lawyers@saul.com

www.saul.com

April 20, 2004

Jonathan G. Katz, Esquire
Secretary
United States Securities and Exchange Commission
450 Fifth Street, N.W.
Washington, D.C. 20549-0609

**Re: File No. S7-23-03;
Study Citing Efficacy of Exception to Proposed Rule 203 (locate and delivery requirements) for Short Sales Fully Hedged by Certain Public Company Issued Warrants and Rights**

Dear Mr. Katz:

Saul Ewing LLP is pleased to submit this Study by Professor Walt Schubert on behalf of Greenwood Partners, LP, which evaluates the efficacy of the continued extension of the Bona Fide Hedge Exception as it relates to "affirmative determination" and "mandatory close-out" requirements of NASD Rules 3370 and 11830.

Sincerely,

SAUL EWING LLP

By: /s/William W. Uchimoto
William W. Uchimoto

Attachment

Centre Square West ◆ 1500 Market Street, 38th Floor ◆ Philadelphia, PA 19102-2186
Phone: (215) 972-7777 ◆ Fax: (215) 972-7725

BALTIMORE CHESTERBROOK HARRISBURG NEW YORK PHILADELPHIA PRINCETON WASHINGTON WILMINGTON

A DELAWARE LIMITED LIABILITY PARTNERSHIP

The Case for the Fully Hedged Exemption, to be Included in New Securities and Exchange Commission Regulation SHO Rule 203, for Hedging Long Positions in Warrants and Rights in Small Capitalized Companies

Walt Schubert Ph.D.

Section I Introduction

The Securities Exchange Act of 1934 directed the Securities and Exchange Commission to "purge the market" of short sale abuses.[1] The rules adopted by the Commission have stayed largely unchanged until the current proposal. The NASD took up the role of creating short sale rules for NASDAQ. Our interest lies primarily in Rule 203 of the new Commission regulation SHO and the choice to amend the NASD Rules 3370 and 11830 to the detriment of the fully hedged investor.

NASD Rule 3370 exempts fully hedged positions from the rule requiring an affirmative determination that the member can borrow the securities or otherwise provide for delivery of the securities by the settlement date.[2] The Commission recently approved the exemption in the amended Rule 3370 that took effect on February 20, 2004.[3] NASD Rule 11830 imposes a mandatory close out requirement for NASDAQ securities that have a clearing short position of 10,000 shares or more per security and that are equal to at least one-half of one percent of the issue's total shares outstanding. Like Rule 3370, Rule 11830 provides an exemption from this requirement for the fully hedged investor in warrants and rights. However, Rule 203 of Commission Regulation SHO has removed these exemptions. We believe it is to the benefit of the marketplace to have the exemptions carried forward to Rule 203.

The Commission is charged with purging the market of abusive short selling. A number of abuses including bear raids and death spirals have been noted and prosecuted. Short selling is a powerful tool for market manipulation and naked short selling (selling the security without borrowing the necessary securities to make delivery) can leverage the benefits of these negative activities for the abuser. However, the Commission notes that short selling provides important benefits in terms of liquidity and price discovery to the marketplace. We argue that two additional benefits that are important to the small capitalization market include reduced volatility and the ability to raise more capital; two areas directly benefited by the current hedge exemptions provided in Rules 3370 and 11830.

The Commission's decision not to transfer the exemption benefit provided in NASD Rules 3370 and 11830 into Commission Rule 203 appears to stem from a twofold position. First the naked short position can be held for a significant period of time, which the Commission reckons to be an investment strategy fraught with abuse potential, and secondly that the movement to the bid test pilot provides all the necessary additional flexibility needed. We feel strongly that those issues do not apply well to the marketplace for small-cap firms and the fully hedged investor in particular and that the benefits of greater liquidity, pricing efficiency, reduced volatility, and,

perhaps most importantly, increased access to capital exceed the dangers and costs of the fully hedged naked short position.

Section II of this study focuses on the issue of volatility. Section III discusses price discovery. Section IV analyzes the benefits of the exemption for capital formation and includes some figures from Greenwood Partners, a participant in this market. Section V gives examples of the fully hedged position. Section VI analyzes the issue of voting rights. Finally, Section VII provides a summary analysis.

Section II- Reduced Volatility

The investor purchases rights and or warrants believing that the value of the company's stock will rise. As the investor begins to earn profit he or she will often wish to hedge some of their profits by shorting the underlying stock. The investor, initiating a naked short position under NASD Rule 3370, must be net long or fully hedged. If the warrant is in the money, and assuming each warrant is convertible into one share, then a long investment in say 100 warrants can be fully hedged with a short position of 100 shares. For example, if the underlying stock price was $3.00 per share and the strike price of each warrant was $2.00 per share the investor is entitled, under NASD Rule 3370, to short up to 100 shares of stock. Of course the investor can choose to short fewer than 100 shares in order to stay net long in shares. Alternatively, if the warrant is out of the money, the shares the investor can go short are determined by the value of the warrant. For example, if the share price, in the example above, was $1.78 and the value of a warrant was $.50 then the investor would only be entitled to short up to 28 shares (1.78 * 28 = $49.84) for each 100 warrants long. The warrants are worth $50.00. The investor can short fewer shares than those calculated but not more. That means that the short position is "at least" offset by the long position and the investor cannot gain from falling prices and, therefore, has no incentive to push prices down. Further, the short hedge is fully margined and therefore, despite the lack of delivery, the purchaser of the stock is fully protected both in terms of receiving dividends and earning capital gains. However, the Commission is not concerned that the investor goes short to hedge, but rather that they are exempted, under NASD Rule 3370, from the requirement to make an affirmative determination that the member can borrow the securities or otherwise provide for delivery of the securities by the settlement date and exempted under NASD Rule 11830 from a mandatory close out requirement for NASDAQ securities that have a clearing short position of 10,000 shares or more per security and that are equal to at least one-half of one percent of the issue's total shares outstanding. That is, the Commission objects to the short selling that is allowed under NASD Rules 3370 and 11830 for fully hedged transactions. We argue that without the ability to sell short if the stock cannot be borrowed, there is simply not enough liquidity to allow this hedging policy to be practiced. One of the benefits of allowing the exemption, and thereby supporting the strategy of naked short selling when the stock cannot be borrowed to hedge long warrant and rights positions, is the reduction in volatility that results from the strategy. Because, the investor can short sell, the risk of investing in small-cap warrants and rights is lower. Therefore, warrant and rights prices are higher than they would otherwise be. Further, the hedging process puts pressure on the underlying stock price to moderate. This effect is illustrated in Figure 1. The combination of safer long positions and the short hedging tool must reduce the range of prices, thus lowering volatility from what it would otherwise be. This in turn further increases liquidity in the market, as the lower volatility leads more investors

into the market. In sum, the NASD exemptions encourages investors to pay more for a company's warrants and rights since they are, in fact, less risky due to the hedging possibility. The shorting of the underlying stock helps reduce the price; thus the net impact of the strategy is to lower volatility. Finally, downside market manipulation is not profitable to the fully hedged investor and, therefore, there is no reason to employ the naked short position to drive prices down unreasonably.

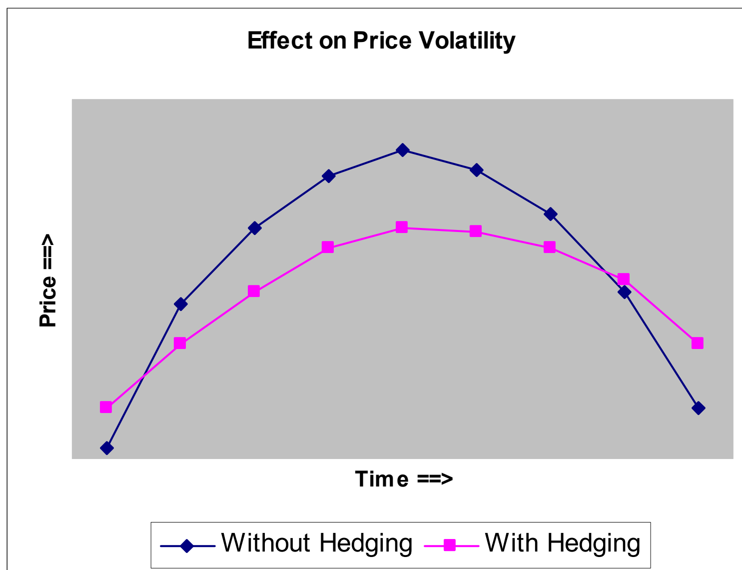

Figure 1. Underlying Stock Prices With and Without Hedging

Section III- Price Discovery

Price discovery is a key component of efficient markets. The ability to hedge both alters the value of the underlying investment and aids in attracting additional buyers and sellers, thereby improving price discovery. In order for price discovery to be effective, a mechanism for encouraging investors to not allow prices to fall too far or to rise too high must be in place. The ability to go long in a stock means that if the price should fall too low some investor will recognize the inefficient price and exploit it by purchasing the stock. As more and more investors enter the market, the likelihood of the stock price falling too low begins to disappear. Similarly the ability to short a security keeps prices from rising too far. As more and more investors enter the market with an ability to short the security, the opportunity for a security's value to rise above its efficient value is reduced. It could, however, be argued that the price discovery virtue, when the short position is strictly for the purpose of hedging the long position, does not exist. We believe, however, that the short hedge, in fact, does continue to enhance price discovery. First, the hedge is rolled up as the long position becomes more profitable, that is as the investor begins to believe that the price increase is beginning to slow. The investor's decision to hedge signals to the market that increases in near term prices are less likely. Further the ability to hedge the long warrants and rights encourages more market participation and consequently increases price discovery efficiency. In sum, carrying the exemptions issued in

NASD Rules 3370 and 11830 forward into SHO Rule 203 will maintain enhanced price discovery in relatively thinly traded markets.

The points made above are reinforced by the example presented in Figure 2. This is an actual example of trading by Greenwood Partners, LP in which the firm is long in warrants that are in-the-money and it is hedging that position with short stock. Midway through the period under observation, the underlying price stabilized when the warrants were in-the-money at about $3. Note that Greenwood either liquidated or exercised a part of their warrant position, and reduced their hedge position to somewhat less than 100 percent. These actions are consistent with the theoretical arguments made previously.

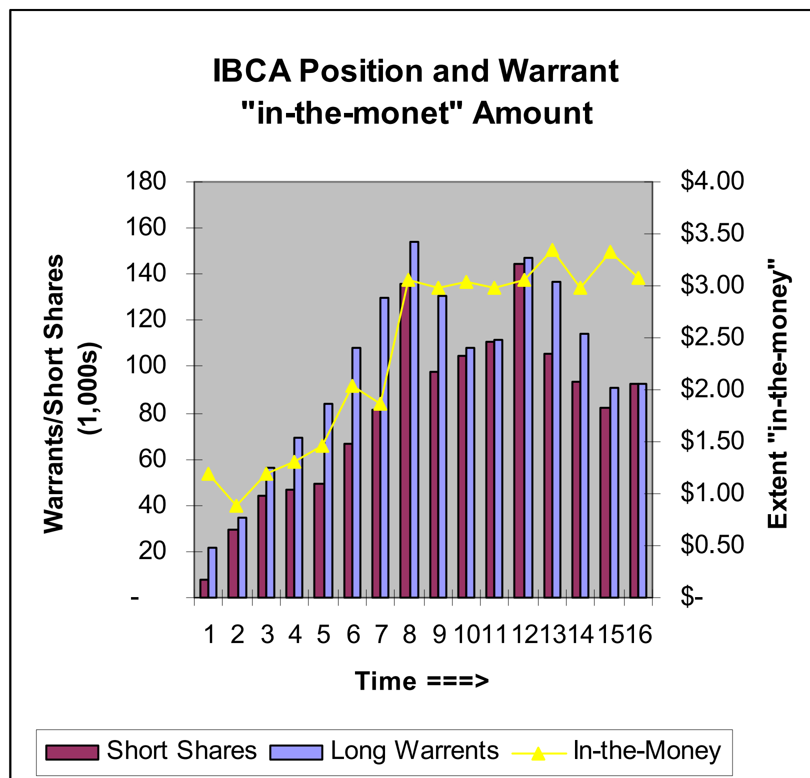

Figure 2. Greenwood Partners, LP Position and “in-the-money” Amount for Period, 3/31/03 through 10/20/03

Section IV- Capitalization

The most important reason to include the exemptions for the fully hedged investor in warrants and rights to the rule requiring an affirmative determination that a member can borrow the securities or otherwise provide for delivery of the securities by the settlement date under NASD Rule 3370 and the rule imposing a mandatory close out requirement for NASDAQ securities that have a clearing short position of 10,000 shares or more per security and that are equal to at least one-half of one percent of the issue’s total shares outstanding under NASD Rule 11830 into Rule 203 of new regulation SHO is the important contribution of capital to small-capitalized firms that

has occurred because of the exemptions. The United States has long been a leader in innovation and an important part of the credit must go to financial markets. The ability of entrepreneurs to raise capital is a key element of success. The ability to hedge the long position in warrants, and rights makes these assets more valuable than they would otherwise be and creates more value for the firm. The ability to hedge draws more investors into the market. Greater demand for the securities means higher values. Similarly the ability to hedge does, in fact, reduce risk and thereby makes the securities more valuable. Finally, at exercise, the firm obtains the exercise price times the shares exercised. Greenwood Partners, for example has provided over 75 million dollars of capital to small-capitalized firms over the past five years. In fact, during the six-month period ending January 31, 2004, Greenwood Partners provided over $7 million to small-cap firms through the exercise of warrants which were held under a hedging strategy (see table 1). That capital has been critical as firms attempt to create profitable productive businesses. To underscore the importance of the provision of capital to the employment picture, we note that Citizen's Bank of Pennsylvania recently decided to provide 100 million dollars of capital at low interest rates to manufacturing concerns in Pennsylvania.[4] They believe that each 25,000 dollars of capital will produce one job. While the ratio of capital invested to employment is most likely variable, Citizen's estimate implies that Greenwood's capital provision alone is responsible for creating positive net employment of **3,000 jobs** over the past five years. It is to the great advantage of small companies and the marketplace that mechanisms be maintained that allow for flows of capital into small companies at reasonable required rates of return. Without the flow of capital much of the potential growth of the United States economy will be adversely affected.

Table 1. Recent Warrant Exercises by Greenwood Partners, LP

Exercises in the prior 6 months ending January 31, 2004

Warrant Symbol	Stock Symbol	Warrants Exercised	Exercise Price	Net Exercise Dollars
IBCAW	IBCA	503,967	$ 10.010	$ 5,044,710
TASRW	TASR	184,373	$ 9.530	$ 1,757,075
AMM/WS	AMM	110,802	$ 3.400	$ 376,727
BNT/WSB	BNT	13,600	$ 5.000	$ 68,000
BOO/WS	BOO	27,230	$ 5.000	$ 136,150
DCTHZ	DCTH	10,000	$ 0.775	$ 7,750
IMNRW	IMNR	200,369	$ 1.330	$ 266,491
UVSLW	UVSL	13,808	$ 0.500	$ 6,904
			Total	$ 7,663,806

Section V

What follows is a model showing how the investment in warrants and rights can be hedged under NASD Rule 3370. We employ the Black-Scholes model as our warrant valuation model.[5] The full model can be viewed in appendix A. The Black-Scholes model does assume the ability to hedge positions in long warrants with short stock positions. It is well known that the model is limited in a number of areas including the assumption of constant risk and constant interest rates over the relevant period. Despite its imperfections the model serves as a reasonable determinant of warrant values. The elimination of the hedge possibility under the new Rule 203 does, however, further reduce the model's usefulness in price discovery. In table 2 below, we show

how the short position roll-up might take place as the underlying stock value rises. In this four-period example, as the underlying stock price increases over time, and the warrant position value increases, the investor begins to hedge in order to protect this greater value. As the $17,036 unhedged position grows in value to $282,674, the investor moves to a 100 percent hedged position. The period 4 position is a one-for-one total hedge. The evolution of the positions in this example is depicted graphically in figure 3.

Table 2. Example based upon Black-Scholes Option Pricing Model

	Out of the Money	Out of the Money	At the Money	In the Money	In the Money
Time	**Now**	**1**	**2**	**3**	**4**
Warrant price*	**0.17**	**0.65**	**1.29**	**2.03**	**2.83**
Stock price	**1**	**2**	**3**	**4**	**5**
Strike price	**3**	**3**	**3**	**3**	**3**
Long Warrants	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**
Value of warrants	**17,036**	**65,038**	**129,308**	**202,964**	**282,674**
Short shares	**0**	**10,000**	**30,000**	**60,000**	**100,000**
Net Position	**100,000**	**90,000**	**70,000**	**40,000**	**0**
Hedged Warrants (%)	**0%**	**10%**	**30%**	**60%**	**100.%**

* Assumed values used in Black-Scholes model:
R=.02; riskless rate of return
σ=.5; volatility
K= 3; strike price
S= 1 through 5; stock price
D= 1825 through 1460; days until expiration

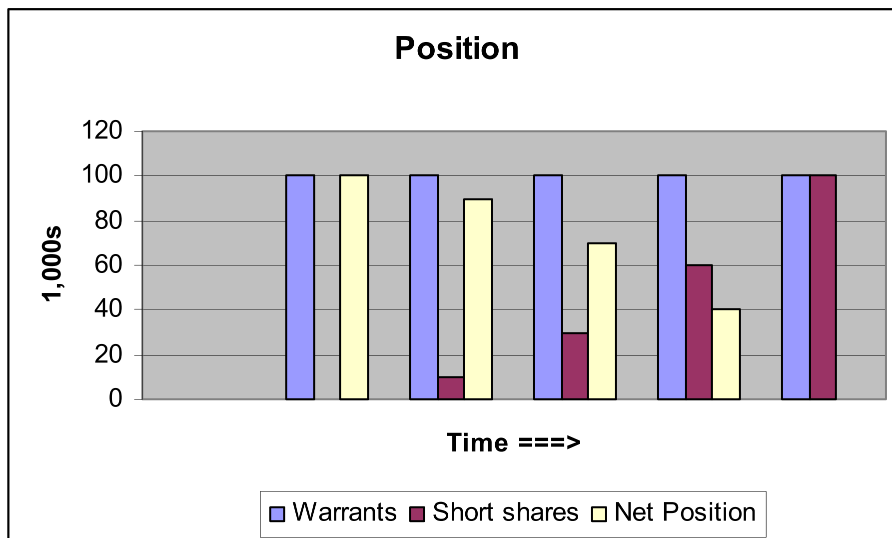

Figure 3. Warrants, Short Stock, and Net Positions

Section VI

The only apparent downside in exempting the fully hedged investor from the rule requiring an affirmative determination that a member can borrow the securities or otherwise provide for delivery of the securities by the settlement date and the Rule imposing a mandatory close out requirement for NASDAQ securities that have a clearing short position of 10,000 shares or more per security and that are equal to at least one-half of one percent of the issue's total shares outstanding is that the purchaser of the stock will not have access to voting rights since he or she will not be a shareholder of record. We note, however, that this is the typical outcome of a short sale. Under the conditions where securities are delivered the investor from whom the securities were borrowed also loses their voting rights. That is, whether securities are delivered or not, net voting rights do not change. Further, because of the significant benefits that stem from the fully hedged investor's activities, most importantly the material provision of capital, it is clear that there is a net gain stemming from the exemptions. We believe the facts of the matter indicate that the exemptions for the fully hedged investor add no downside to the short sale market or the securities market as a whole, and, in fact, these exemptions enables the short sale market to make an enhanced contribution to economic welfare.

Section VII

The NASD wisely exempted fully hedged and arbitraged positions from the rule requiring an affirmative determination that a member can borrow the securities or otherwise provide for delivery of the securities by the settlement date and the rule imposing a mandatory close out requirement for NASDAQ securities that have a clearing short position of 10,0000 shares or more per security and that are equal to at least one-half of one percent of the issue's shares outstanding. The Securities and Exchange Commission has failed to include these exemptions in new Rule 203 of regulation SHO even though they recently approved the amended version of Rule 3370 that went into effect on February 20th of 2004 that does include the exemption to that rule. We believe the exemptions are an important part of making the market for small-capitalized stocks, warrants, and rights more efficient and more valuable to the marketplace. Specifically, the exemptions for the bona fide fully hedged investor in warrants and rights provides for greater liquidity, less volatility, enhanced price discovery, and most importantly significant increases in capital flows to small-capitalized firms. In the end, as is the case in all of regulation, the issue is whether or not the benefits of the exemptions exceed the costs. We believe the answer to that question is that the benefits of the exemptions do exceed the costs especially with respect to investment in warrants and rights in small-capitalized stocks. While there is ample evidence in the form of capital provided to the small-cap market to underscore that the benefits of the exemptions are substantial, we know of no data showing that the NASD has experienced regulatory problems or material increases in cost due to regulating these exemptions with respect to hedging warrant and rights positions. We believe that before the Commission chooses to eliminate the exemptions, the Commission should be sure that the costs of these exemptions exceed the benefits. We believe that any such analysis will show that the benefits of the exemptions to small emerging companies and the marketplace are significant and do exceed the cost. Until there is significant evidence to the contrary, we strongly encourage the Commission to add the exemptions provided in NASD Rule 3370 and NASD Rule 11830 to SHO Rule 203.

Appendix

The Black-Scholes Option Pricing Model[5]

$$C = S\,N(d_1) - K\,e^{-RT}\,N(d_2)$$

where $$d_1 = \frac{\ln(S/K) + (R + \sigma^2/2)\,T}{\sigma\,(T)^{1/2}}$$

and $$d_2 = d_1 - \sigma\,(T)^{1/2}$$

S = current stock price

K = option strike price

e = base of natural logarithms

R = riskless interest rate

T = time until expiration[1]

σ = standard deviation of returns on the underlying security

$N(d_1)$ and $N(d_2)$ = cumulative standard normal distribution functions

ln = natural logarithm

The time frame associated with the variables must be consistent. If "T" is in years, then R must be an annual rate and σ must be annualized.

Notes:

1.) U.S. Securities and Exchange Commission, Proposed Rule: Short Sales, October 29, 2003.

2.) NASD Manual Online, Prompt Receipt and Delivery of Securities, March 2004.

3.) National Association of Securities Dealers, Amendments to NASD Rule 3370, Affirmative Determination Requirements, January, 2004.

4.) Philadelphia Inquirer, Bank Has Plans for Creating Pa. Jobs, Philly.com, March 23, 2004.

5.) Derivatives, An Introduction, Robert A. Strong, Cincinnati, OH: South-Western, 2002, p. 140.