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MARKET INSIGHTS

Short Circuit: New Restrictions on Short Selling in U.S. Equity Markets

In February of this year, the U.S. Securities and Exchange Commission voted to implement a new rule that will reimpose constraints on the execution of short sales. Dubbed the “alternative uptick rule,” the new rule has two major components, a “circuit breaker” and a “passive bid test.” The restrictions will be triggered if a stock’s price declines by 10% from its prior closing price. Over the remainder of that and the following day, short sales in that specific name will be permitted only if executed at a price above the stock’s then-current national best bid. The SEC has given market participants until November 2010 to comply with the new rule.

In this Market Insights, we consider this SEC rule, the latest U.S. regulatory initiative on short sales since the market turmoil of 2008, in the context of the following questions:

1. How does the SEC’s new rule compare in form and content to past rules, such as the “uptick” and “bid-test” rules?

2. How does the new rule fit within the existing regulatory structure for short sales in the United States?

Although our presentation focuses on the regulatory landscape in the United States, we’ll also draw some brief comparisons to short-sale regulations in Europe and Asia.
Price-Test Constraints on Short Selling: The Alternative Uptick Rule and Its Predecessors

In the midst of a severe decline in stock prices in 2008, the SEC unveiled a series of new regulatory initiatives, including temporary measures that imposed “pre-borrow” requirements on short sales of 19 financial stocks and banned the shorting of more than 900 stocks. According to a number of analyses, both emergency orders did much to impair liquidity in equity markets and raise costs for stock buyers. One academic study found that the quoted bid-ask spreads for the 19 financial stocks falling under the SEC’s temporary pre-borrow rule doubled relative to a control group of stocks.\(^1\) Another found that the September 2008 short-sale ban resulted in a $4.9 billion wealth transfer from buyers to sellers.\(^2\)

With its February decision on the alternative uptick rule, the SEC has added price-test constraints on the timing and execution of trades back to the mix of regulations that govern short sales. As a reminder, in July 2007, after many years of analysis, the Commission repealed the old uptick and bid-test rules, thereby eliminating such price-test constraints from the array of pre- and post-trade rules on short selling. After outlining a handful of proposals for new price-test constraints and soliciting feedback during a lengthy comment period in 2009, the SEC has now made the alternative uptick rule the successor to the uptick and bid-test rules.

At this relatively early date, it appears that the scope of the SEC’s new alternative uptick rule, in terms of number of stocks affected, will be far narrower than either the 2008 short-sale ban or previous price-test constraints. Based on an analysis of trading from April 2001 through September 2009, the SEC estimates that the new rule would have applied to approximately 4% of stocks listed on U.S. exchanges on any given day.\(^3\) Given that approximately 7,000 stocks currently would be covered under the new rule, and extrapolating from the SEC’s historical data, one might expect that short selling would be constrained in fewer than 300 stocks on an average day. However, for those stocks that do trigger the circuit breaker on a given day, short selling is likely to be far more constrained while the passive bid test is in force than under the old uptick or bid-test rule.

Before spelling out the new rule in more detail, it’s worth briefly reviewing the origins of price-test constraints on the execution of short sales. We’ve seen this cycle of regulation before. Past financial crises, like the most recent one, prompted calls for increased regulation as the public, their political representatives, and various market watchers reacted with fear or anger to steep declines in equity markets.

Prior Price-Test Constraints on Short Selling

Until the end of the 1920s, short selling in the United States was not limited by formal rules. In the wake of the 1929 stock market crash, with short sellers roundly—and as academic studies have subsequently shown,\(^4\) unfairly—blamed for causing the collapse, the New York Stock Exchange imposed a number of new constraints on shorting, including a “downtick” rule that prohibited short sales at prices below the last sale price.

In 1935, the newly established SEC requested that other national exchanges adopt the NYSE’s downtick rule, which they quickly did. However, after U.S. stocks suffered another crash in 1937, the SEC issued Rule 10a-1, known more informally as the “uptick rule.” While the original Rule 10a-1 indeed limited short sales on national exchanges to those executed at an uptick (increase in price) over the last price at which the preceding sale was executed (a “plus tick”), this narrow constraint quickly proved unworkable. Just over a year after adopting Rule 10a-1, the SEC modified the rule to allow short sales on either a plus tick or a “zero-plus tick,” the latter being the same price as the previous sale but higher than the last different sale price.

This basic uptick rule stood alone until 1994, when the growth of electronic trading led the SEC to approve a similar rule for stocks traded on the NASDAQ. This rule, administered by the NASD, relied on a “bid test” rather than


a price test. This modification was implemented because NASDAQ trades were not necessarily reported to the tape in chronological order, making it difficult, if not impossible, to determine an accurate last “price.” Under the NASD bid-test rule, short sales were prohibited at or below the then-current best or “inside” bid (the highest bid to buy stock displayed in the NASDAQ Market Center) when that current best bid was lower than the previous best bid. This prohibition was indicated to traders by a red “down” arrow appearing next to the ticker symbol on NASDAQ data feeds when the bid sequence was declining. When the bid sequence was advancing, a green “up” arrow appeared as an indication that a short sale could be entered and executed at any level, even below the current best bid.

The SEC’s uptick rule and the NASD bid-test rule, together with the NYSE’s original downtick rule, were all put in place largely to combat a presumptive form of market abuse that is generally referred to as a “bear raid.” In a bear-raid scenario, a small number of market participants accumulate a large pool of capital to short a stock, perhaps in conjunction with the spreading of rumors intended to put downward pressure on the stock price. Such actions are intended to cause sufficient panic so that holders of long positions begin to sell, causing further losses. In theory, this not only allows the short sellers to cover their short positions and realize gains but also permits them to purchase long positions they’ll hold and sell later at considerable profit if, once the short-selling and rumor campaigns subside, the stock price trends up.

After more than 70 years of significant change in equity markets (including the end of “ticks” altogether with the move to decimalization) and considerable enforcement efforts to combat market manipulation of all kinds, the SEC repealed the uptick and bid-test rules in July 2007. This regulatory change followed a controlled experiment that was designed by the Commission to pinpoint the effects of the price and bid tests on stock prices and market quality. The two-year experiment involved ranking the stocks in the Russell 3000® Index according to average trading volume and then allowing every third stock (a “pilot”) to trade without price or bid-test constraints; the remaining stocks served as natural controls. The SEC staff report on this study, as well as several academic studies analyzing the same data, concluded that there were no meaningful differences in volatility, particularly to the downside, across the pilot and control stocks, and no evidence that stocks in the pilot group were subject to trading suggestive of bear raids. With enhanced enforcement tools and no evidence that the short-sale restrictions benefited the market, the SEC eliminated those constraints.

The New Alternative Uptick Rule

After the steep losses and equity market volatility of 2008, many of the same recriminations against short selling made in the 1930s were voiced again. Some market participants and corporate CEOs charged that short selling had disproportionately caused the price declines, particularly for financial stocks. Others, including SEC staff economists analyzing 2008 market data, contend that the selling pressures from traditional holders, rather than short sellers, accounted for the downward movement of stock prices during the extreme market events. In the face of significant market uncertainty, a newly appointed Commission considered reinstating some form of price-test constraints on short sales and proposed several options for public comment.

In a split decision reflecting the degree of controversy that surrounds short sales, the SEC voted 3 to 2 on February 24, 2010 to amend Section 201 of Regulation SHO and to impose the alternative uptick rule. Here’s a brief outline of the new rule.

**Scope:** The new rule applies to all equity securities listed on U.S. exchanges. It does not apply to options or other derivative securities.

**Price trigger:** The circuit breaker is triggered if the price of an individual stock declines by 10% from its closing price on the prior trading day.

**Duration:** From the point at which the circuit breaker is triggered, the new rule applies to a stock for the remainder

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1 For accounts of alleged bear raids, see Kathryn E. Staley, The Art of Short Selling (New York: John Wiley and Sons, 1997), chap. 12.
of the day and the following day.\(^8\) If a stock falls by 10% or more from its prior closing price again when the alternative uptick rule already applies, the circuit breaker is retriggered and will remain in effect for that day and the following day.

**Passive bid test:** For market participants, the new rule effectively means that for as long as the circuit breaker applies to a given stock, implementing a short sale in that name would generally require entering a passive limit order to sell the security at a price above the current national best bid.

Market centers must implement “policies and procedures” reasonably designed to prevent, for the relevant period, the execution or display of short-sale orders at or below the current national best bid that has triggered the circuit breaker. The rule is thus not a strict prohibition against display or execution of impermissibly priced short sales. Rather, exchanges and brokers must undertake reasonable efforts to prevent display or execution of short sales that don’t conform to the rule, and those measures could vary across market centers.

### Old and New Price-Test Rules Compared

When the SEC initially outlined new proposals for restricting short selling in April 2009, its stated goal was to improve investor confidence. The intent behind the new rule is to make short selling more difficult in a declining market and thus limit downward pressure on stocks that are already falling in price.\(^9\) The SEC did not allege market manipulation, as it had in previous crises, but seemed to take the view that reinstatement of an old rule couldn’t do much harm, despite the results of various economic studies.

In selecting the alternative uptick rule, the SEC appears to have tried to mitigate some of the impact that such a rule could otherwise have on the efficient functioning of equity markets, in at least two ways. First, the Commission recognized that bringing back the old uptick rule or the NASD bid test was not practical given changes in the structure of U.S. equity markets. So, for the majority in favor of reimposing price-test constraints, the passive bid test may have been attractive because it could be implemented without radically overhauling the current market structure or forcing the exchanges and brokers to implement expensive new systems. Second, a passive bid test on its own would come perilously close to an outright ban on shorting, an option the Commission had explicitly rejected. Among other things, the addition of the circuit-breaker feature limits the new rule’s application to individual stocks (rather than applying it to the entire market) and thus seeks to counterbalance the adverse consequences of such an effective ban. Let’s consider both points in a bit more detail.

### Implementation Hurdles

Feasibility of implementation was apparently a major consideration for the SEC when it considered new constraints on short sales. Simply reimposing the former uptick rule would have been virtually impossible given the evolution of market structure in the United States. There are more than 30 trading venues for U.S. equities, including national and regional exchanges, dark pools, and electronic communication networks. The decentralization of the market for stock trading means that determining the last sale price (and thus whether any given stock is rising or falling) across all markets would not be feasible without significantly restructuring the way these markets report trades.

Typically, trade prices are reported simultaneously from multiple locations using different systems within the required 90-second window, making reported last-sale price sequencing an unreliable indicator of the actual order of transactions. Even last-sale prices that are reported immediately may not be in sequence if executed at different venues. Under these conditions, putting a limit on short sales based on the last price, as the SEC explicitly acknowledged, was not practical.

Reimposing the old NASD bid test also would have posed considerable challenges under the current market structure, though to a lesser extent than the price test. For the most liquid stocks, exchanges can receive hundreds and even thousands of orders per second, and consequently bids can move from up to down hundreds of times per second across dozens of market centers. Therefore, the sequencing aspect of the NASD bid test introduced a layer of potential

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\(^8\) We’ve opted to use the SEC’s language here, although it’s likely the Commission intended this to mean “following trading day.”

\(^9\) In this vein, some have asked why the U.S. government has not imposed a corresponding downtick rule that permits buyers to purchase a stock only when its price is falling. This is perhaps a flippant way of pointing out that policymakers have focused more on the effects of downside volatility and less on the adverse consequences of stock-price bubbles like those seen during the “dot-com” era.
complexity to trading and monitoring that was seen by market centers as onerous and expensive to implement.

The alternative uptick rule's approach is believed to be simpler for market centers to put in place. The test for whether a stock may be shorted during a circuit-breaker condition is more straightforward. The current national best bid will provide a bright-line test for market centers to apply, and exchanges have some flexibility in devising appropriate measures that prevent the execution of short sales at impermissible prices. However, what the alternative uptick rule gains in simplicity comes at the expense of precision.

Limiting the Impact of the Passive Bid Test

The simplicity of the alternative uptick rule is rooted in a rather draconian approach to limiting short sales. The new rule is far more strict than the old uptick rule or the NASD bid test because it could apply during declining, static, and advancing markets for a security. The new rule thus extends beyond the scope of the SEC’s announced intention to curb short selling in a declining market. When triggered, the rule will likely disadvantage purchasers by imposing a premium on stock made available to the market by short sellers. Additionally, by discouraging short sales of particular stocks, liquidity likely will decline, leading to higher bid-ask spreads. Under certain market conditions, the new rule might approximate an outright ban on short sales for affected stocks at a given price.

Consider the following example: The current national best bid for a stock is $10.00 with a displayed size of 100 shares, meaning, under the new rule, that short sellers generally would only be permitted to enter passive limit orders to sell short at $10.01, even if they judge the stock to be worth less. Giving long sales priority over short sales when a stock has triggered the circuit breaker, therefore, could mean that purchasers will pay a premium to buy a constrained stock.

It seems clear, then, that without the circuit breaker feature, the passive bid test on its own could have severely hampered market liquidity. Given that potential, the circuit breaker appears to have been included to limit the impact of the passive bid test, at least in terms of number of stocks affected. However, because the restriction carries through the next day following a 10% price decline, the alternative uptick rule will have a more pronounced impact than if the price-test simply expired at the end of the day. There could be other distortions in volatile markets. What if a stock declines by 10% and then rebounds by 5% over the course of the same trading day, perhaps due to significant news, such as a merger or an earnings surprise? In such situations, which are not all that rare, the market for the stock is no longer declining, yet the alternative uptick rule will constrain short sales and reduce liquidity in that stock for the remainder of that day and the next one.

The Broader U.S. Regulatory Regime on Short Sales

Before it lifted the earlier price and bid tests, the SEC put in place a number of tools to prevent the sort of market manipulation that is often cited as the rationale for restricting short sales more generally. To place the alternative uptick rule in broader context, let's consider how the new short-sale constraints fit within the wider set of rules on short selling in U.S. equity markets.

Preventing Naked Short Selling

In recent years, much of the public controversy surrounding shorting of equities has centered on the illegal practice of abusive “naked” short selling. Traders who act irresponsibly by selling a stock short without borrowing or arranging to borrow in time for settlement are engaged in illegal naked short selling. In an abusive naked short transaction, the seller doesn’t actually borrow the stock and intentionally fails to deliver it to the buyer, with the purpose of driving down the security’s price. (To be clear, a relatively small number of delivery failures results from processing errors.) Whether acting recklessly or with the intent to manipulate markets, naked short sellers are violating SEC rules.

Complying with the locate requirement

The SEC enacted Regulation SHO in 2005 with the intent of adapting regulation to modern market structures and placing harder limits on the potentially abusive practice of naked short selling. Among other things and with certain

\[10\] Discussion of margin requirements has been intentionally omitted, as the topic is outside the scope of this piece.
exceptions, Regulation SHO stipulates that no broker may accept a short sale from a client or enter a short sale for its own account without first making an “affirmative determination” on the availability of stock to borrow. Fulfilling this locate requirement entails borrowing the stock, having an agreement in place to borrow the stock, or having a reasonable belief that the stock can be borrowed and delivered by the settlement date.

What does this mean in practical terms for a firm like ours? Each morning our computers tell our prime brokers’ computers which stocks we might short that day. The prime brokers search their own inventory and also daily data feeds from banks that custody securities for clients like pension and mutual funds. When the stocks available for borrow are found, we’re given a “locate” to prove we have access to borrowable stock. Our trading systems are programmed not to allow a stock to be shorted unless a locate has been obtained.

Brokers estimate that the percentage of shares borrowed is well below 10% of all shares for which they provide locates, and they use sophisticated analyses to manage inventory and prevent failures. Most stocks are easy to borrow, but some aren’t—a relatively large number of traders may, for example, wish to hedge a convertible issue or pursue merger- or event-arbitrage trades—so brokers don’t enable their systems to automatically confirm a locate for such “hard-to-borrow” stocks. Instead, we have to call brokers to find available borrow. Whether borrowable stock is located automatically or over the phone, no capital changes hands until the trade’s settlement day.

As a technical matter, this locate requirement is more or less specific to current U.S. short-sale regulations and should not be confused with certain pre-borrow requirements that were temporarily implemented by the SEC and other regulators around the world in 2008. Such pre-borrow rules are far more onerous and costly than a locate requirement because pre-borrow dictates that a stock must actually be borrowed prior to the entry of a short sale order in that name on an exchange, regardless of whether the contemplated short sale ultimately occurs. Pre-borrow thus requires the funding of the borrow to begin on the trade date of a short sale, instead of the settlement date. Since the proceeds of a short sale are not available to clearing brokers until the settlement date, such a requirement means that brokers would need to fund the pre-borrow out of their own capital (the cost of which brokers are likely to pass on to their customers).

**Tightening fail-to-deliver rules**

Under the original version of Regulation SHO, clearing brokers were generally obligated to “close out” fail-to-deliver positions that had remained open for at least 13 consecutive settlement days (i.e., trades that had failed for 10 days beyond the typical 3-day settlement period) in certain securities that were determined to have large and persistent fails-to-deliver. (Regulation SHO defines stocks with persistent failed trades as “threshold securities.”) To close out a position within the required timeframe, brokers must purchase securities of like kind and quantity in order to deliver them to the party who had purchased and expected to receive them. In September 2008, the SEC significantly tightened its close-out rule on an interim basis by requiring close-outs of short sales at or before the open of trading on the day after the settlement date and by extending the scope of the requirement to apply to all equity securities. The upshot of the SEC’s temporary rule was that by the beginning of the fourth trading day after a short sale experienced a failure-to-deliver, the broker handling the transaction must have borrowed or purchased the security to close out the failing trade. If not, the broker is not permitted to execute additional short sales in that name for any party. In July 2009, the Commission made this interim rule permanent.

The SEC previously estimated that, as a percentage of the total dollar value of trades conducted over nearly 200 trading days on major U.S. exchanges, less than 1% of all equity trades failed to settle within three days after the trade date. The relative proportion of fails-to-deliver was therefore already small, and the new rule has proven effective in driving down the number of failed stock deliveries even farther. The SEC found that after tightening its delivery rule in September 2008, fails-to-deliver for all stocks declined by over 50% in the subsequent six months.

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11 The SEC also eliminated the existing exemption from the close-out requirement that had been available to options market makers. However, certain market makers are currently provided with some additional flexibility on when they must close out positions.


Short Circuit

Reporting and Disclosure Requirements

When looking across major jurisdictions, it’s notable that although uptick and bid tests have been imposed by regulators in the United States and certain countries in Asia, such price-test constraints have generally not been imposed in European countries. This may be due to the absence of a trade-marking infrastructure at the exchange level in those jurisdictions. European exchanges historically have not required that trades be marked “long” or “short” when orders are entered, and regulators typically haven’t imposed price-test constraints on short sales, since they can’t be identified. Consequently, regulators in those jurisdictions have leaned more heavily in the direction of short-sale disclosure rules. Once again, it may be instructive to see how SEC rules have evolved in this area and how they have affected our firm.

After the 1929 crash, the NYSE required its members to provide data on their short positions and privately encouraged them to minimize their shorting activities. Not long thereafter, the NYSE implemented a requirement that all sell orders be marked long or short. And in 1932, the U.S. Senate subpoenaed the president of the NYSE to furnish data on the identities and positions of all accounts with open short positions as of the end of a trading day in April of that year. The Senate then released that information to the public. These disclosures caused a temporary reduction in short selling activity.¹⁴

The recent market crisis once again prompted regulators to impose new reporting requirements on short selling activity. In September 2008, the SEC issued an emergency order requiring “institutional money managers” with assets under management of $100 million or more to report certain of their short sales and positions. Under the original emergency order, such managers were required to report to the SEC new short positions acquired and short transactions executed after the effective date. The emergency order was replaced by a temporary order that simplified the requirement in a number of ways but also required the reporting of short positions acquired prior to the emergency order. Under both the emergency and temporary orders, the information that we and other managers reported to the SEC was not disclosed to the public. In the aftermath of the financial crisis, regulators in the United Kingdom and other countries have adopted or considered reporting and disclosure requirements for short positions. The United Kingdom now requires that investors publicly disclose all net short positions that exceed 0.25% of a given stock’s market capitalization. Other European Union countries are currently considering a public reporting requirement for net-short positions that exceed 0.50%. However, if other EU regulators follow Germany’s lead, such public disclosures would remain anonymous with respect to the identity of the short seller. Hong Kong’s financial regulator is also considering a short-position reporting regime, but unlike the current U.K. requirement, all reporting would, like the SEC’s 2008 temporary rule and the German reporting rule, be made privately to the regulator, and any public disclosures would consist of anonymized data to better protect investor trading strategies.¹⁵

The SEC allowed its temporary order requiring short-sale reporting to expire without renewal in August 2009. Without finding any concrete benefits to the collection of this immense volume of data, the SEC opted to pursue a different path toward greater transparency for all market participants regarding the aggregate level of short selling on national exchanges. The Commission announced that it was working with self-regulatory organizations (“SROs”) to provide public disclosure on the volume of daily short sales for individual securities, as well as making public information on short-sale transactions with a one-month lag.¹⁶ Since 2005, SROs like the NYSE and NASDAQ have released bi-monthly reports showing the number of shares in individual names that have been sold short and not repurchased. U.S. exchanges began reporting daily volume of short sales in individual names in August 2009. In April 2010, the SEC proposed a “large-trader” reporting rule that would require large traders to notify the SEC and receive a unique identifier. That identifier would be attached to all of the


large trader’s trades in its brokers’ records so that all transaction data (including the identifier) could be made available privately to the SEC by brokers upon request the morning after the day on which transactions (long or short) were effected. The SEC has also discussed the possibility of reinstating a reporting requirement for individual large short positions.

Additionally, the SEC has worked to provide the public with short-sale data in two other areas. In July 2009, the SEC began releasing fail-to-deliver data for individual stocks. The aggregate number of fails for each stock is posted to the SEC’s Web site twice monthly. The SEC has also coordinated with SROs to provide a trade-by-trade record of short-sale transactions for each stock listed on U.S. exchanges, including the transaction time, price, and number of shares.

**Conclusion**

A strong consensus has developed among various experts—including brokers, exchange officials, institutional investors, and academics—that short selling contributes liquidity and price discovery to equity markets and ultimately makes those markets more competitive and efficient for all who trade in them. At the same time, regulatory oversight is also clearly essential to the promotion of fair and orderly trading in equity markets. Although something of a stable equilibrium generally seems to prevail between these twin objectives in normal markets, three severe market crises in 80 years have prompted calls for tighter restrictions on short selling, including some that materially compromised the efficiency of equity markets.

It will be some time before the markets can fully gauge the impact of the SEC’s alternative uptick rule. In the coming months, as the exchanges clarify the policies and procedures with which they will implement the new rule, our firm expects to coordinate with our trading counterparties and modify our trading infrastructure to adapt to those changes. We don’t believe the new price-test rule will have a material impact on our investment activities. The number of stocks affected under the alternative uptick rule is expected to be limited. In addition, we believe the tightening of delivery standards and other 2009 regulatory reforms to prevent illegal naked short selling can only benefit markets and rule-abiding investors.

More generally, we don’t anticipate that the regulatory regimes in the United States and other jurisdictions—whether related to short selling or not—will remain static. It remains to be seen, for example, whether short-sale reporting rules in major equity markets will broadly converge or whether national regulators will follow independent paths, as they largely have on price-test constraints. Given our global trading footprint, we’ll follow regulatory developments in a number of jurisdictions quite closely.

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17 This data is available at [http://www.sec.gov/foia/docs/failsdata.htm](http://www.sec.gov/foia/docs/failsdata.htm).
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