



Regulatory Circular RG09-97

To: Members, Member Organizations
From: Division of Member and Regulatory Services
Date: August 31, 2009
Subject: Margin Requirements for Leveraged ETFs
and Uncovered Options on Leveraged ETFs

Exchange
Contacts: James Adams (312) 786-7718

KEY POINTS

- A leveraged exchange traded fund (“ETF”) seeks to generate a return that is a multiple (e.g., 2x, 3x) of the return of an index benchmark.
- The Exchange has implemented increased customer margin requirements for leveraged ETFs and uncovered options on leveraged ETFs pursuant to Exchange Rules 12.3(g) and 12.10.
- The increased requirements must be applied by member organizations by no later than December 1, 2009.

DISCUSSION

Leveraged ETFs seek to generate a return that is a multiple (e.g., 2x, 3x) of the return of an index benchmark. They attempt to achieve these multiple returns by utilizing derivative instruments such as swaps, options or futures. Consequently, leveraged ETFs are more volatile than their non-leveraged counterparts. A list of leveraged ETFs on which CBOE currently has options listed is attached.

CBOE Rules 12.3(g) and 12.10 (Margin Required is Minimum) both provide that the Exchange may at any time impose higher margin requirements when it deems such higher margin requirements to be advisable. In view of the increased volatility inherent in leveraged ETFs relative to their non-leveraged counterparts, the Exchange deems higher margin levels necessary. Pursuant to its authority, the Exchange has implemented higher margin requirements for leveraged ETFs and uncovered options on leveraged ETFs.

Maintenance Margin Requirements for Leveraged ETFs

The current strategy-based maintenance margin requirement for any long ETF is 25% of the current market value. The current strategy-based maintenance margin requirement for any short

ETF is generally 30% of the current market value.¹ In the case of a leveraged ETF, the Exchange has increased these maintenance margin requirement percentages as follows:

Multiply the current maintenance margin requirement percentage by the ETF's leverage multiple, the result not to exceed 100%

Examples:

Long 100 shares LMN ETF (with 2x leverage multiple)

LMN closing price: 30

Multiply the standard percentage by the leverage factor: $.25 \times 2 = .50$

Calculation: $.50 \times \text{LMN price} = .50 \times 30 = 15$

Maintenance margin requirement: $15 \times 100 \text{ shares} = \$1,500$

Short 100 XYZ ETF (with 2.5 leverage multiple)

QRS closing price: 44

Multiply the standard percentage by the leverage factor: $.30 \times 2.5 = .75$

Calculation: $.75 \times \text{XYZ price} = .75 \times 44 = 33$

Maintenance margin requirement: $33 \times 100 \text{ shares} = \$3,300$

Note that buying power in the case of a leveraged ETF with a maintenance margin requirement percentage that exceeds 50% will be less than 2x.

Initial and Maintenance Margin Requirements for Listed and Over-the-Counter Uncovered Options on a Leveraged ETF

In the case of both listed and over-the-counter ("OTC") uncovered options on leveraged ETFs, the Exchange has increased the standard percentages in the same manner. Thus, the currently applicable percentages are to be multiplied by the ETF's leverage multiple to arrive at the percentage applicable to an uncovered option on the leveraged ETF.

The current strategy-based initial and maintenance margin requirement pursuant to CBOE rules for a listed uncovered option on an ETF that has a **broad-based** index benchmark is given below. The same formula is applied for an uncovered option on a **narrow-based** ETF, except that the first, or basic, percentage of aggregate contract value is 20% instead of 15%.²

100% of the option proceeds* plus **15%** of the aggregate contract value (current ETF price x \$100) minus the amount by which the option is out-of-the-money, if any, subject to a minimum for calls of option proceeds* plus **10%** of the aggregate contract value and a minimum for puts of option proceeds* plus **10%** of the aggregate exercise price amount.
(*For calculating maintenance margin, use option current market value instead of option proceeds.)

Examples of how these percentages are increased in the case of a listed and OTC uncovered option on a leveraged ETF are as follows:

¹ The Exchange's current maintenance margin requirements for short ETFs are: 1) if current market value less than \$5.00 per share – greater of \$2.50 per share or 100% of current market value, 2) if current market value \$5.00 per share or more – greater of \$5.00 per share or 30% of current market value. Exchange Rule 12.3(b).

² Refer to Exchange Rule 12.3(c)(5)(B) for OTC uncovered option margin requirements.

Broad-based underlying ETF (2x leverage multiple)

Listed: Basic percentage: $.15 \times \text{leverage multiple} = .15 \times 2 = 30\%$
 Minimum percentage: $.10 \times \text{leverage multiple} = .10 \times 2 = 20\%$

OTC: Basic percentage: $.20 \times \text{leverage multiple} = .20 \times 2 = 40\%$
 Minimum percentage: $.10 \times \text{leverage multiple} = .10 \times 2 = 20\%$

Narrow-based underlying ETF (3x leverage multiple)

Listed: Basic percentage: $.20 \times \text{leverage multiple} = .20 \times 3 = 60\%$
 Minimum percentage: $.10 \times \text{leverage multiple} = .10 \times 3 = 30\%$

OTC: Basic percentage: $.30 \times \text{leverage multiple} = .30 \times 3 = 90\%$
 Minimum percentage: $.10 \times \text{leverage multiple} = .10 \times 3 = 30\%$

Portfolio Margin

For leveraged ETFs and their overlying options, the Options Clearing Corporation has increased the assumed up / down percentage market moves used to compute gains and losses for portfolio margin arrays. The increased market move percentages, similar to the increased strategy-based margin requirement percentages, are obtained by multiplying the current market move percentages by the leverage multiple. For example, a broad-based ETF (highly capitalized index) is normally subject to a market move of -8% / +6%. In the case of a broad-based ETF that has a leverage multiple of 3x, the market move would be increased to -24% / +18%, or 3x the standard market move percentages.

Day Trading

The increased margin requirements discussed above must be applied at all times, including when calculating an account's excess maintenance margin equity and when determining the day trading buying power for a leveraged ETF. Note that the day trading buying power for a non-leveraged ETF is 4x excess maintenance margin equity based on the previous night's close. The buying power for a leveraged ETF will be less due to the increased maintenance margin requirement. For example, in the case of a leveraged ETF with a 3x leverage multiple, there would be a 75% maintenance margin requirement. The dollar amount of buying power for a leveraged ETF with a 75% maintenance margin requirement would be the amount for which the excess maintenance margin equity would equal the 75% maintenance margin requirement. This translates to a day trading buying power of 1.33 times $(100 / .75)$.

For pattern day traders, day trading buying power for writing uncovered options on a leveraged ETF is 1x, the same as it is now for a non-leveraged ETF, in that the uncovered option margin requirement uses excess maintenance margin equity dollar-for-dollar.

* * * * *

Member organizations must apply the increased maintenance margin requirements for leveraged ETFs and the increased initial and maintenance margin requirements for uncovered options on leveraged ETFs **by December 1, 2009**. Questions concerning this Regulatory Circular may be directed to Jim Adams, (312) 786-7718, in the Exchange's Department of Member Firm Regulation.

Leveraged ETF's on Which CBOE Currently Has Options Listed (8-25-2009)

AGQ	ProShares Ultra Silver
BGU	Direxionshares Large Cap Bull 3X Shares
BGZ	Direxionshares Large Cap Bear 3X Shares
BZQ	ProShares UltraShort MSCI Brazil
DDM	Ultra Dow30 ProShares
DIG	Ultra Oil & Gas
DPK	Direxionshares Developed Markets Bear 3X Shares
DRN	Direxion Daily Real Estate Bull 3x Shares
DRV	Direxion Daily Real Estate Bear 3x Shares
DUG	UltraShort Oil & Gas ProShares
DXD	UltraShort Dow30 ProShares
DZK	Direxionshares Daily Developed Markets Bull 3X Shares
EDC	Direxionshares Emerging Markets Bull 3X Shares
EDZ	Direxionshares Emerging Markets Bear 3X Shares
EET	ProShares Ultra MSCI Emerging Markets
EEV	UltraShort MSCI Emerging Markets ProShares
EFU	UltraShort MSCI EAFE ProShares
ERX	Direxionshares Energy Bull 3X Shares
ERY	Direxion Energy Bear 3X Shares
EUO	ProShares UltraShort Euro
FAS	Direxionshares Financial Bull 3X Shares
FAZ	Direxion Financial Bear 3X Shares
FXP	UltraShort FTSE/Xinhua China 25 ProShares
GLL	ProShares UltraShort Gold
MWJ	Direxionshares Mid Cap Bull 3X Shares
MWN	Direxionshares Mid Cap Bear 3X Shares
MZZ	UltraShort MidCap400 ProShares
PST	UltraShort Lehman 7-10 Treasury ProShares
QID	UltraShort QQQ ProShares
QLD	Ultra QQQ ProShares
REW	ProShares UltraShort Technology
ROM	ProShares Ultra Technology
RSU	Rydex 2x S&P 500 ETF
RSW	Rydex Inverse 2X S&P 500 ETF
SCO	ProShares UltraShort DJ-AIG Crude Oil
SDS	UltraShort S&P500 ProShares
SIJ	ProShares UltraShort Industrials ETF
SKF	UltraShort Financials ProShares
SMK	ProShares UltraShort MSCI Mexico Investable Market
SMN	UltraShort Basic Materials ProShares
SPXU	ProShares UltraPro Short S&P 500

SRS	UltraShort Real Estate ProShares
SSG	UltraShort Semiconductor ProShares
SSO	Ultra S&P500 ProShares
TBT	UltraShort Lehman 20+Year Treasury ProShares
TMF	Direxion Daily 30-Year Treasury Bull 3X
TMV	Direxion Daily 30-Year Treasury Bear 3X
TNA	Direxionshares Small Cap Bull 3X Shares
TWM	UltraShort Russell2000 ProShares
TYD	Direxion Daily 10-Year Treasury Bull 3X
TYH	Direxionshares Technology Bull 3X Shares
TYO	Direxion Daily 10-Year Treasury Bear 3X
TYP	Direxionshares Technology Bear 3X Shares
TZA	Direxionshares Small Cap Bear 3X Shares
UCO	ProShares Ultra DJ-AIG Crude Oil
UGL	ProShares Ultra Gold
UPRO	ProShares UltraPro S&P 500
URE	Ultra Real Estate ProShares
USD	Ultra Semiconductor
UWM	Ultra Russell2000 ProShares
UXI	ProShares Ultra Industrials ETF
UYG	Ultra Financials ProShares
UYM	Ultra Basic Materials ProShares
XPP	ProShares Ultra FTSE/Xinhua China 25
YCS	ProShares UltraShort Yen
ZSL	ProShares UltraShort Silver