedge funds are already smaller participants in this space so their absence is less significant.

Exhibit 5: Intraday Volatility of Small Caps NOT Subject to Short Sell Restriction (10 min Intervals





Source: Credit Suisse: AES® Analysis

Shorts Have Little Interest in Restricted Names

Contrary to what many people believe, shorts often represent only a small percent of a stock's daily volume and an even smaller percent of the total equity float (shares available for public trading, i.e. not restricted stock). Out of the nearly 1000 stocks on the restricted list, roughly 1/5 can cover all of their short interest with 1 day's volume. Less than 1/3 would require more than 10 days of trading to cover all shorts.

Surprisingly, although many blamed short sellers for dragging down the prices of prominent investment banks like Goldman Sachs or Merrill Lynch, their short interest was only .88 and .55, respectively, of their ADV as of Sept 15 - well before the short sell limitation! Lehman's ratio was only .5!

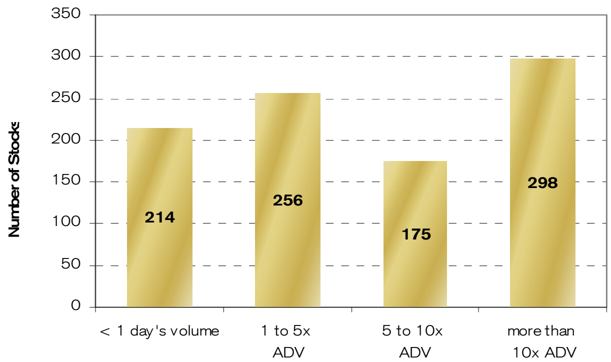
In fact, such blue chips as Wal-Mart, IBM and Chevron all have short interest ratios substantially higher than many of the stocks on the restricted list: Wal-Mart's short interest, at 2.13, is higher than 625 stocks on the list (Ex. 6)!

Exhibit 6: **Short Interest Ratio of Selected Names**

Company	Shorts as % of ADV	Shorts as % of Float
Lehman Brothers	**50%**	**N/A**
Merrill Lynch	**55%**	**4%**
Goldman Sachs	**88%**	**3%**
Morgan Stanley	**162%**	**4%**
Wal-Mart	213%	2%
IBM	151%	1%
Chevron	144%	1%

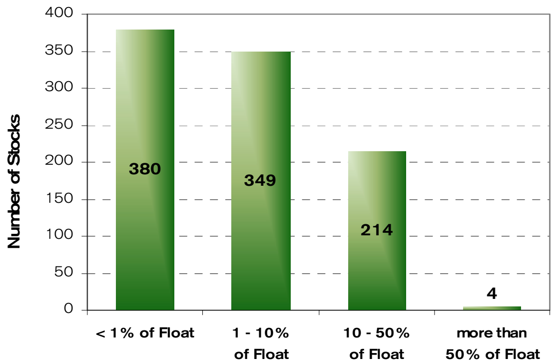
Source: Credit Suisse: AES® Analysis

Exhibit 7: **Short Interest as % of ADV for Restricted Stocks**



Source: Credit Suisse: AES® Analysis

Exhibit 8: **Short Interest as % of Float for Restricted Stocks**



Source: Credit Suisse: AES® Analysis

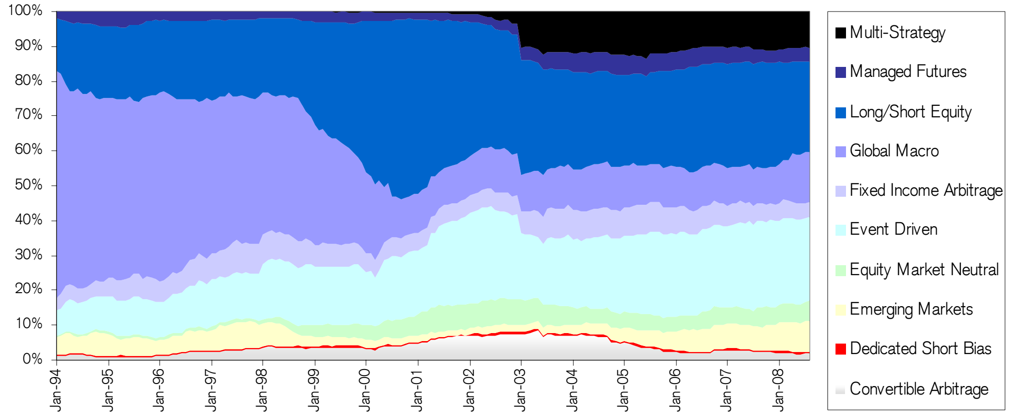
Few Hedge Funds are Dedicated Shorts

It is also interesting to note that while hedge funds do engage in short selling, most are not designed to specifically target companies by shorting their stock. Much of the hedge funds' short selling is part of a strategy that matches short sells with long positions, as discussed on p 3.

As of the latest data from the Credit Suisse/ Tremont Hedge Fund Index (Aug 2008), a minuscule 0.7% of hedge funds was dedicated to short only trades. The balance is either long only or engaged in long-short strategies.

HF Strategy Breakdown (Aug 2008)	
Convertible Arbitrage	1.8%
Dedicated Short Bias	**0.7%**
Emerging Markets	8.9%
Equity Market Neutral	5.6%
Event Driven	24.1%
Fixed Income Arbitrage	4.2%
Global Macro	14.4%
Long/Short Equity	25.8%
Managed Futures	4.0%
Multi-Strategy	10.4%

Exhibit 9: **Hedge Fund Breakdown by Strategy Type Over Time**



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