An increasing number of active mutual fund managers are employing futures and options strategies to hedge against downside risk, to quickly gain or reduce equity exposure, and to enhance returns. Mutual funds now use products such as the Standard & Poor's 500 futures and options contracts to help protect the value of their equity portfolios, and US Treasury instruments and Eurodollar futures and options to protect the value of their fixed income investments.

Several recent regulatory changes have made these markets significantly more accessible to mutual funds. This paper provides an overview of the major legal requirements that apply to mutual funds' participation in the futures and options markets, and presents examples of how mutual funds can use these markets to their advantage.[1]

[1] Although this paper applies most directly to mutual funds (which are open-end management investment companies), many of the same concepts and rules (except the senior security rules) apply to closed-end management investment companies as well.

LEGAL REQUIREMENTS

Mutual fund activities in the futures and options markets are governed by federal securities, commodities and tax laws.

FILINGS AND SHAREHOLDER APPROVALS

Mutual funds and the securities they issue must be registered with the Securities and Exchange Commission (SEC) pursuant to both the Securities Act of 1933, as amended (1933 Act) and the Investment Company Act of 1940, as amended (1940 Act). Most mutual funds register with the SEC on Form N-1A, and are required to distribute a current prospectus to shareholders and prospective shareholders. A prospectus should identify the fund's objectives and the manner in which it proposes to achieve them, any special investment practices (including the use of futures or options), and the principal risk factors associated with investment in the fund. A statement of additional and more detailed information about the fund must be made available to shareholders upon request. Changes in fundamental investment policies as stated in the registration statement are prohibited by Section 13 of the 1940 Act, unless the changes are authorized by a majority vote of the shareholders.

An existing mutual fund planning to invest in futures or options for the first time generally should: (1) seek shareholder approval in accordance with the SEC's proxy solicitation rules; (2) amend its registration statement and prospectus to describe the new investment, the strategy to be used and the intended objectives of the investment; and (3) obtain the appropriate approvals from the SEC and the Commodity Futures Trading Commission (CFTC).

PROHIBITION ON THE ISSUANCE OF SENIOR SECURITIES

Section 18(f) of the 1940 Act generally prohibits mutual funds from issuing a "senior security," which is defined to include an obligation representing indebtedness. This prohibition is intended to prevent mutual funds from issuing senior (preferential) securities to promoters, and thus exposing the public purchasers of junior, non-preferential securities to excessive risk.

Mutual funds have argued that financial futures contracts and related options are not "securities" within the meaning of the federal securities laws, and therefore do not constitute senior securities within the meaning of Section 18(f). The SEC, however, has reasoned that a mutual fund that establishes a margin or commodity account thereby issues a senior security by obligating itself to pay the amounts due under preferential arrangements.

As a result, a number of mutual funds have requested "no action" letters from the SEC regarding the applicability of Section 18(f) to their proposed futures and options transactions.[2] The SEC has responded that the staff would not recommend enforcement action under Section 18 if a mutual fund enters into futures and options transactions as follows:

1. It sells futures contracts to offset expected declines in the value of its portfolio securities, provided that the value of such futures contracts does not exceed the total market value of those securities;

2. It writes covered call options on futures contracts, indexes of securities, or other securities;

[2] *See, e.g.,* Colonial Option Income Trust - Portfolio II [1984-85 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 77,814 (avail. Sept. 10, 1984); Colonial Government Securities Plus Trust [1984 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 77,670 (avail. June 15, 1984).

3. It purchases futures contracts, provided it creates a segregated account consisting of cash or cash equivalents in an amount equal to the total market value of any such futures contract, less the amount of initial performance bond (margin) for the contract; and

4. It writes covered put options on futures contracts, indexes of securities, or other securities.[3]

In granting such relief, the SEC apparently agreed with the mutual funds that the proposed futures or options strategies with the stated limitations would not give rise to the speculative abuses that Section 18(f) was designed to prevent.

CUSTODY OF PERFORMANCE BOND FUNDS

Until recently, SEC rules did not permit mutual funds to deposit and maintain their futures and futures options-related performance bond assets with a futures commission merchant (FCM). This prohibition, coupled with the CFTC requirement that an FCM segregate and separately account for customer funds,[4] gave rise to the establishment by mutual funds and FCMs of third-party custodial bank accounts for the deposit and maintenance of performance bond assets. However, effective in early 1997, the SEC adopted Rule 17f-6,[5] which permits a mutual fund to place and maintain performance bond assets and other cash, securities, and similar investments with an FCM in amounts necessary to effect the fund's futures and futures options transactions, provided that:

1. There is a written contract between the fund and the FCM that indicates:
   (a) The FCM will comply with CFTC segregation and secured amount requirements;[6]
   (b) The FCM may place and maintain the fund's assets with another FCM, a clearing organization, a US or foreign bank, or a member of a foreign board of trade and shall obtain a properly executed acknowledgment letter as required under CFTC Rule 1.20(a) or 30.7(c), as applicable;[7] and
   (c) The FCM shall promptly furnish such records or other information pertaining to the fund's assets as may be requested by the SEC.

2. Gains on the fund's transactions, other than de minimis amounts, may be maintained at the FCM only until the business day following receipt by the FCM.

3. If the custodial arrangement ceases to meet the requirements of Rule 17f-6, the fund's assets must be withdrawn from the FCM as soon as reasonably practicable.

Rule 17f-6 was adopted in response to several concerns raised by the use of third-party custody accounts. Such accounts are costly to establish and maintain, and require the FCM to use its own capital as performance bond at the clearinghouse level for the mutual fund's positions. The third-party custodial arrangement therefore increases FCM financing and opportunity costs and may even pose systemic liquidity

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[3] Putnam Option Income Trust II [1985-86 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 78,169 (avail. Sept. 23, 1985). Noting that it had previously issued a string of no-action letters on this subject, the SEC staff concluded Putnam by stating, "...we will no longer respond to no-action requests in this area unless they raise novel or unique questions."

[4] Commodity Exchange Act (CEA) §4d(2), Comm. Fut. L. Rep. (CCH) ¶ 1071 (1994); and CFTC Reg. §§1.20-1.30, Comm. Fut. L. Rep. (CCH) ¶¶ 2147-57 (1997).

[5] Fed. Sec. L. Rep. (CCH) ¶ 48,417 (1997). *See also* SEC Rel. No. IC-22389, 61 F.R. 66207 (Dec. 17, 1996).

[6] *See* note 4, *supra*, and CFTC Reg. §30.7, Comm. Fut. L. Rep. (CCH) ¶ 2704 (1995), respectively.

risks by diverting FCM capital, especially during periods of market volatility when liquidity is critical.[8]

Rule 17f-6 is not exclusive, however, and a mutual fund and its FCM still may opt to utilize a third-party custodial bank account. The CFTC has specified that in a proper third-party safekeeping account, an FCM must have the absolute right to liquidate open positions in an account that goes into deficit and also must have the right to withdraw funds from the account upon demand if certain conditions are met. In addition, the third-party account may not be located at an affiliate or fiduciary of the mutual fund.[9]

The SEC has confirmed the acceptability of third-party accounts in several no-action letters to mutual funds, so long as the FCM is permitted access to the account only if the fund has failed to honor its commitments to the FCM.[10]

REGISTRATION AS A COMMODITY POOL OPERATOR

A mutual fund may be required to comply with the CFTC's registration and reporting requirements for a "commodity pool operator" (CPO), which is defined in Section 2(a)(1)(A) of the (CEA) to mean generally a person engaged in the business of soliciting or accepting funds from others for the purpose of trading commodity futures contracts.

CFTC Regulation Section 4.5[11] generally excludes a registered mutual fund and its employees from the definition of CPO if the fund has filed a signed notice of eligibility with the CFTC and the National Futures Association, stating that the fund:

1. Will use futures and commodity options solely for bona fide hedging purposes or, with respect to positions not used for hedging, the aggregate initial performance bond and premiums required to establish such positions (less the in-the-money amount of any options) will not exceed 5 percent of the liquidity value of the fund's portfolio (after taking into account unrealized gains and losses on such contracts);

2. Will not be marketing participation to the public as a vehicle for trading in futures or commodity options markets;

3. Will disclose in writing to each prospective participant the purpose of and the limitations on the scope of trading of futures and commodity options by the fund; and

4. Will submit to special calls made by the CFTC.

FEDERAL TAXATION

A mutual fund typically attempts to stay within the definition of a "regulated investment company" (Internal Revenue Code Section 851) so that the fund will not be subject to federal income tax with respect to the portion of its investment income and capital gains that it currently distributes to shareholders.

To qualify as a regulated investment company, a mutual fund generally must meet the following requirements found in Code Section 851(b):

1. At least 90 percent of the fund's gross income must be derived from dividends, interest, payments for securities loans, gains from the sale or other disposition of stock or other securities or foreign currencies, or other income

[8] SEC Rel. No. IC-20313, 59 F.R. 28286 (June 1, 1994), at notes 61-70 and accompanying text.

[9] Fin. and Seg. Interp. No. 10, Comm Fut. L. Rep. (CCH) ¶ 7120 (1996); and Advisory: Responsibilities of Futures Commission Merchants and Relevant Depositories with Respect to Third Party Custodial Accounts, Comm. Fut. L. Rep. (CCH) ¶ 7120A (1996).

[10] *See,* e.g., Putnam, note 3, *supra.* The SEC's conclusion in *Putnam* regarding the response to further no-action requests also applied to requests regarding third-party custody accounts.

[11] Comm. Fut. L. Rep. (CCH) ¶ 2221E (1997).

(including gains from options, futures and forward contracts) derived with respect to its investment business; and

2. A fund must diversify its holdings so that, at the end of each fiscal quarter, (a) at least 50 percent of the value of its total assets is represented by cash, cash items, government securities, securities of other regulated investment companies, and other securities; the "other securities" amount is limited, with respect to the securities of any one issuer, to an amount not greater than 5 percent of the value of the fund's assets and 10 percent of the voting securities of the issuer; and (b) not more than 25 percent of the value of the fund's assets is invested in the securities of any one issuer, except with respect to government securities or the securities of other regulated investment companies. For purposes of these 5 percent and 25 percent tests, when determining the value of securities of a single issuer, broad-based index contracts are considered to be issued by the contract writer rather than the clearinghouse.

Congress has amended Section 851(b) to repeal the so-called "short-short" rule,[12] which was a significant impediment to mutual fund participation in the futures and options markets. As a result of the repeal, a mutual fund may now invest in futures and options without jeopardizing its status as a regulated investment company.

Tax and accounting rules generally require mutual funds to mark-to-market the values of their futures and options positions.

DIVERSIFIED COMPANY

In order to increase their appeal to potential shareholders, most mutual funds elect to operate as a "diversified company," which generally is defined in Section 5(b)(1) of the 1940 Act as any management investment company, if at least 75 percent of the company's assets consist of cash, cash items, government securities, securities of other investment companies, and other securities. For the purposes of this calculation, "other securities" are limited in regard to any issuer to an amount not greater than 5 percent of the value of the total assets of the management company and to not more than 10 percent of the outstanding voting securities of the issuer.

STATE REGULATION

Under the National Securities Markets Improvements Act of 1996, mutual funds now generally are exempt from state regulation.[13] As a result, state securities (or "blue sky") laws may no longer place restrictions or prohibitions on options or futures transactions by mutual funds.

[12] Effective as of the next fiscal year of a mutual fund after August 5, 1997. The rule had included in the criteria for a regulated investment company the requirement that less than 30 percent of a fund's gross income be derived from the sale of any of the following that were held for less than three months: (1) stock or securities; (2) options, futures, or forwards (other than those on foreign currencies); or foreign currencies (or options, futures or forwards thereon) if such currencies or contracts are not directly related to the company's principal business of investing in stock or securities (or options or futures thereon).

[13] Fed. Sec. L. Rep. (CCH) ¶ 4894 (1997).

STRATEGIES AND EXAMPLES

MAINTAINING OR GAINING EQUITY EXPOSURE

One of the most common strategies employed by mutual funds is equitizing the cash flows from dividends or from new investments in the fund. As cash accumulates, the fund tends to underperform relative to its benchmark, usually the S&P 500. In order to enhance performance, many mutual funds use S&P 500 index futures to maintain investment in the equity market without using leverage. This allows the fund to participate in the equity market while benefiting from the liquidity and efficiencies of the futures market.

> ***Portfolio objective:*** Invest $5 million of new cash flow into the fund.
>
> ***Action:*** Purchase 18 S&P 500 index futures contracts with the underlying cash invested in money market instruments.
>
> ***Results:*** Portfolio is fully invested in equities while maintaining liquidity.

How to determine the proper number of futures contracts:

$$\frac{\text{Value of portfolio x Beta of portfolio}}{\text{Index level x Contract multiplier}}$$

Example: $\frac{\$5{,}000{,}000 \text{ x } 1.0}{1100.00 \text{ x } \$250}$ 18 S&P 500 contracts

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ALLOCATING ASSETS

Many balanced funds invest in all three major asset classes: stocks, bonds, and money market instruments. As the investment markets change or the perceived risk and return for each asset class changes, these funds reallocate their mix between the different asset classes. The most efficient manner of allocating or reallocating the assets usually will be with futures. In increasing or decreasing exposure to equities, purchasing or selling S&P 500 futures will be much cheaper than purchasing or selling the underlying stocks and bonds.

> ***Portfolio objective:*** Increase exposure to equities by $5 million while reducing exposure to bonds.
>
> ***Action:*** Buy 18 S&P 500 index futures and sell bond futures.
>
> ***Results:*** Synthetically reallocated portfolio with a $5 million increase in equity exposure and $5 million decrease in bond exposure without selling or purchasing the underlying stocks and bonds.

PORTFOLIO ADJUSTMENT

Another common strategy is tilting the portfolio toward a different market capitalization. An equity fund manager may feel that midcap stocks will outperform large capitalization stocks in the near future. Rather than liquidating what may be core holdings, the manager may reallocate their exposure without incurring the cost to buy and sell all the underlying stocks.

Portfolio objective: Reallocate $5 million to increase exposure to midcap stocks and reduce exposure to large-cap stocks.

Action: Buy 27 S&P MidCap 400 index futures and sell 18 S&P 500 index futures.

Results: Tilted equity portfolio towards midcap exposure from large cap without incurring the cost of purchasing or selling underlying stock holdings.

How to determine the proper number of futures contracts:

Example: $\frac{\$5{,}000{,}000 \times 1.0}{370.00 \times \$500}$ 27 S&P MidCap 400 futures contracts

$\frac{\$5{,}000{,}000 \times 1.0}{1{,}100.00 \times \$250}$ 18 S&P 500 futures contracts

HEDGING

A manager may feel the market is overvalued in the near term. Rather than sell either certain stocks or a cross section of holdings, the manager can sell S&P 500 index futures to protect the portfolio. Another way of protecting the portfolio on the downside would be to buy put options on S&P 500 futures. Options in this case would work like an insurance policy in which the fund would pay for the protection via the option premium.

Portfolio objective: Protect $5 million in equity exposure.

Action: Sell 18 S&P 500 futures or purchase puts on S&P 500 futures options.

Results: $5 million in equity exposure protected by selling S&P 500 futures or by purchasing puts on S&P 500 futures options.

CONCLUSION

Financial futures and options are valuable tools that can significantly aid a mutual fund manager's investment strategies. As more managers have determined to use these tools, recent regulatory changes have made it easier to do so. Among the potential benefits of futures and options are added liquidity, lower transaction costs, yield enhancement, and decreased risk through hedging.

FOR FURTHER INFORMATION

The Chicago Mercantile Exchange has several publications available for anyone interested in stock index futures and options products. Copies of the following can be obtained by contacting your broker or the CME:

Using S&P 500
Futures and Options

Equity Index Futures &
Options Information Guide

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