From: The Desk of Richard Tullo

April 13, 2009

Dear Madam Chairwomen:

I am writing to congratulate you on your new position and to comment on Regulation SHO. We meet many years ago when I was a NASDAQ Market Maker and at that time I thought you were a fair person. I have confidence that you realize importance of regulatory reform and the ramifications of bad regulations. Today I argue that if we go back to the Old Short sale rule that the SEC will have done nothing to resort the market Integrity. Moreover, the failure of the markets to provide investors with accurate information, and pricing has little to do with Short-Selling in regulated markets as the emergence of completely unregulated swaps transactions was responsible for AIG's failure and perhaps Lehman Brother and Enron as well.

I believe the current financial crisis is the end result of a complex chain reaction exacerbated by the lack of regulation in some markets, over regulation of exchange traded markets and the failure to enforce existing regulations when appropriate. The result of this failure is destruction of roughly \$2 trillion USD, 300,000 jobs lost in the global financial industry and over \$80 billion USD in lost revenue to the Treasury (over 1/4 the 2008 US budget deficient).

I have communicated to the commission for years (see Exhibit II published in 2004) and suggested on several occasions that the current regulatory regime favored large corporations and undermined the ability of smaller companies to raise capital. I also predicted the current regulatory philosophy (which began under the Clinton Administration) would lead to market failures and inferior returns for individual investors. I think by focusing the SEC's resources on regulating individual transactions and spreads instead of issuers and institutions the SEC created a regime that it could not enforce despite a 300% increase in budget from 2001 to present days. The diversion of the SEC's resources owing to the enforcement of rules which govern research analysts and trade spreads resulted in the SEC's failure to catch a plethora of scandals which in-turn cost the investors billions and crashed the markets.

Market Integrity is a hackneyed term used but rarely understood by those that flower speeches with this important concept. Sure Market Integrity is an ethical responsibility of industry actors to their clients but it is more than just ethics. Market Integrity cannot be based on solely the morals of traders, brokers and investment bankers. Integrity is also the structural ability of markets to withstand a stressor and function in an orderly and precise manner as designed. Clearly market integrity has failed as the volatility has approached all time highs (despite technology and innovation) and S&P was down 48% at its low.

The problem is since 1994 new regulations have applied extreme interpretations of the Theories of Perfect Competition and the Efficient Market Hypothesis when markets a rarely perfect or efficient outside the Ivory Towers of elite universities. Therefore as the SEC reviews its rules which regulate our profession we need a set of new rules like the Securities and Exchange Acts of 1933 and 1934 were in their original form. We need rules which clearly define the structure of securities that can be issued and the role of the markets that trade them. While holistic reform is complex and requires great effort and coordination, I argue the global economy would be better served by transparent clearly defined risk based regulation. I also suggest that the SEC yield transactional regulation to the markets, the states, arbitration panels and the courts, which have the resources and the US Constitutional authority to address the task at hand.

The tick driven bid test or up-tick driven rule cannot work in today's equity markets for several reasons;

1) When bid/ask spreads are just a penny will a tick rule make a difference?

- 2) Each dollar change in price has 100 price increments and each stock has as many as 4000 or more price changes per trading session how can the SEC monitor, enforce and audit such a rule?
- 3) When the tick rule was introduced there was also far fewer middle men between a client and broker. Today an order can change as many as 5 to hands (including brokers, black box systems, wholesalers, prime brokerage departments and ATS) before reaching an exchange if it ever gets to one. Can the SEC Regulate such a system?
- 4) Short Selling serves a vital function, in many cases fundamental short sellers have uncovered bad corporate managers.

Ironically, owing to management changes; many companies been saved by the existence of short sellers. However unbridled short-selling by unchecked well funded proprietary trading desks at regulated firms, "off-shore" trading desks or un-regulated hedge funds could undermine market Structure and Integrity. That is why I suggested that the exchange consider a circuit breaker rule in fall of 2008. I think a short-sell circuit breaker should be applied to the markets, pre and post market trading sessions as well as to individual stocks.

This is how it would work.

1) If the S&P 500, Dow Jones or NASDAQ QQQ index is down 5% then short selling in all exchanges should be halted until the next trading day.

This would prevent unwarranted index arbitrage short selling across markets as a result in an event in one particular index, sector or stock.

2) If any individual stock is down 20% then short selling should be halted until the next trading session. This would work similar to (but better than) a down limit in commodities market as it would not prevent natural long selling.

This would be an easy rule to enforce because any Short-Sale after the halt is illegal. An added benefit is that the halt would also give right of way for natural sellers to liquidate positions during the halt period therefore returns in mutual funds and pension plans should improve as a result as they are able to liquidate at higher prices.

- 3) The circuit breaker must be applied to even market makers and options traders with reasonable exceptions such as filling a customer buy order or a specific exchange obligation.
- 4) I would also lift any restriction on corporate buy-backs and insider buying during the halt so companies and executives can support the shares during –unrestricted buy-backs would provide an incentive to cover short-positions.
- 5) Ban zero cost collar on corporate insider equity and options positions –CEO's should not be allowed to short their own stock under any circumstances even as part of a hedge.

Just as the regulators reformed Mark-to Market accounting The SEC now has the opportunity reform counter productive regulations such as Manning or Decimalization, SOX, Reg. RE and FASB 123 which have noble intentions but horrible consequences. I think a holistic and comprehensive approach to regulations is a something every market participate wants. Moreover once a regulatory regime that offers true transparency and allows reasonable hard earned profits is established then market integrity and investor confidence will likely follow. Lastly, during the last 15 years the SEC has been focused on enforcing mutual fund and exchange regulations which in turn gave rise to entire markets that are unregulated such as Hedge Funds, Mortgage markets and Credit Default Swaps which have killed our economy and stifled innovation. Clearly now is the time for a new third way built on the foundation of protecting the investor and respect for the firms that finance innovation and the Government.

Kind regards,

Rich Tullo



Fine tuning Decimalization: Creating Markets that Price Securities Fairly for All Investors.

Overview

Since the advent of new technologies the US equities markets have undergone more structural change in the last ten years then at any given time in history. Since 1996, regulators and the principal equity markets have introduced a series of reforms with these principal goals:

- Mandate limit order driven pricing
- Minimize human interaction with equity orders
- Decrease price increments

The SEC and the SRO's have for the most part succeeded in implementing these structural changes to the equity markets. These changes were driven by a report written by a committee formed after the 1987 stock market crash called "Markets 2000". A second influence on the regulatory bodies has been the 1994 NASDAQ stock market anti-trust scandal. It appears today that the current New York Stock Exchange investigation will also usher in new reforms. The problem is that thousands of new lines of regulation and billions of new lines of computer code have been written and those regulations and computer programs may be based on faulty premises. The market structure, as it exists, today has resulted in market inefficiencies and is generating unintended externalities that are silently hurting investors, workers and the US economy.

- Increased mutual fund expense ratios
- Decreased competition in equity trading
- Decreased competition for financial services
- Less equity research
- ➤ Higher cost of capital for issuers
- Increased portfolio turnover
- > Decreased liquidity in lower capitalized stocks
- ➤ 80,000 lost jobs in the financial industry
- Eight Billion Dollars in lost federal tax revenues
- > Decrease in economic opportunity

Decimalization as it exists today has the potential to undermine the US economy for the sake of modernity. Just because decimalization exists in Germany, France, Italy and England doesn't mean it is better. In fact anyone who has traded ordinary shares on foreign bourses can testify to the fact that these markets do not even remotely provide the limit order protection that the major US exchanges provides for its customers. The US economy has out performed its European counter parts in part because the US equity markets are superior. This is the reason why major foreign companies from around the world seek to list on the NYSE and NASDAQ. Recently, Bill Donaldson has made public comments regarding reforming decimalization and if he is serious about change then there are two market structure alternatives that would be an improvement over the existing trading environment that is currently thin and fragmented for most issues.

- ➤ Multiple tiered minimum price incremented markets
- Multiple tiered minimum spread incremented markets

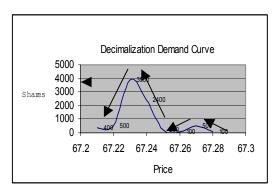
Both alternative market structures have benefits over the current decimalization regime and if adopted they offer the promise of better market efficiency and better prices for all market participants.

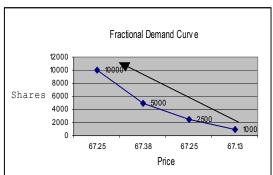
Bring Back the Breath

Since the introduction of tick reform breath, the amount of shares available on the best Bid or Offer size of the market, has declined for stocks not represented in the major market indexes such as; S&P 100 or the NASDAQ 100. The decline in breath was expected when tick increments were reduced from 1/4 share to 1/16 fractional increments because it was expected that overall breadth across all price quotes would be greater and it was believed that the reduction in trading costs outweighed the loss of liquidity. What wasn't expected was the decline in tradable orders. The reduction of price increments allowed speculators to post prices ahead of larger institutional orders, in essence competing against the posted order for liquidity. The institutional response (that started when stocks traded in 1/16's and was exacerbated by decimalization) was to pull their orders from the floor of the exchanges and from NASDAQ Market Maker desks. Today when an institution wants to buy 50,000 shares of stock they are just as likely to enter five hundred 100 share orders on an ECN as to enter a single 50,000 share order with a Specialist or Market Maker. This type of trading is enabled by reserve books and average price trading programs. The result is that liquidity for stocks is found in electronic cues and governed by algorithms and is often not available to trade freely with the other side.

As a result of reduced liquidity, liquidity providers like NASDAQ Market Makers or NYSE Specialist are less likely to provide capital to trade and institutions are less likely to provide liquidity to the primary market as they buy and sell positions. These trading practices have resulting in fragmented markets as traders execute their orders based on technology and rebates and not price and liquidity.

Stock markets just like any other markets have a supply and demand curve. In a stock market the demand curve is represented by market buy orders and bids. Most economists believe that as prices increase demand declines, provided that all other economic variables remain constant. Since the reductions in the minimum trading increment demand, as represented by the NASDAQ bid side market montage has changed. Clearly decimalization has changed trading behavior and these changes have created unintended consequences.





In the charts above bid size increases then declines dramatically under decimalization. Typically under decimalization few orders are reflected at any point on the montage and barely any orders are reflected out side the first ten price levels (ten cents). By comparison under the old fractional system typically more size was reflected in the montage at lower price levels and overall more stock was bid for across the total price horizon.

Recently, trading in Corinthian Colleges Inc. (ticker symbol COCO) has created a lot of controversy on Wall Street. On December 5, 2003 a trader inadvertently placed a large sell order on Bloomberg's 'Trade Book' ECN and flooded the market in COCO with sell orders and hit all the bids posted at that time. COCO stock traded from \$57.45 to as low as \$38.97 in twelve minutes. While many on Wall Street are reviewing NASDAQ's and ARCA's actions regarding their regulatory responses to the trading activity perhaps the more interesting question is: How could just one trader pressure a stock down almost twenty points? That is a market structure issue; not a regulatory issue! Cleary if there was more breath in the market for COCO, then even a two million share order should not have been able to pressure the stock down twenty points. The COCO event is more than an anomaly; the event highlights a fundamental weakness in market structure that creates smaller but serious price gaps everyday due to poor market structure.

Alternative Minimum Price Increments (AMPI)

The idea of trading in price increments greater than a penny has been put forward by economists, traders and even Bill Donaldson. The idea behind AMPI is that if there are less price increments than orders would be aggregated at the remaining tick sizes. Also, the AMPI by definition would create larger spreads due to the increase in tick size. It is hoped that under the AMPI, incentive will be created for Specialists and Market Makers to provide liquidity and the practice of penny-ing ahead would be curtailed. AMPI has already been adopted by the option markets; they trade in nickel increments. It seems that the nickel increment on the options market offers both low cost execution and the incentive for options traders to provide liquidity.

The stock market is often not just one market but a market of markets. The stock market by nature is segmented across industries and market capitalization. That is why stocks trade higher after it is announced that they are being added to or deleted from the S&P 500 index. One big concern of those that oppose the AMPI is that it would inflate trading costs for large capitalized issues like MSFT. That concern is valid to an extent but even MSFT would be more liquid under the AMPI and the added liquidity would offset the increased tick size thus giving the investor an overall lower cost of execution under some circumstances. The real issue in regards to AMPI when applied to larger companies is what tick size maximizes liquidity and minimizes costs; the answer for MSFT may very well be a penny.

The introduction of the AMPI should ideally go hand in hand with the introduction of multiple tiered markets based on market capitalization. Ideally, ticks sizes of one penny for large capitalized stocks, a nickel for mid sized companies and ten cents for small capitalized stocks should add liquidity to the market place and reduce overall trading costs. Moreover, the increased trading revenues generated by the AMPI could provide an incentive for financial industry to cover more stocks on a trading and a research basis and as a result more value would be generated by the industry for investors and issuers.

Alternative Minimum Spread

A less understood but interesting alternative to decimalization is the Alternative Minimum Spread (AMP). In an AMP market a stock would have a minimum spread set by the primary exchange. For example, if the minimum spread is set at ten cents then the differences between the best bid and ask price would always be ten cents or greater (Example 1). Limit orders with prices better than the inside market can be given price improvement but their existence would be aggregated at the best bid and offer (Example 2).

Example 1:	Bid	Ask
	\$50.50 TESTA 5000 shares -	 5000 shares TESTA \$50.60
Example 2:	Bid	Ask
_	\$50.50 TESTB 1000 shares -	 5000 shares TESTB \$50.60
		(500+4500)

(Assume in the market in the above example 500 shares is offered at \$50.55 but is aggregated in the \$50.60 offering.)

Customer enters \$50.60 bid for 5000 shares then 500 shares would be executed at \$50.55 and 4500 at \$50.60.

The AMS market structure offers many benefits over both decimalization in its current form and minimum price increments. AMS markets that allow price improvement offer investors low cost execution at any decimal increment while providing traders with incentives to enhance liquidity. AMS markets also allow for low cost adoption and the cost savings is eventually passed along to all market participants. Moreover, customers concerned about penny-ing would be protected to some degree since the AMS market encourages liquidity while giving the investors the opportunity for price improvement. If the AMS market is successful, the spread would be transformed from a penalty (or toll) applied to market orders to a continuously trading crossing exchange. Also under both the AMS market and the AMPI market the bid and ask represents real trading intent not the bait and switch markets that currently exist in today's market structure.

While it is obvious to most traders and market professionals that the current trading system is aggravating, time consuming and costly; why haven't the powers that regulate trading sought reform. The reasons are:

- Politics
- **Economists**
- Special Interest Groups
- Lack of focus

The trading community has done a poor job in educating the public and justifying its role in the financial markets. This lack of understanding has opened the door for regulators, economists and business interests to influence market structure to further their own ends. While the claims of these constituencies are popular the results of just some of their reforms have undermined commerce and resulted in less competition in the equity research and trading services. The principle argument used by reform advocates is that markets charge economic rent and if that rent is reduced the market as a whole benefits. This logic is the same logic used by socialist thinkers to justify housing rent controls in New York and other major US Cities. Under rent controls New York City declined from 1946 to 1980 and became virtually uninhabitable. Industry left the major cities and their economies declined even though the economists predicted that rent controls should have stimulated more economic activity under their estimates.

Just as converting from rent control to rent stabilization restored housing markets in New York and San Francisco revising decimalization should allow more investors to benefit from a stronger market structure. By adjusting decimalization more jobs will be created in the financial industry and investors will benefit from improved execution and service