Regulatory Circular RG 97-85

Date: July 3, 1997

To: All Exchange Members

From: Division of Regulatory Services

Re: Risk-based Haircut Amendments to SEC Net Capital Rule 15c3-1 Effective September 1, 1997

Introduction

On March 15, 1994 the Securities and Exchange commission ("SEC") issued a no-action letter[1] which allowed broker dealers that clear options market-maker transactions on a proprietary or market-maker customer basis to calculate options haircuts in accordance with a haircut methodology developed jointly by the Chicago Board Options Exchange ("Exchange") and the Options Clearing Corporation ("OCC") based upon the theoretical options pricing model of Cox Ross Rubinstein. More recently, on February 6, 1997 the SEC approved amendments to the Net Capital Rule which codified theoretically based haircuts for listed options and gives additional relief for certain index baskets and offsets between broad based index classes as described in Securities Exchange Act Release No. 38248.[2] Clearing firms will also have the alternative of continuing to calculate listed option haircuts under the terms of the SEC no-action letter, which provides for similar treatment of options positions under a theoretical option pricing methodology, until the time that the amendments to SEC Rule 15c3-1 become effective. The rule release states that the effective date is September 1, 1997, although broker-dealers may rely on the rule change currently. Broker-dealers which do not chose to calculate haircuts under the theoretical pricing method must apply capital charges based upon the requirements of the alternative strategy based method in accordance with the aforementioned amendment of the Net Capital Rule.

Options Market-Makers
Important To Note

- Most clearing firms have been calculating market-maker haircuts using the theoretically based method since mid 1994. As a result, codification of this treatment in SEC rules may have little practical impact on equity options market-makers.
- Qualified stock basket offsets with industry and broad-based index options now require fewer stocks to be represented in the applicable index - 95% capitalization required for industry index baskets; 50% capitalization required for broad-based index baskets. See attached chart for details.
- The new rule permits greater recognition of offsets between index product groups (e.g., 50% offset now permitted between certain high-cap broad-based index product groups and non high-cap broad-based index product groups. See attached chart for offsets.)

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[1] *See* March 15, 1994 letter to Mary L. Bender, CBOE, and Timothy Hinkes, OCC, Vice President, from Brandon Becker, SEC, Division of Market Regulation.

[2] *See* Securities Exchange Act Release No. 38248 (February 6, 1997), 62 FR 6474 (February 12, 1997), amending SEC Rule 15c3-1 to permit broker-dealers to employ theoretical option pricing models in determining net capital requirements for listed options and related positions.

<u>Required Calculation</u>

The required haircut calculations, as set forth in the Rule 15c3-1 amendments,[3] are as follows:

(1) With respect to positions involving listed options in a single specialist's market-maker account, and, separately, with respect to positions involving listed option positions in its proprietary or other account, a broker-dealer will group long and short positions into the following portfolio types:

(A) equity options on the same underlying instrument and positions in that underlying instrument;

(B) options on the same major market foreign currency, positions in that major market foreign currency and related instruments within that options' class;

(C) high-cap broad-based market index options,[4] related instruments within an option class, and qualified stock baskets on the same index;

(D) non-high-cap broad-based index[5] options on the same index, related instruments within that index option's class, and qualified stock baskets on the same index;

(E) narrow-based index options, related instruments within the index option's class, and qualified stock baskets on the same index.

Broker-dealers may also include index options other than those specified in this circular in any of the above categories to the extent that the Commission or its staff has issued a no-action letter, rule amendment, or interpretation authorizing such inclusion.

(2) Before making the computation, each broker-dealer shall obtain from the OCC or from a third party vendor at such time as any third party vendor receives approval by an examining authority designated pursuant to Section 17(d) of the Exchange Act (“DEA”), the applicable theoretical gains and losses (See paragraph (3)(E)) for each option's series and for the related and underlying instruments within those options' classes in each specialist's market-maker account guaranteed, endorsed or carried by a

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[3] Those firms that are planning to calculate haircuts under the no-action letter version of risk-based haircuts should consult the no-action letter to determine the appropriate haircut methodology.

[4] For purposes of this Regulatory Circular, the following indexes will be deemed high-cap broad-based market indexes within the following product groups: United States market group “A” (i) Institutional Index ("XII"), (ii) Major Market Index ("XMI"), (iii) S&P 100 Index ("OEX"), (iv) S&P 500 Index ("SPX"), (v) NYSE Composite Index ("NYA"), (vi) PHLX Big Cap Index (“MKT”), and (vii) PHLX Top 100 Index (“TPX”); United States market group “B” (i) S&P Barra Growth (“SGX”) and (ii) S&P Barra Value (“SVX”); United Kingdom market group (i) Financial Times Stock Exchange Index ("FT-SE"); European market group (i) EuroTop Index ("TOP"); and the Japan market group (i) Japan Index (("JPN") and (ii) Nikkei Index ("NKX"). For purposes of this Regulatory Circular, all products must be listed and traded in the United States.

[5] For purposes of this Regulatory Circular, the following indexes will be deemed non-high-cap broad-based market indexes within the following product groups: U.S. market group (i) MidCap Index ("MTD"), (ii) Russell 2000 Index ("RUT"), (iii) Value Line Index ("VLE"), (iv) Wilshire 250 Index ("WSX"), and (v) CBOE S&P SmallCap Index (“SML”); U.S. NASD market group (i) NASDAQ-100 Index ("NDX") and (ii) National OTC Index ("XOC"); and Mexican market product group (i) Index of Prices and Quotations (“IPC”).

broker-dealer, or in the proprietary or other accounts of that broker-dealer in which options market making transactions are carried.

(A) Upon receipt of the theoretical gains and losses, for each one of the portfolio types described above, the broker-dealer shall multiply the corresponding theoretical gains and losses at each of the ten equidistant valuation points by the number of positions held in a particular options series, the related instruments and qualified stock baskets within those options' class and the positions in the same underlying instrument. (See paragraph (3)(E) and footnote 6)

(B) In determining the aggregate profit or loss for each portfolio type, the broker-dealer will be allowed the offsets as described in the attached chart.

(3) For each portfolio type, the total haircut shall be the larger of:

(A) the amount for any of the ten equidistant valuation points representing the largest theoretical loss after applying the offsets provided above, or

(B) a minimum charge equal to one quarter (1/4) point times the multiplier for each equity and index option contract and each related instrument within the option's class or product group, or $ 25 for each option on a major market foreign currency with the minimum charge for futures contracts and options on futures contracts adjusted for contract size differentials, not to exceed market value in the case of long positions in options and options on futures contracts, or

(C) in the case of portfolio types involving index options and related instruments offset by a qualified stock basket, there will be a minimum charge of 5% of the market value of the qualified stock basket for high-cap broad-based market indexes and narrow-based market indexes, or

(D) in the case of portfolio types involving index options and related instruments offset by a qualified stock basket, there will be a minimum charge of 7½% of the market value of the qualified stock basket for non-high-cap broad-based indexes.

(4) The terms used in the description set forth in this Regulatory Circular are defined as follows:

(A) “Options series” are listed option contracts of the same type (either a call or a put) and exercise style, covering the same underlying security with the same exercise price, expiration date and number of underlying units.

(B) A "related instrument" within an option class or product group includes futures contracts and options on futures contracts covering the same underlying instrument. In relation to options on major market foreign currencies, a related instrument within an option class also includes forward contracts on the same underlying currency.

(C) An "underlying instrument" includes long and short positions, as appropriate, in the same major market foreign currency, the same security, other than an option contract ("underlying security"), or a security which is exchangeable for or convertible into the underlying security within a period of 90 days. If the conversion or exchange requires the payment of money or results in a loss upon conversion at the time when the security is deemed an "underlying instrument," the broker-dealer will deduct from net worth the full amount of the conversion loss or the amount required for the conversion or exchange. The term "underlying security" shall not be deemed to include futures contracts, options on futures contracts or unlisted products.

(D) A "product group" consists of two or more option classes, related instruments, underlying instruments, and qualified stock baskets in the same portfolio type for which it has determined a percentage of offsetting profits may be applied to losses at the same valuation point.

(E) “Theoretical gains and losses” are the gain and loss in the value of individual option series and the gain and loss in the value of underlying instruments, related instruments, and qualified stock baskets within that option's class, at ten equidistant intervals ("valuation points") ranging from an assumed movement (both up and down) in the current market value of the underlying instrument equal to the percentage corresponding to the deductions otherwise required under SEC Rule 15c3-1 for the underlying instrument.[6] Theoretical gains and losses shall be calculated by OCC using an approved theoretical options pricing model.

(F) An “approved theoretical options pricing model” shall mean any mathematical model that the DEA from time to time, shall deem appropriate for calculating theoretical gains and losses.

(G) A “major market foreign currency” shall mean the currency of a sovereign nation whose short-term debt is rated in the highest category by at least two nationally recognized statistical rating organizations for which there is a substantial inter-bank forward currency market. For purposes of this Regulatory Circular, the European Currency Unit ("ECU") shall be deemed a major market foreign currency.

(H) A “qualified stock basket” is a set or basket of stock positions, which represents no less than 50% of the capitalization for a high-cap or non-high-cap broad-based market index, or, in the case of a narrow-based index, no less than 95% of the capitalization for such narrow-based index. Any stock position carried in excess of the capitalization represented in the index (excess stock) must be haircut separately.

Any questions concerning the requirements outlined above should be directed to Richard Lewandowski, (312) 786-7183, Department of Financial Compliance. Questions concerning the distribution of theoretical values required for the haircut calculations should be directed to the Options Clearing Corporation Help Desk (312)322-6295 or 1-800-544-6091 outside of Illinois.

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[6] For purposes of this Regulatory Circular, the assumed movements in the current market value of the underlying instrument for high-cap, broad-based index option positions will be + 6%, (-) 8% and for major market foreign currency positions +(-) 41/2% for non-clearing option specialists and market-makers. For a non-clearing market maker, or a specialist in any of the components of a non-high-cap broad-based index product group, the assumed market move shall be +(-) 10%. Self regulatory organizations listing these products must demonstrate the appropriateness of these lower percentage market moves before September, 1999.