



FUTURES AND OPTIONS TRADING FOR HEDGE FUNDS: THE REGULATORY ENVIRONMENT

(**Please note:** This version on the Internet does not have footnote references. The hardcopy version available from the CME has footnotes.)

Futures and options on futures can provide attractive investment opportunities for hedge funds. These funds employ numerous strategies using the futures and options markets, including traditional hedging, overlay and income enhancement. In fact, hedge funds have become an influential force in the currency and fixed income markets and are the fastest growing pool of foreign exchange product users. For example, to protect the value of a fixed income portfolio, a hedge fund may use futures and options on futures on U.S. Treasury bills and Eurodollars. Also, to protect the fund against exchange rate risk, a hedge fund may employ foreign currency futures and options on futures. These are just a few examples of the uses of the efficient and economical futures markets.

Hedge fund managers often ask what regulatory requirements they will face if they trade futures and options on futures as part of an investment strategy. The following is intended to provide an overview of certain regulatory requirements applicable to hedge funds, including federal and state securities and commodities regulations. These sections highlight the regulatory requirements that may apply to the fund and those that may apply to the fund manager. In addition, the final section includes examples of investment strategies that use futures and options on futures.

OVERVIEW -- HEDGE FUNDS

The term "hedge fund" is a misnomer. Hedge funds are not limited to hedging or any particular strategies or markets. As an example, a hedge fund can be both long and short various types of investments. Although these funds have received much attention in the last few years, the first fund actually was developed in 1949. Since then, the number of hedge funds has increased dramatically, with a recent, amazing growth of hedge funds in Europe.

A U.S. hedge fund is usually a private limited partnership with 99 or fewer limited partners. The limited partners' investments are pooled and managed by a general partner (fund manager) that is also an investor. The fund manager may receive a management fee based on assets and/or a performance fee based on appreciation of assets. A typical fee arrangement might be a 1% management fee

and a 20% performance fee. Hedge funds vary in degrees of risk and amount of leverage. The traditional customers of hedge funds are high-income individuals, institutions endowments and foundations.

OVERVIEW -- REGULATORY REQUIREMENTS

Hedge funds typically operate under exemptions from many of the regulatory requirements imposed by securities and commodities laws. Many hedge funds are "offshore" funds, i.e., organized in locations outside the U.S. and offered only to non-U.S. persons. Offshore fund managers with funds consisting of non-U.S. citizens or residents as investors, and whose funds all come from non-U.S. locations, are generally exempt from Securities and Exchange Commission (SEC) and Commodity Futures Trading Commission (CFTC) requirements. The CFTC has made exemptive relief available to registered fund managers who are U.S. citizens or residents with respect to the organization and operation of hedge funds outside the U.S. in which none of the participants is a U.S. person and no capital comes from U.S. sources. Offshore hedge funds also can be exempt from registering their interests with the SEC via the exemptive provisions of Regulation S. Likewise, the fund and its investment adviser also may be exempt from registration with the SEC as an investment company or as an investment adviser.

Even though hedge funds that accept U.S. investors are subject to the U.S. securities and commodities laws, they can substantially limit the amount of regulatory requirements imposed by these laws.

FEDERAL SECURITIES LAWS

Exemption from Registering Hedge Fund Interests As Securities

Most U.S. hedge funds are formed as limited partnerships. Limited partnerships are intended to provide two benefits: flow-through tax treatment and limited liability for the limited partners. The hedge fund manager usually acts as the general partner and contributes a significant amount of capital to the fund. Section 5 of the Securities Act of 1933 (1933 Act) states that securities must be registered before they are sold, unless the securities are exempt from registration. In general, interests in a limited partnership are considered securities. Most hedge funds avoid cumbersome securities registration by claiming a "private offering" exemption under the safe harbor of Rule 506 of Regulation D under the 1933 Act. Under Rule 506, the general partner may not advertise to attract potential investors to the hedge fund. Rule 506 places no limit on the amount of the offering or the number of "accredited" investors. However, the number of "non-accredited" investors is limited to 35. If sales of interests in the hedge fund are made only to accredited investors, no specific disclosure to the investors is required. If sales are made to one or more non-accredited investors, the same kind of information must be provided as the investor would receive in connection with an offer of interests in a registered fund. Such information includes: audited financial statements, an opinion of counsel as to the legality of the securities being offered, the material tax consequences of investing in a limited partnership, risk factors, plan of distribution, and the use of

proceeds.

If a hedge fund is claiming an exemption from registration based on the safe harbors provided by Regulation D under the 1933 Act, the fund must file a Form D with the SEC within 15 days after the initial closing of the hedge fund offering. Form D requires much less disclosure of information than is required by Section 5 of the 1933 Act.

Exemption from Registration as an Investment Company

Although Rule 506 of Regulation D does not limit the number of accredited investors, hedge funds typically maintain 99 or fewer investors to ensure that the fund does not fall within the definition of an investment company under the Investment Company Act of 1940 (1940 Act). If exempt, the hedge fund will not be required to comply with the extensive disclosure, investment and other regulatory requirements applicable to registered investment companies. By being exempt from the 1940 Act, a hedge fund retains the ability to invest in many markets as well as engage in desired levels of leverage. These activities are limited by the 1940 Act.

Exemption from Registration as an Investment Adviser

The Investment Advisers Act of 1940 (Advisers Act) governs the activities of "anyone who engages in the business of advising others whether to invest in, purchase or sell securities for compensation." While hedge fund managers are included in this definition, many managers are exempt from registration pursuant to Section 203(b)(3) of the Advisers Act. This particular Section exempts from registration an adviser with fewer than 15 clients during the prior 12 months who does not hold himself out to the public as an investment adviser and does not act as an investment adviser to a registered investment company. Even if exempt from registration, an investment adviser is subject to the anti-fraud provisions of the Advisers Act.

STATE SECURITIES LAWS

A hedge fund manager also must consider the securities and investment adviser laws for the various states in which investments in the hedge fund will be offered. With respect to registration of securities, many states follow the private offering and Regulation D exemption approaches of the 1933 Act.

ERISA

The provisions of the Employee Retirement Income Security Act of 1974 (ERISA) should be considered if the hedge fund intends to accept funds from pension or benefit plans subject to ERISA. Generally, if 25% or more of the aggregate hedge fund assets consist of ERISA assets, the entire fund will be considered "plan assets," resulting in the hedge fund being subject to the various restrictions and prohibitions under ERISA. Therefore, most hedge funds keep investments from ERISA plans below 25% of the aggregate assets.

FEDERAL LAWS APPLYING TO FUTURES AND OPTIONS ON FUTURES

The manager of a hedge fund that uses futures and options on futures will be subject to the applicable regulatory requirements set forth in the Commodity Exchange Act and Regulations. These requirements generally fall within four categories: registration, disclosure, reporting, and recordkeeping. However, there are several exemptions that can minimize any additional regulatory impact beyond what is already required by the federal and state securities laws.

Exemptions from Certain Regulatory Requirements of a Pool Operator

Unlike the securities laws which require registration of an offering unless an exemption is available, the commodities regulations that relate to funds using futures apply to the fund manager rather than to the fund itself. Accordingly, there is no CFTC registration of the fund. Further, except as described below, there are no limitations on the uses of futures and options on futures by the fund. The applicable regulations and exemptions for the fund manager are those that define and apply to commodity pool operators and commodity trading advisers. The Commodity Exchange Act defines a Commodity Pool Operator (CPO) as any person engaged in the business of soliciting or accepting funds from others for the purpose of trading commodity futures contracts in connection with a commodity pool. A commodity pool is generally any investment trust, syndicate, or similar entity that invests its pooled funds in commodity interests. A hedge fund manager intending to use futures and options on futures would generally fit this definition and must register as a CPO. However, there are three regulations that provide significant relief from the impact of the disclosure, reporting, and recordkeeping requirements.

The first regulation can be used by hedge funds sold only to "Qualified Eligible Participants" (QEPs). CFTC Rule 4.7 offers an exemption providing that the fund manager is registered as a CPO. The rule also defines QEPs to include: 1) registered commodities and securities professionals, 2) those considered accredited investors under the 1933 Act who also have (a) an investment portfolio of at least \$2,000,000 or (b) \$200,000 on deposit as commodities margin (or a combination of a and b) and 3) non-U.S. persons. The fund manager must file a simple exemption form with the CFTC. Regulation 4.7 relieves the CPO of the requirement to provide a CPO Disclosure Document to each customer, provided that the offering memorandum is not misleading. The rule also allows the fund manager to send statements quarterly rather than monthly, as would otherwise be required. These statements are only required to provide the Net Asset Value of the pool as of the end of the reporting period and the change in Net Asset Value from the end of the previous reporting period. In addition, the hedge fund may substitute the required certified annual report for an uncertified annual statement containing, at a minimum, a Statement of Financial Condition and a Statement of Income (Loss).

An alternative for hedge fund managers primarily focused in the securities and other markets may be to seek relief under CFTC Rule 4.12(b). While the fund manager would be required to register as a CPO, this rule reduces the disclosure

to be provided to fund investors. Most importantly, no performance information is required to be disclosed. The CPO still must file with the CFTC and provide to prospective investors a disclosure document including information such as: the organizational structure of the pool; business background (including any material administrative, civil, or criminal action within the preceding five years); ownership interest in the pool of the CPO, trading advisor, and any principals of the pool; anticipated fees to be incurred by the pool; the amount of funds to be accepted into the pool; a description of the transferability of the interests; a description of conflicts of interest; and information concerning distributions to investors. Often, the offering memorandum prepared for non-accredited investors in accordance with Regulation D may be used to satisfy the CFTC requirements. Sometimes a brief CFTC supplement will be needed.

Unlike the Rule 4.7 exemption, the CPO must file a certified annual report. However, like the Rule 4.7 exemption, the CPO need only provide its participants with a quarterly statement that indicates the Net Asset Value of the fund at the end of the reporting period and the amount of any change in the Net Asset Value from the end of the prior reporting period. To receive this exemption, the CPO must file for an exemption representing that aggregate initial margin and options premiums will not exceed 10% of the fair market value of the fund's assets.

Rule 4.8 is also beneficial to hedge fund managers who receive an exemption pursuant to Rule 4.12(b) or sell interests solely to "accredited investors" and rely on the safe harbor provisions of Rule 506 or Rule 507 of Regulation D under the 1933 Act in forming the hedge fund. Rule 4.8 allows the hedge fund to begin soliciting, accepting, and receiving funds from participants upon providing the CFTC and the participants with the Disclosure Document for the pool. The benefit is that the hedge fund does not have to wait the normal 21-day period after filing the document with the CFTC to begin soliciting, accepting, and receiving funds.

Exemptions from Registration as a Commodity Trading Advisor

Hedge fund managers also have to consider whether their advising activities would subject them to registration as a Commodity Trading Advisor (CTA). A CTA is defined as anyone who, for profit, engages in the business of advising others about trading in commodity futures and options on futures. A manager who trades futures and options on futures for a hedge fund would fit this description. However, there are at least two exemptions from registration as a CTA that might be available.

First, CFTC Regulation 4.14(a)(4) states that a registered CPO that only provides trading advice to the pool or pools for which it is registered as a CPO does not also have to register as a CTA. The second exemption is applicable if an advisor has less than 15 clients in a 12 month period and does not hold itself out to the public as a CTA.

Registered CTAs also may use the exemptive provisions of Rule 4.7 if all of their customers are "Qualified Eligible Clients" (QECs). Rule 4.7 is available to

relieve the CTA of the requirement to provide a CTA Disclosure Document, including the past performance history of the CTA. The CTA also is relieved of the specific recordkeeping requirements of Rule 4.32 and must only have available for inspection records concerning the qualifications of the QECs and other records prepared in connection with his CTA activities for QECs. Those records should substantiate any past performance representations the CTA chooses to make.

SUMMARY

Hedge funds may be exempted from many of the regulatory requirements imposed by securities and commodities laws. While the securities laws place registration requirements on both the fund manager and the fund itself, the commodities laws only place registration requirements on the fund manager and do not require registration of the fund. With the available exemptions provided by the commodities laws to hedge fund managers, the regulatory impact for hedge funds choosing to use the futures markets can be minimal beyond what is already required by the securities laws.

STRATEGIES AND EXAMPLES

Hedge fund managers engage in several types of investment strategies who may benefit from use of the risk management tools of futures and options. This portion of the paper presents a couple of strategies which could be employed in furtherance of a portfolio manager's goals. For more information and background you may request from your broker several publications by the Chicago Mercantile Exchange, including the following:

Currency Futures and Options: A Reference Guide for Institutional Investors
U.S. Equity Index Futures and Options Institutional Manual
[The Financial Safeguard System of the Chicago Mercantile Exchange](#)

Example I: Short Hedge of a Stock Portfolio Using S&P 500 Futures and Options

The S&P 500 futures contract permits investors to lessen the systematic risk in a stock portfolio and to hedge securities against potential market declines efficiently, inexpensively, and quickly. To construct a hedge for these purposes, one needs to know (a) the value of the portfolio for which hedging is desired, (b) the beta of the portfolio, and (c) the current level of the S&P Index itself.

The beta is a measure of the expected change in the value of the portfolio versus any change in the S&P Index. For example, stocks with betas of 1.0 move in the same proportion as the market, while a stock portfolio with a beta of 1.5 will tend to move one-and-one-half times any broad market move.

Consider the problem of hedging a \$1 million stock portfolio with an assumed beta of 1.1. Further assume the current value of the S&P 500 Index is 540.00. The number of contracts needed would be found by dividing \$1 million by (the index value X 500) and multiplying that quotient by 1.1, as per the following

formula:

$$\# \text{ Contracts} = (\$1,000,000 / (540.00 \times 500)) \times 1.1 = 4.1$$

In this case, the portfolio manager would sell four contracts for coverage, as fractional contracts cannot be bought or sold. At the end of the appropriate time period the manager would buy four contracts to close out its position. Two of the many possible outcomes of the hedging strategy are shown as follows:

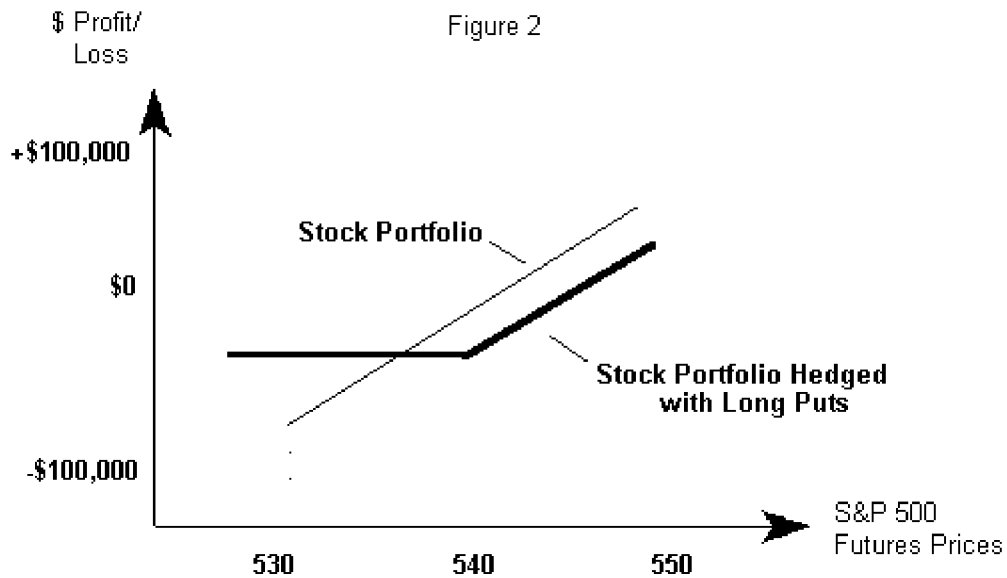
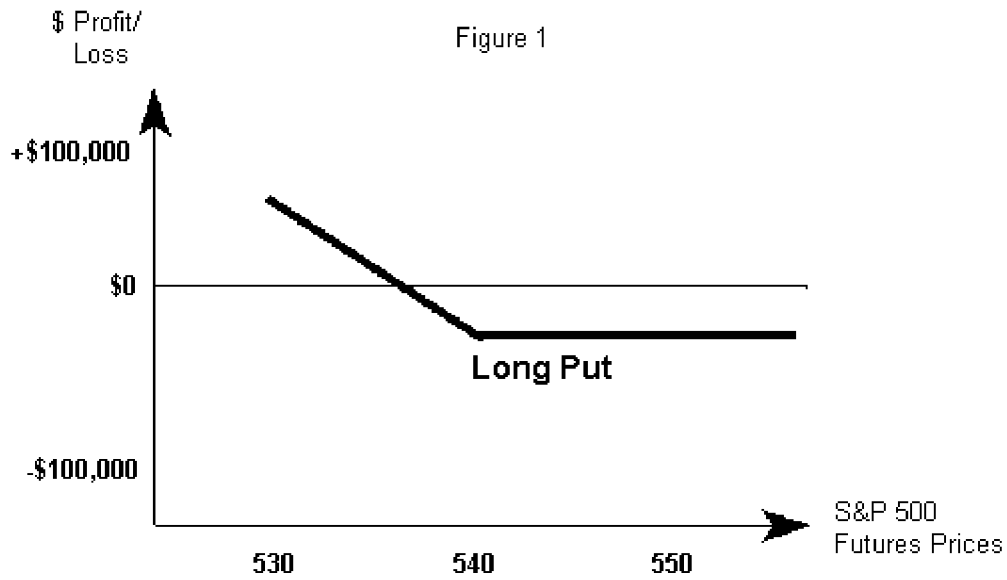
	Falling Stock Market	Rising Stock Market
Stock Market Move	Down 10%	Up 10%
Stock Portfolio Change	Down 11% \$110,000 Loss	Up 11% \$110,000 Gain
S&P 500 Futures Change	Down 10% 4 x (540 - 486) x \$500 = \$108,000 Gain	Up 10% 4 x (540-594) x \$500 = \$108,000 Loss
Net Change	\$2,000 Loss	\$2,000 Gain

The table above shows how the futures contracts provide an offset, regardless of whether the value of the stock portfolio rises or falls.

If a portfolio manager wanted to hedge the downside risk of a portfolio but still have the ability to participate in an upward move in the market, he or she could take a long position in put options on S&P 500 futures. A manager who did buy at-the-money put options often would face one of three scenarios at the expiration of the options:

1. If the S&P 500 Index had risen, the puts would expire worthless and the entire premium would be an insurance expense to the portfolio's owner. However, the value of the portfolio probably would have increased - an increase in which the investor would have participated, reduced by the put's premium and commission costs.
2. If the S&P 500 Index had fallen, by several points, at-the-money puts would have increased in value, roughly offsetting the loss in the portfolio's value less the cost of the puts. When the market falls, the insurance aspect of long put positions becomes effective, and an investor's downside risk is limited.
3. If the S&P Index had remained relatively stable, puts would be worth little or nothing at expiration, resulting in a loss of most of premium amount. The portfolio value would remain approximately unchanged, less the insurance expense.

Here is a graphic illustration of possible profits or losses at various S&P 500 prices:



Thus, index futures and options can lessen the systematic risk of an equity portfolio.

Example II: Hedging the Currency Risk in Foreign Investments

Many portfolio managers recently have increased their overseas investments in attempts to diversify their portfolios. However, foreign investments are subject to currency risk. Institutional investors often wish to mitigate or avoid exchange rate exposure, and currency futures and options offered on the CME can help them do so.

For example, suppose that in October a portfolio manager had a portfolio of United Kingdom stocks worth 10 million pounds sterling, and the British pound futures contract is priced at 1.65. After estimating his hedge ratio at one, he took

a short position in 160 December British pound futures contracts in order to cover his foreign currency exposure. The formula for determining the number of contracts with which to hedge may be expressed as follows:

$$\frac{\text{(Portfolio value in foreign currency)}}{\text{(\# of currency units covered by CME futures contract)}} = \frac{\text{£ 10,000,000}}{\text{£ 62,500}} = 160$$

(Please note that the traditional CME British pound futures contract has a trading unit of 62,500 pounds, while the newer CME Rolling Spot[®] British pound futures contracts generally have larger trading units.)

The manager also could have chosen to purchase the appropriate number of put options on British pound futures in order to hedge his currency exposure. Both the December futures and options can help protect the dollar value of his investment.

CONCLUSION

Financial futures and options are tools which can add flexibility to a portfolio managers's investment strategies. Among the possible benefits of the use of these products are added liquidity, lower transaction costs, and lowered risk through hedging.

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