Perfect Hedge: Adding Precision to the Proposed SEC Rule on Investment Company Use of Derivatives with a Hedging Exception

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PERFECT HEDGE: ADDING PRECISION TO THE PROPOSED SEC RULE ON INVESTMENT COMPANY USE OF DERIVATIVES WITH A HEDGING EXCEPTION

Abstract: Derivatives are complex financial instruments that derive their value from an underlying asset. Used and valued by commercial and financial institutions, derivatives are booming. Indeed, the growing $600 trillion derivative market dwarfs the $67 trillion stock market. Yet, the magnification effect of derivative leverage on losses has well-documented ties to the 2008 Financial Crisis when AIG, Lehman Brothers, and other financial institutions found themselves indebted on hundreds of billions of dollars in derivative transactions. Since the crisis, investment companies and funds constrained by the Investment Company Act to protect unsophisticated and vulnerable investors have increased their use of derivatives. In response to a dearth of regulation of investment company use of derivatives, the SEC introduced Proposed Rule 18f-4 in 2015. The proposed rule would control risky derivative use through mandating portfolio limitations, asset segregation requirements, the establishment of Derivative Risk Management Programs, and additional recordkeeping requirements. The current wind in government, however, blows against such a rule. This Note argues that Proposed Rule 18f-4 should not be abandoned but rather implemented to prevent hazardous derivative use by investment companies. The rule, if implemented, should allow for the beneficial and vital use of hedging in its calculation of fund risk exposure and use expected shortfall instead of Value at Risk in making such a calculation. These augmentations to the rule would allow investment companies to benefit from derivatives and still follow the Investment Company Act’s goal of protecting unsophisticated investors.

INTRODUCTION

Currently estimated to be over $600 trillion, the growing derivatives market is up from $445 trillion in 2006 and is much larger than even the $67 trillion global stock market.¹ U.S. investment companies, who currently manage

¹ See BANK FOR INT’L SETTLEMENTS, EXCHANGE-TRADED FUTURES AND OPTIONS BY LOCATION OF EXCHANGE 1 (2017) [hereinafter BIS, EXCHANGE-TRADED FUTURES] (providing statistics on the 2006 and 2016 exchange traded derivative market sizes); BANK FOR INT’L SETTLEMENTS, OTC DERIVATIVES MARKET ACTIVITY IN THE SECOND HALF OF 2016, at 1 (2017) (providing statistics on the 2006 and 2016 over-the-counter (“OTC”) derivative market sizes); WORLD FED’N OF EXCHS., ANNUAL STATISTICS GUIDE 2016, at 1 (2017) (providing statistics on the global stock market). There are numerous definitions for derivatives, but the term has generally been defined as financial instruments that derive their value from an underlying asset. See JOHN HULL & SANKARSHAN BASU, OP-
over $19.5 trillion in assets—up from $11 trillion in 2006—are also enjoying substantial growth, both in the amount of assets held and number of firms.\(^2\) As they have continued to grow, investment companies funds (“funds”), such as mutual funds and exchange-traded-funds (“ETFs”), have increased their use of derivatives and innovatively engineered them.\(^3\) The U.S. Securities and Exchange Commission (“SEC”) has pushed back on the risky use of derivatives by funds and proposed Rule 18f-4 in 2015 in an effort to bring fund derivative use under the purview of the Investment Company Act of 1940 (“ICA”).\(^4\)

Derivatives have drawn immense criticism, reaching a crescendo with the 2008 Financial Crisis.\(^5\) Financial calamities in the 1990s and early 2000s, such

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\(^1\) TIONS, FUTURES, AND OTHER DERIVATIVES 1 (9th ed. 2016) (defining “derivative”); see also infra notes 31–59 and accompanying text (providing an in-depth explanation of derivatives).


\(^5\) See Brooksley Born, Foreword: Deregulation: A Major Cause of the Financial Crisis, 5 HARV. L. & POL’Y REV. 231, 237 (2011) (stating that derivatives were major role-players in the Financial Crisis); Mark J. Roe, The Derivatives Market’s Payment Priorities as Financial Crisis Accelerator, 63 STAN. L. REV. 539, 588 (2011) (concluding that the 2008 Financial Crisis was accelerated by deriva-
as Enron’s collapse, Long-Term Capital Management’s $4.6 billion loss, followed by collapse, and Metallgesellschaft AG’s $1.3 billion loss were all tied to derivatives use. The 2008 Financial Crisis was accelerated by the use of derivatives by some major financial institutions, such as AIG and Lehman Brothers, who were unable to pay hundreds of billions in derivatives obligations as the housing bubble burst. Although the destructive systematic impact

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7 See The Role of Derivatives in the Financial Crisis: Hearing Before the Fin. Crisis Inquiry Comm’n (2010) (statement of Michael Greenberger, Professor, University of Maryland School of Law) (transcript available at http://digitalcommons.law.umd.edu/cgi/viewcontent.cgi?article=1036&context=cong_test [https://perma.cc/BQH4-B3UD]) (covering the rise of deregulated derivative use and its ties to the Financial Crisis); FIN. CRISIS INQUIRY COMM’N, THE FINANCIAL CRISIS INQUIRY REPORT 279 (2011) (concluding that the massive losses of major financial institutions were due to derivatives); René Stulz, Financial Derivatives: Lessons from the Subprime Crisis, MILKEN INST. REV., First Quarter 2009, at 70 (linking derivatives to losses in the Financial Crisis); Tim Adam & Andre Guettler, The Use of Credit Default Swaps by U.S. Fixed-Income Mutual Funds 10 (Fed. Deposit Ins. Corp., Working Paper No. 2011-01, 2010) (stating that the use of certain derivatives caused substantial losses at banks and funds during the Financial Crisis); Robert L. McDonald & Anna L. Paulson, AIG in Hindsight 12–18 (Nat’l Bureau of Econ. Research, Working Paper No. 21108, 2015) (explaining AIG’s derivative use). Alan Greenspan, the revered former chairman of the Federal Reserve, once championed the use of derivatives but recanted that view after the Financial Crisis. See FIN. CRISIS INQUIRY COMM’N, supra, at 47–49 (quoting Greenspan as stating before the financial crisis that he believed the regulation of derivatives was “unnecessary” but then stated that he was “not opposed to the regulation of derivatives”). There were warning signs indicating that derivative use could cause problems. See id. at xxi (explaining some of the variables indicating dangers of derivative use prior to the Financial Crisis); Born, supra note 5, at 5 (covering efforts to regulate derivatives prior to the Financial Crisis); Martin Mayer, The Dangers of Derivatives, BROOKINGS, May 20, 1999, at 2 (raising concerns with the use of derivatives prior to the Financial Crisis); René Stulz, Should We Fear Derivatives?, 18 J. ECON. PERSPECTIVE 173, 190 (2004) (outlining the dangers of derivatives in 2004); Letter from Warren Buffet, Chief Exec. Officer, Berkshire Hathaway, Inc., to S’holders of Berkshire Hathaway (Feb. 21, 2003) (calling derivatives “weapons of mass destruction”) (on file with Berkshire Hathaway, Inc.). Brooksley Born, Chairwoman of the Commodities Futures Trading Commission, tirelessly pushed for
had already been felt, Congress enacted the Dodd-Frank Wall Street Reform and Consumer Protection Act in 2010, in part, to address select types of derivatives in response to the massive losses sustained and calls for derivative regulation. Even with regulations in place, worries still continue to surface about a repeat of the systemic failures of the 2008 Financial Crisis that were magnified by derivatives use.

Despite the risks, derivatives are seen as beneficial and important instruments for capital markets. They allow for lower transaction costs and price discovery, improve liquidity, and can be tools for efficient market risk allocation but was rebutted by Alan Greenspan and Congress. See Richard B. Schmitt, The Born Prophecy, 95-MAY ABA. J. 50, 55 (2009) (outlining Born’s fight for regulation and the push-back from the Treasury); Stout, supra note 5, at 20–21 (describing Born’s push for regulation). Born continues to advocate for derivative regulation. See Born, supra note 5, at 242–43 (advocating for greater derivative regulation).


See OFF. OF FIN. RESEARCH, ASSET MANAGEMENT & FINANCIAL STABILITY 18–19 (2013) (finding that current use of derivatives poses risks to financial stability); Colleen M. Baker, Regulating the Invisible: The Case of Over-the-Counter Derivatives, 85 NOTRE DAME L. REV. 1287, 1292 (2010) (arguing for more transparency of derivative use due to their possible systemic impact); Michael Simkovic, Paving the Way for the Next Financial Crisis, 29 NO. 3 BANKING & FIN. SERVICES POL’Y REP. 1, 2, 6 (2010) (arguing that concerns remain about the regulation of OTC derivatives); John Dizard, Derivatives Market Is Short of a $3.7tn Lifeboat, FIN. TIMES (Feb. 10, 2017), https://www.ft.com/content/1726ae08-eee9-11e6-930f-061b01e23655 [https://perma.cc/6KBT-P4ZV] (stating that the OTC derivative market is under-collateralized at about $3.69 trillion); Mayra Rodriguez Valladares, Derivatives Markets Growing Again, with Few New Protections, N.Y. TIMES: DEALBOOK (May 13, 2014, 4:35 PM), https://dealbook.nytimes.com/2014/05/13/derivatives-markets-growing-again-with-few-new-protections/ [https://perma.cc/9CUW-8ATY] (highlighting the concentration of derivatives in few financial institutions). In the instances of Bear Sterns, AIG, and Long-Term Capital Management, all had numerous outstanding derivatives contracts that would have shifted back to their counterparties and had an immense effect on the markets. ALAN RECHTSCHAFFEN, CAPITAL MARKETS, DERIVATIVES AND THE LAW 160 (2009); see also infra note 36 and accompanying text (explaining derivative counterparties).

Funds specifically benefit through the ability to hedge risks and maximize gains on investments. Although derivative use has received immense criticism, oversimplifications of measurements, incomplete data, and quick conclusions can muddy risk delineations between different derivative uses. The inherent risk in derivative use still persists, however, and is of particular concern to the SEC when funds, which are accessible to unsophisticated and vulnerable investors, utilize them. Additionally, there has been no formal SEC guidance on fund use of derivatives since 1979, and even then, derivatives were not explicitly addressed. With the 2008 Financial Crisis fresh in regulators’ minds, a growing derivatives market, an influx of investment company use of derivatives, and evidence suggesting that funds pose systemic risk,
the SEC has taken a more aggressive regulatory approach to protect investors.\(^{16}\) In 2015, the SEC proposed Rule 18f-4, its most comprehensive rule governing fund use of derivatives.\(^{17}\) There are six regulatory components to Rule 18f-4: (1) portfolio limitations; (2) asset segregation; (3) the Derivatives Risk Management Program; (4) requirements for Financial Commitment Transactions; (5) recordkeeping; and (6) amendments to proposed SEC forms N-PORT and N-CEN.\(^{18}\)

The mutual fund industry, as well as Michael Piwowar, then Acting Chairman of the SEC and now a Commissioner on the SEC, criticized the proposal as lacking flexibility and possessing imprecise definitions.\(^{19}\) Critics,

\(^{16}\) See Proposing Release, supra note 4, at 1–2 (outlining the reasoning behind Proposed Rule 18f-4); OFF. OF FIN. RESEARCH, supra note 9, at 18 (stating that failure of a large asset management firm could pose a risk to the financial system). There has been an upward trend in SEC enforcement actions between 2014 and 2016, with 2016 being an exceptional year for SEC enforcement. Jessica Dye, US Securities Regulators Tout Another Record Year for Enforcement, FIN. TIMES (Oct. 11, 2016), https://www.ft.com/content/65676ae6-670c-3c9a-8c0b-7b32ed43d3d8 [https://perma.cc/X2U9-XPRH].


\(^{19}\) See, e.g., Fidelity Management & Research Company, Comment Letter on Proposed Rule Regarding the Use of Derivatives by Registered Investment Companies (Mar. 28, 2016) [hereinafter Fidelity Comment Letter] (advocating for the allowance of hedging in exposure calculation) (on file with the SEC); Vanguard, Comment Letter on Proposed Rule: Use of Derivatives by Registered Investment Companies (Mar. 28, 2016) (advocating for an expansion of qualifying coverage assets and recognition of offsetting transactions) (on file with the SEC); Joe Rennison, Mutual Funds Hit Back at SEC Proposal to Limit Derivative Use, FIN. TIMES (Mar. 29, 2016), https://www.ft.com/content/cb563284-f5fe-11e5-96db-fc683b5e52db [https://perma.cc/S8V8-CZWW] (outlining some of the responses by mutual funds to the Proposed Rule and highlighting that a recent study found that 471 funds with $613 billion in assets would not meet the requirements of the proposed rule); Michael Piwowar, Comm’r, SEC, Dissenting Statement at Open Meeting on Use of Derivatives by Registered Investment Companies (Dec. 11, 2015) [hereinafter Piwowar Statement] (transcript available at https://www.sec.gov/news/statement/piwowar-dissenting-statement-use-of-derivatives-funds.html [https://perma.cc/JY5G-ZZ77]) (stating that he could not support the proposed rule because the SEC did not do a high-quality analysis of comprehensive data on fund use of derivatives); Letter from Barbara Novivk, Vice Chairman, BlackRock, to Brent J. Fields, Secretary, SEC (Dec. 5, 2016), https://www.sec.gov/comments/s7-24-15/s72415-266.pdf [https://perma.cc/KKT2-WF5R] (advocating for an expansion of what constitutes qualifying assets).
however, conceded that there is a need for updated regulations. The change in presidential administrations in 2016, however, has turned the tide against regulation generally, leaving Proposed Rule 18f-4’s fate up in the air. This Note argues that Proposed Rule 18f-4 should be implemented in order to protect investors and the national public but should be modified to allow for the beneficial use of hedging in its calculation of fund exposure to risks.

Part I of this Note discusses the current use of derivatives by funds and the current regulatory scheme. Part II explores the provisions set out by Proposed Rule 18f-4. Part III argues that Proposed Rule 18f-4 serves as a necessary starting point for the regulation of derivative use by funds, but must be tailored in some of its key components to allow funds to simultaneously benefit investors and adequately protect unsophisticated investors.

I. FUND DERIVATIVE USE AND THE CURRENT REGULATORY SCHEME

Derivatives and funds have long-held significance in U.S. financial markets predating the Great Depression. In the past few years, however, invest-

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22 See infra notes 184–226 and accompanying text.

23 See infra notes 26–106 and accompanying text.

24 See infra notes 107–183 and accompanying text.

25 See infra notes 184–226 and accompanying text.

26 See CLIFFORD KIRSCH, MUTUAL FUNDS AND EXCHANGE TRADED FUNDS REGULATION § 1A:1 n.3 (3d ed. 2013) (stating that the funds began to flourish in the 1920s but had been established in the United States in the 1800s); see also Stout, supra note 5, at 11–17 (tracing the history of derivatives in
ment volumes in both have reached unprecedented heights.\textsuperscript{27} This Part explores the current use of derivatives by funds and the existing regulatory guidance.\textsuperscript{28} Section A provides an explanation of derivatives and funds and discusses how funds currently utilize derivatives.\textsuperscript{29} Section B examines the current SEC regulations that govern fund use of derivatives that Rule 18f-4 seeks to replace.\textsuperscript{30}

\textbf{A. Expansion of Fund Use of Derivatives}

1. Derivatives

Legal practitioners and academics alike have difficulty explaining derivatives.\textsuperscript{31} Generally, derivatives are financial instruments that derive their value from an underlying asset.\textsuperscript{32} They are bilateral contracts between counterparties who each take opposing positions, with each party contracting to buy, sell, or transfer an asset at a certain date in the future.\textsuperscript{33} Derivatives are aleatory con-

\textsuperscript{27} See BIS, EXCHANGE-TRADED FUTURES, supra note 1, at 1 (showing an increase in the derivatives market from less than $100 trillion to more than $700 trillion between the 1990s and 2010s); INV. CO. INST., supra note 2, at 9 (presenting statistics on immense fund growth). Funds have become important choices for retirement plans, with mutual funds managing 63% of 401(k) plans. See KIRSCH, supra note 26, § 1A:2.5[C]: Retirement Assets Total $27.2 Trillion in Third Quarter 2017, INV. CO. INST. (DEC. 20, 2017), https://www.ici.org/research/stats/retirement/ret_17_q3 [https://perma.cc/WEZ8-X7US] (providing data on retirement assets). Currently, over 43% of U.S. households invest in mutual funds. INV. CO. INST., supra note 2, at 112.

\textsuperscript{28} See infra notes 31–106 and accompanying text.

\textsuperscript{29} See infra notes 31–91 and accompanying text.

\textsuperscript{30} See infra notes 92–106 and accompanying text.

\textsuperscript{31} See Lynch, supra note 14, at 9 (explaining that many practitioners misunderstand derivatives). There are numerous definitions of derivatives that are similar to the one presented, which lends credence to the struggle scholars have in defining the term. See id. at 16 n.39 (listing nine different definitions of derivatives by scholars).

\textsuperscript{32} See HULL & BASU, supra note 1, at 1 (defining “derivatives”); Frank H. Easterbrook, Derivative Securities and Corporate Governance, 69 U. CHI. L. REV. 733, 734 (2002) (same); Lynch, supra note 14, at 5 (same). The “underlying asset” need not be a physical asset that can be possessed. See HULL & BASU, supra note 1, at 1 (stating that derivatives can be based on practically any variable). Indeed, many derivatives are based on events such as credit derivatives, weather derivatives, and interest rate derivatives. See HULL & BASU, supra note 1, at 1 (listing different types of assets that derivatives are based upon); Lynch, supra note 14, at 24 (same).

\textsuperscript{33} See Procter & Gamble Co. v. Bankers Tr. Co., 925 F. Supp. 1270, 1275 (S.D. Ohio 1996) (stating that a derivatives transaction is a “bilateral contract or payments exchange agreement whose value derives . . . from the value of an underlying asset or underlying reference rate or index”) (internal
tracts, meaning that the outcome is based on an event that the counterparties have no control over. Derivatives typically come in four different forms: forwards, futures, options, and swaps. One of the simplest derivative transactions is a future. For example, if Trader A wishes to enter into a three-month futures contract in January to buy 100 pounds of wheat at $0.15 per pound (the long position), Trader B will contract to sell the 100 pounds of wheat at $0.15 at the end of the three-month period (the short position). If the price of wheat during that time increases above $0.15, then trader A will buy the wheat at a discounted price and be able to then sell it for a profit and if the price of wheat drops below $0.15 then trader B will be selling the wheat at an above market price.
Derivatives are traded either on exchanges or over-the-counter ("OTC"). Exchange traded derivatives are those traded on regulated exchanges such as the Chicago Mercantile Exchange, the Chicago Board of Trade, or the Minneapolis Grain Exchange. The exchange regulates the contracts between the parties, serves to keep the market orderly, and mitigates risk. OTC derivatives are negotiated and entered into off of regulated exchanges through either another party (called a central counterparty), or solely between the two traders (called a bilateral trade).

One of the most common uses of derivatives is to hedge the risk of an asset or another derivatives contract. For example, an option gives the trader

39 See id. at 1–2 (explaining the distinction between exchange-traded and OTC derivatives); Lynch, supra note 14, at 30 (same); see also RECHTSCHAFFEN, supra note 9, at 162 (finding that the distinction was made by the United States Treasury).

40 See HULL & BASU, supra note 1, at 2 (listing exchanges); Lynch, supra note 14, at 30 (same). Exchange-traded derivatives provide a "central marketplace," "standardized terms," and "constant maturity." RECHTSCHAFFEN, supra note 9, at 163. Originally, exchanges were open outcry systems where traders would perform the transactions on a physical floor, but electronic trading is becoming increasingly popular. HULL & BASU, supra note 1, at 3.

41 See HULL & BASU, supra note 1, at 2 (explaining derivative exchanges); Norman Menachem Feder, Deconstructing Over-the-Counter Derivatives, 2002 COLUM. BUS. L. REV. 677, 717–18 (same). The exchange clearinghouse acts as a middle party between the two trading counterparties. HULL & BASU, supra note 1, at 3. Instead of the traders directly dealing with each other, they take a side opposite of the contract with the clearinghouse. Id. For example, if a Trader A wishes to enter into the long position of a futures contract on an exchange, the clearinghouse will take the short position. See id. The clearinghouse will then take the long position in the contract with trader B who is taking the short position. See id. This method decreases the counterparty risk of parties not holding up their end of the contract. Id. Counterparty risk is the risk that a counterparty defaults on its obligation and the related risk of having many derivatives transactions with one counterparty. Id. at 208.

42 See HULL & BASU, supra note 1, at 3, 46 (explaining OTC derivatives transactions and central counterparties); Henry T.C. Hu, Misunderstood Derivatives: The Causes of Informational Failure and the Promise of Regulatory Incrementalism, 102 YALE L.J. 1457, 1457 (1993) (expressing worries about the OTC market); Jeremy Kress, Credit Default Swaps, Clearinghouses, and Systemic Risk: Why Centralized Counterparties Must Have Access to Central Bank Liquidity, 48 HARV. J. ON LEGIS. 49, 65 (2011) (listing the benefits of OTC derivatives). The OTC market allows for flexible contract terms. RECHTSCHAFFEN, supra note 9, at 163. Central counterparties perform a role similar to that of the exchange by taking the counterparty position for each trader. HULL & BASU, supra note 1, at 46. When the transaction is completed only between the two traders, it is called a bilateral clearance. Id. OTC deals typically include a collateral requirement to cover the value of the contract. Id.

43 See HULL & BASU, supra note 1, at 11; RECHTSCHAFFEN, supra note 9, at 163–65; Erik F. Gerding, Credit Derivatives, Leverage, and Financial Regulation’s Missing Macroeconomic Dimension, 8 BERKELEY BUS. L.J. 29, 37 (2011) [hereinafter Gerding, Credit Derivatives] (explaining hedging); Lynch, supra note 14, at 38. Hedging is commonly done with forwards and options contracts. See HULL & BASU, supra note 1, at 13 (noting common hedging derivatives). Forward contracts hedge risk by locking in the trader to buy or sell at a certain price. See id. Hedging, in the context of Credit Default Swaps, does not always result in a full mitigation of risk. See Gina-Gail S. Fletcher, Hazardous Hedging: The (Unacknowledged) Risks of Hedging with Credit Derivatives, 33 REV. BANKING & FIN. L. 813, 865 (2014) (stating that perfect hedges are near impossible); Edwin Patterson, Hedging and Wagering on Produce Exchanges, 40 YALE L.J., 843, 878 (1930) (finding that courts struggle with the distinction). Hedging, however, is viewed as vital to the marketplace. Erik F. Gerding, Code, Crash, and Open Source: The Outsourcing of Financial Regulation to Risk Models
insurance while still allowing the trader to attain financial gain.\textsuperscript{44} Consider Trader A, who wishes to hedge against the risk that the price of her 100 shares dips to below $10.\textsuperscript{45} By entering into a put option to sell the 100 shares at $10, Trader A ensures that she will be able to sell at $10 if the stock drops below that point at the maturity date.\textsuperscript{46} Derivatives can hedge pre-existing risk such as credit and lending risk and therefore eventuate certain financing arrangements that would not have otherwise occurred.\textsuperscript{47} When a trader uses derivatives not to hedge risk but to gain a spot in the market or stake on a certain event, they are partaking in the controversial speculative use of derivative.\textsuperscript{48}

Often requiring little or no deposit to secure obligations, derivatives can be greatly leveraged.\textsuperscript{49} Leverage refers to the investment strategy by which investors are able to achieve a return on capital that is substantially greater than what they initially contributed.\textsuperscript{50} Leverage acts as a magnifier, giving in-
vestors the ability to attain immense gains but also great losses, as seen in the Great Depression and the 2008 Financial Crisis. For example, if Trader A invests $100 in shares of Stock A with solely her own equity and later sells her shares at $200, she realizes a 100% return on her initial investment. If she instead invests $20 and borrows the $80 of the $100 Stock A purchase price and later sells the shares at $200, she realizes a 500% gain on her initial $20 investment. A loss operates in the same manner. Derivative leverage similarly amplifies gains or losses that can far exceed the initial investment because there is little or no initial investment made on the transaction.

The acceleration of the failures of financial institutions during the 1990s, early 2000s, and the 2008 Financial Crisis highlighted the derivative counterparty and systemic risk created by derivative leverage and speculation. Counterparty risk—the risk of a counterparty defaulting on the contract—links to systemic risk when the amount and number of losses caused by a derivatives

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52 See HAAS, supra note 8, at 157 (explaining leverage).

53 See id.

54 See id.

55 See COMM. ON FED. REGULATION OF SEC., supra note 12, at 8 (explaining derivative leverage); KIRSCH, supra note 26, § 8A:3.1 (same); RECHTSCHAFFEN, supra note 9, at 160 (same). Leverage allows a trader to use capital on other assets rather than cover the derivative obligation. Gerding, Credit Derivatives, supra note 43, at 41. For example, a fund enters into one hundred long futures contracts to buy Stock A for $10 per share in three months. See id. Remember that futures contracts do not involve payment for the contract up front. See HULL & BASU, supra note 1, at 7. If the futures contracts mature and Stock A’s spot price has sprung up to $20, the fund can make a 100% return on its investment after it sells the shares. See id. If the spot price is $1, then there has been a 90% loss. See id. By using no initial investment, the fund can incur both the gains and losses. See id. This would be considered indebtedness leverage. See KIRSCH, supra note 26, § 8A:3.1. If the fund were to have bought call options, where there is an initial investment to purchase the right to buy, it likewise could attain gains and losses in excess of its initial investment. See id. This would be considered economic leverage. See id.

56 See FIN. CRISIS INQUIRY COMM’N, supra note 7, at 279 (concluding that the massive losses of major financial institutions were, in part, due to derivatives); Lynch, supra note 34, at 84–94; Stulz, supra note 7, at 70 (linking derivatives to losses in the Financial Crisis); Adam & Guettler, supra note 7, at 1 (stating that the use of certain derivatives caused substantial losses at banks and funds during the Financial Crisis); McDonald & Paulson, supra note 7, at 12–18 (explaining AIG’s derivative use); see also Dan Fitzpatrick et al., J.P. Morgan’s $2 Billion Blunder, WALL ST. J. (May 11, 2012, 12:47 PM), https://www.wsj.com/articles/SB1000142405270230407030404577396511420792008 [https://perma.cc/F295-ZQPC] (covering J.P. Morgan’s over $2 billion loss caused by derivative use).
default could impact the greater financial system. In 1998, Long-Term Capital Management, a hedge fund leveraged twenty-eight to one due to the use of derivatives, required a government bailout because of counterparty and systemic risk after losing $40 billion in assets over the course of a year. During the 2008 Financial Crisis, Bear Stearns, AIG, and Lehman Brothers would have defaulted on derivatives transactions that posed immense counterparty risk and ultimately would have had substantial successive effects on the economic system if not for government intervention.

2. Investment Companies

Considered a vital part of the financial services sector, funds are generally defined as financial intermediaries that raise capital from investors, invest that capital in other establishments, and then issue securities that give investors an interest in the investments. Investors typically use funds as investment vehi-

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57 See RECHTSCHAFFEN, supra note 9, at 161 (covering counterparty risk in the derivative context). Systemic risk is all non-business specific risk. HAAS, supra note 8, at 3. Specifically, it is the risk that an economic tremor will result in market losses or losses to financial institutions that lead to increases in the cost of capital. Schwarcz, supra note 8, at 204.

58 See PRESIDENT’S WORKING GRP. ON FIN. MKTS., HEDGE FUNDS, LEVERAGE, AND THE LESSONS OF LONG-TERM CAPITAL MANAGEMENT 29 (1999) (covering Long-Term Capital Management’s losses); Siconolfi et al., supra note 6, at 1 (same); see also ROGER LOWENSTEIN, WHEN GENIUS FAILED: THE RISE AND FALL OF LONG-TERM CAPITAL MANAGEMENT (2000) (providing a comprehensive overview of Long-Term Capital Management’s actions). Having leverage of 28 to 1 means that Long-Term Capital Management was indebted on derivatives contracts 28 times the amount of actual capital that the fund owned. See Gerding, Credit Derivatives, supra note 43, at 41 (explaining leverage).


60 See RICHARD CARNELL ET AL., THE LAW OF FINANCIAL INSTITUTIONS 643 (5th ed. 2013) (explaining the importance of funds); KIRSCH, supra note 26, §§ 1:1, 1B:1 (highlighting the importance of funds); see also 15 U.S.C. § 80a-3 (2012) (defining “investment company” under the ICA). Whether a company is considered an investment company under the ICA often turns on whether the company is “primarily engaged in business of investing, reinvesting, or trading in securities.” See 15 U.S.C. § 80a-3 (defining investment company); H. Norman Knickle, The Investment Company Act of 1940: SEC Enforcement and Private Actions, 23 ANN. REV. BANKING & FIN. L. 777, 783 (2004) (covering investment companies). Hedge funds and private equity funds are typically exempt from the ICA. See Mercer Bullard, Regulating Hedge Fund Managers: The Investment Company Act as a Regulatory Screen, 13 STAN. J.L. BUS. & FIN. 286, 287 (2008) (covering hedge funds); Robert S. Reder et al., Private Equity Funds: The Development of the Secondary Market, 9 No. 12 ANDREWS DERIVATIVES LITIG. REP. 11, 11 (2003) (stating that private equity funds generally use the 100-investor exemption, which generally allows a private fund to be exempt from investment company status if the fund has no more than 100 investors).
icles to diversify their portfolios and take advantage of skillful administration of their portfolios.61

As public investment companies who sell their shares to the general public, funds are registered and structurally regulated under the ICA, and their activities are regulated by the Securities Act of 1933 and the Securities and Exchange Act of 1934.62 Accordingly, funds must register under both the ICA and the Securities Act of 1933.63 Additionally, funds must identify themselves as diversified or non-diversified and are bound by certain liquidity requirements.64

Generally organized as corporations, funds maintain a board of directors and are owned by shareholders.65 The portfolio management, however, is not run by employees but by third party advisors, called investment advisors.66

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62 See 15 U.S.C. § 80a-8 (requiring registration under § 8 of the ICA); id. § 77e (2012) (setting forth the registration requirements under the Securities Act); id. § 78a–qq (2012 & Supp. III 2015, Supp. IV 2016) (setting forth the rules under which securities can be purchased and sold under the Exchange Act); John Morley, The Regulation of Mutual Fund Debt, 30 YALE J. ON REG. 343, 345–55 (2013) (explaining registration under the ICA). The ICA does not require investors of investment companies to be sophisticated or accredited. See generally 15 U.S.C. §§ 80a-1 to -64 (not requiring a sophisticated or accredited status). Sophisticated investors have sufficient knowledge in financial areas that they can evaluate risks. See generally SEC v. Ralston Purina Co., 346 U.S. 119 (1953) (providing a foundational definition of sophisticated investor). Accredited investors are those investors defined under rule 501 of the Securities Act of 1933 that have either a minimum income of $200,000 or have a net worth of $1 million. See 17 C.F.R. § 230.501 (2017) (defining accredited investor).

63 See 15 U.S.C. § 80a-8(a) (requiring registration for funds); id. § 77e(c) (requiring the filing of a registration statement); Knickle, supra note 60, at 784 (covering registration requirements). Registration requires the disclosure of extensive information that the SEC will review. See id. § 80a-8(b). These requirements include registering with the SEC, filing notice of registration, filing a registration statement that includes policies, providing semiannual reports, undergoing audits, and keeping certain records. See CARNELL ET AL., supra note 60, at 655 (listing the requirements).

64 KIRSCH, supra note 26, §§ 1:4.3, 33:2. Diversification turns on whether the management company meets the ICA requirement that certain percentages of the value of assets be represented by certain types of assets. Id. § 33:2. A fund must generally have their investments in no greater than 15% of illiquid assets. Id. § 1:4.2[F]. Liquidity refers to the ability of the asset to be sold. HULL & BASU, supra note 1, at 867.

There are three major categories of funds: open-ended mutual funds, ETFs, and closed-end companies.67 Mutual funds are the most common type of fund and have the highest assets under management.68 Over 44% of American households are invested in mutual funds, and 65% of 401(k) plans are managed by mutual funds.69 In addition to investment expertise, mutual funds offer diversification, daily redemption, and economies of scale.70 In function, they sell redeemable shares to investors and stand ready to redeem those shares at net asset value on a daily basis.71 The net asset value is the value of the company’s assets minus liabilities divided by the total number of shares.72

66 CARNELL ET AL., supra note 60, at 651; KIRSCH, supra note 26, § 1:2.1. The responsibility of the investment advisor is to manage and oversee the fund. CARNELL ET AL., supra note 60, at 651. They are specifically regulated under the Investment Advisors Act. 15 U.S.C. §§ 80b-1 to -21 (2012 & Supp. III 2015). Typically, the investment advisor will appoint one of its members to be the portfolio manager. KIRSCH, supra note 26, § 1:2.2.

67 CARNELL ET AL., supra note 60, at 644. Open-end refers to the ability of investors to “redeem” or exchange their shares for cash. See 15 U.S.C. § 80a-5(a) (2012) (defining an open-end). The ICA recognizes three greater general categories: management companies, unit investment trusts, and face-amount certificate companies. CARNELL ET AL., supra note 60, at 644. Management companies—which include mutual funds, ETFs, and closed-end companies—is the catch-all type for funds as they are any fund other than unit investment trusts and face-amount certificate companies. See id. (quoting 15 U.S.C. § 80a-4(3)). Unit investment trusts issue only redeemable securities, do not maintain board members, and maintains a fixed portfolio. Id. Face-amount certificate companies are no longer used. Id. at 645. Additionally, funds are broken down into the securities types that they invest in: money market, fixed income, equity, and hybrid. Id. at 647. Money market funds invest in short maturity, low risk, unsecured debt instruments, offering smaller risk to investors. Id. at 728. Fixed income securities are average maturity and are those other than money market securities. Id. at 647. Equity securities are typically shares issued by corporations. Id. Hybrid consists of both equity and fixed income. Id.

68 KIRSCH, supra note 26, § 1:1. The total number of U.S. mutual fund assets under management in 2015 was $15.7 trillion compared to ETF’s, which had a total of $2.1 trillion, and closed-end funds, which had a total of $261 billion. INV. CO. INST., supra note 2, at 9. Mutual funds have enjoyed substantial growth in the past century, growing from $500 million at the time of the ICA to $15.7 trillion today. Id. (providing current statistics); Meyer Eisenburg & Richard M. Phillips, Mutual Fund Litigation—New Frontiers for the Investment Company Act, 62 COLUM. L. REV. 73, 74 (1962) (outlining the growth of mutual funds from 1940 to 1960).

69 INV. CO. INST., supra note 2, at 112 (providing comprehensive statistics on mutual fund holdings); see also INV. CO. INST., THE US RETIREMENT MARKET: THIRD QUARTER 2017, http://www.ici.org/info/ret_17_q3_data.xls (providing statistics on fund holdings of retirement assets); KIRSCH, supra note 26, §§ 1:2.1, 1A:2.5[C].

70 See KIRSCH, supra note 26, § 1:2.1 (listing the benefits of mutual funds); Karmel, supra note 61, at 914; Zhi Da et al., Informed Trading, Liquidity Provisions, and Stock Selection by Mutual Funds 31 (Nat’l Bureau of Econ. Research, Working Paper No. 14609, 2008) (finding that mutual funds add value through expert stock selection and timing methods). Redeemable shares are those that the issuing company must buy back from the holder upon request. CARNELL ET AL., supra note 60, at 644. Diversification occurs when an investor buys multiple different assets. HAAS, supra note 8, at 113. This can lead to decreased risk because risk is spread over multiple assets. See id. An economy of scale is the decrease in average costs that occurs when a business entity increases production. Stewart L. Brown, Mutual Fund Advisory Fee Litigation: Some Analytical Clarity, 16 J. BUS. & SEC. L. 329, 344 (2016).

71 KIRSCH, supra note 26, § 1:2.1.

72 CARNELL ET AL., supra note 60, at 644; KIRSCH, supra note 26, § 18:1. Due to the fact that mutual funds must redeem the shares, mutual funds typically have greater expenses than closed-end...
The increasingly popular ETF is considered a hybrid investment vehicle. Unlike mutual funds, they sell shares through a public offering and the shares trade on a stock exchange at prices set by supply and demand. ETFs offer the ability to know what’s in the fund, risk benefits of exchange listing, certain tax benefits, and spread risk across different assets. Shares of ETFs

companies. KIRSCH, supra note 26, § 1B:3.2. The net asset value is computed on a daily basis. INV. CO. INST., supra note 2, at 59.


CARNELL ET AL., supra note 60, at 645. The net asset value of an ETF is computed constantly, meaning the price is calculated at the time of sale. INV. CO. INST., supra note 2, at 61. Retail investors may only buy and sell ETFs on exchanges while institutional investors have the option to buy and redeem shares in large quantities. KIRSCH, supra note 26, § 1B:3:3. An initial public offering is the first instance that a public company offers to sell shares of its stock to the public. HAAS, supra note 8, at 3.

DAVID ABNER, THE ETF HANDBOOK: HOW TO VALUE AND TRADE EXCHANGE TRADED FUNDS 22 (2016). An ETFs is the only fund that allows an investor to know from day to day what the fund holds. Id. at 23.
are also redeemable in large blocks, called creation units, which give ETFs open-end company attributes.76

**Closed-end companies**, the least popular types of funds, are funds that sell non-redeemable shares to their investors on an exchange.77 They issue a set number of shares in an initial public offering that are traded on a stock exchange.78 Closed-end companies can elect to be regulated under the ICA as a Business Development Company (“BDC”), which functions as a type of venture capital company.79

3. Current Fund Use of Derivatives

Funds see derivatives as a way to augment market exposure, hedge risks, increase returns through leverage, acquire lower transaction costs and positions otherwise unavailable, gain entry to particular markets, and manage flows through increased liquidity.80 Due to their potential benefits, funds have vastly expanded their use of derivatives since they first started using them in the 1980s.81

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76 KIRSCH, supra note 26, § 34:1; STRAUSS, supra note 73, § 17.1. These creation blocks usually consist of 50,000 or more shares. KIRSCH supra note 26, § 35:2.2. The purchase is typically done through a clearing agency. Id.

77 CARNELL ET AL., supra note 60, at 730; KIRSCH, supra note 26, § 1B:3.1. Due to the general illiquidity of their non-redeemable shares, closed-end companies are unpopular. KIRSCH supra note 26, § 33:3.1. This is despite the potential lower operating costs for closed-end companies. Id. The shares are sold at a discount and it is argued that this is due to the increased risks of investing in closed-ended companies. CARNELL ET AL., supra note 60, at 733. The risks include the devaluation of stock if the demand for the stock decreases. Id.

78 CARNELL ET AL., supra note 60, at 645.

79 15 U.S.C. § 80a-54 (2012); id. § 80a-2(a)(48); STRAUSS, supra note 73, § 7.4. See generally Reginald Thomas & Paul Roye, Regulation of Business Development Companies Under the Investment Company Act, 55 S. CAL. L. REV. 895, 895–96 (1982) (providing an explanation of Business Development Companies (“BDCs”)). A BDC must be closed-end, incorporated, and meet the requirements of § 80a-2(a)(48), which prescribes that the companies principally partake in investing in and provide managerial assistance to small, growing businesses that the BDC issues securities of. STRAUSS, supra note 73, § 7.4. They are classified as non-diverse companies. Id.


81 See COMM. ON FED. REGULATION OF SEC., supra note 12, at 12 (suggesting that funds have been using derivatives since the 1980s); DELI ET AL., supra note 3, at 6 (finding that funds that typically use derivatives with greater frequency grew the most out of all other funds between 2010 and 2014); KIRSCH, supra note 26, § 8A:1 (positing that the use of derivatives has dramatically increased in the past two decades); Kibbie, supra note 4, at 209–10 (highlighting the increased use).
The most common use of derivatives by funds is to further the fund’s investment goals by hedging investments from risks.\(^\text{82}\) Mutual funds will use credit derivatives, currency derivatives, interest rate derivatives and equity derivatives to hedge against certain investment-specific risks.\(^\text{83}\)

Funds also use derivatives for their leverage characteristics.\(^\text{84}\) Alternative strategy funds, mutual funds that hold non-traditional investments, make use of leverage through extensive derivatives in their portfolios in a way similar to hedge funds.\(^\text{85}\) Some funds use what is called a 130/30 leverage strategy.\(^\text{86}\) The increasingly popular geared or leveraged ETFs, double or triple returns of daily indexes through derivatives leverage.\(^\text{87}\) Synthetic ETFs, funds that are created to mimic the value of an index, commonly use swaps.\(^\text{88}\)

\(^{82}\) See COMM. ON FED. REGULATION OF SEC., supra note 12, at 6 (covering hedging); Tian, supra note 12, at 1 (same). Risk management and sharing is considered the “primary purpose” of derivative use by mutual funds. Tian, supra note 12, at 1. Derivatives allow funds to shift risk to those who wish to bear it. Id. It is considered an important function of the market to maintain efficient risk allocation. Id.

\(^{83}\) ROY GIRASA, SHADOW BANKING: THE RISE, RISKS, AND REWARDS OF NON-BANK FINANCIAL SERVICES 218 (2016); KIRSCH, supra note 26, § 8A:3; Letter and Memorandum from Arthur Levitt, Chairman, SEC, to Edward J. Markey, Chairman, U.S. House of Representatives Subcomm. on Telecomms. & Fin. and Jack Fields, Ranking Republican Member, U.S. House of Representatives Subcomm. on Telecomms. & Fin. 2 (Sept 26, 1994) [hereinafter Levitt Letter & Memorandum] (on file with SEC). Currency derivatives hedge against changes in currency rates. Concept Release, supra note 80, at 14. For example, a fund may hedge against the rise in the value of foreign currency by taking a short forward in the currency. Id. at 15. Interest rate derivatives can be used to hedge against changes in interest rates. Id. This can be accomplished through the use of interest rate swaps. Id. at 16. Equity derivatives allow funds to achieve liquidity or “equitize” cash using long futures. Id. Credit derivatives can hedge against credit default or other events that an investment may be based upon. Id. Though a fund may use these derivatives to hedge, each can also be used to expose the fund to possible gains. Id. at 14–17.

\(^{84}\) Proposing Release, supra note 4, at 12; COMM. ON FED. REGULATION OF SEC., supra note 12, at 8; KIRSCH, supra note 26, § 8A:3.1.


\(^{87}\) See Tim Dulany, et al., Leverage, Inverse, and Futures-Based ETFs, 19 No. 1 PIABA B.J. 83, 84–85 (2012) (explaining leveraged ETFs); Lewis Braham, Leveraged ETFs Raise the Ante, BARRON’S (Apr. 8, 2017), http://www.barrons.com/articles/leveraged-etfs-raise-the-ante-1491627055 [https://perma.cc/M26V-QEZK] (covering new leveraged ETFs that are four times leveraged); Crystal Kim, Triple Leveraged Crude Oil ETFs: Speculation Cubed?, BARRON’s (Mar. 28, 2017), http://
The leverage characteristics of derivatives had unintended effects on some mutual fund portfolios in the 2008 Financial Crisis. For example, Oppenheimer Champion Income Fund sustained an 80% loss and Oppenheimer Core Bond Fund sustained a 30% loss. More recently, Catalyst Hedged Futures Strategy Fund, a mutual fund, sustained a loss of $600 million over a five-day period by trading options.

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88 See Awrey, supra note 3, at 271–73 (covering synthetic ETFs). These funds use what are called total return swaps, swapping cash flows of floating interest rate with a total return on an asset or portfolio. See Srichander Ramaswamy, Market Structures and Systemic Risks of Exchange-Traded Funds 4-6 (Bank for Int’l Settlements, Working Paper No. 343, 2011) (covering total return swaps).

89 See OFF. OF FIN. RESEARCH, supra note 9, at 18 (covering mutual fund use of derivatives in the Financial Crisis); Adam & Guettler, supra note 7, at 1 (same).

90 See OFF. OF FIN. RESEARCH, supra note 9, at 18; Adam & Guettler, supra note 7, at 1. Several mutual funds also saw great losses in the 1990s due to derivative use. See Jerry W. Markham, Protecting the Institutional Investor-Jungle Predator or Shorn Lamb?, 12 YALE J. ON REG. 345, 361 (1995) (covering mutual fund losses in the 1990s); see also In re UBS Willow Mgmt. L.L.C., Investment Company Act Release No. 31869, 2015 WL 6123024 (Oct. 16, 2015) (settled action) (involving a fund that was forced to liquidate after derivative use led to immense losses); In re Claymore Advisors, LLC, Investment Company Act Release No. 30308, 2012 WL 6608205 (Dec. 19, 2012) (describing a fund that lost 45% of its assets due and eventual liquidation due to derivative use). A 2015 study found that it is “theoretically possible,” given the wide parameters allowed by current regulations that funds could default “solely” based upon their derivative use. Dominika Paula Galkiewicz, Regulation, Leverage, and Derivative Use by Mutual Funds 42 (Mar. 23, 2015) (unpublished dissertation, Humboldt University of Berlin) (on file with Humboldt University of Berlin).

B. Current SEC Regulation of Fund Use of Derivatives

The ICA specifically governs fund capital structure but makes no mention of derivatives. During the 1920s and 1930s, the SEC found that funds exploited unsophisticated investors and lacked sufficient assets to cover their heavy use of leverage. Accordingly, the ICA was passed in 1940 and the SEC was charged with enforcing the provisions that serve to protect investors from the harmful consequences of leverage.

Section 18 of the ICA addresses leverage by prohibiting funds from issuing a senior security or selling a security of which it is the issuer unless the fund has sufficient asset coverage. Senior securities are defined in the ICA as obligations or instruments that are a security that signal indebtedness or stock that has priority over classes that distribute assets or pay dividends and thus increase a fund’s leverage. Derivatives were later recognized in the General Statement of Policy in the Investment Company Act Release 10666 (“Release 10666”) and in an assortment of no-action letters as falling under the functional definition of senior

92 See generally 15 U.S.C. § 80a-18 (2012) (regulating fund capital structure); The Investment Company Act of 1940, supra note 61, at 449–51 (explaining § 18 of the ICA). Under the ICA, an investment company is a securities issuer who holds itself out as being “primarily engaged in the business of investing, reinvesting, or trading in securities.” See 15 U.S.C. § 80a-3(a)(1)(A) (defining “investment company” under the ICA); see also supra notes 60–79 (providing a more in-depth explanation of an investment company under the ICA). Funds are subject to numerous statutory requirements under the ICA. See CARNELL ET AL., supra note 60, at 655 (listing the regulations funds are subject to). Capital structure is the distribution of debt and equity that a company chooses to have. 1 COX & HAZEN, supra note 65, § 18.1.

93 See Investment Trusts and Investment Companies: Hearings on S. 3580 Before a Subcomm. of the Sen. Comm. on Banking & Currency, 76th Cong. 265–78 (1940) (finding abuses by funds); see also Levitt Letter & Memorandum, supra note 83, at 21 (describing the practices in the 1920s and 1930s that gave rise to § 18’s limitations on leverage, and specifically discussing the potential abuse of senior security holders). Shareholder losses in the 1930s were found to be over $1 billion. Knickle, supra note 60, at 781.

94 See KIRSCH, supra note 26, § 3:3.1[A] (covering the context of the ICA’s enactment); The Investment Company Act of 1940, supra note 61, at 440 (same). The SEC was given power to make, issue, amend, and rescind rules and regulations to enforce the ICA. See 15 U.S.C. § 80a-38 (listing the powers granted the SEC).

95 See 15 U.S.C. § 80a-18; Release 10666, supra note 4, at 25, 129. There are different requirements for open-end and closed-end companies. See 15 U.S.C. § 80a-18(a) (addressing closed-end); id. § 80a-18f(a) (addressing open-end). Open-end companies cannot issue any senior security but may borrow from a bank if it has 300% asset coverage. Id. § 80a-18(f)(1). Closed-end companies, however, can issue three securities classes. Id. § 80a-18(a). This essentially limits funds to borrowing from a bank. KIRSCH, supra note 26, § 1B:3.2[C]. Congress was concerned with abuse of senior security purchasers, the increase in undue speculation of junior securities caused by senior securities, and inadequate covering reserves. See 15 U.S.C. § 80a-1(b)(7)–(8) (listing the purposes of the ICA).

96 See 15 U.S.C. § 80a-18(g) (defining “senior security”). This would include bonds, debentures, and other instruments that enjoy priority rights, such as preferred stock. See id.
securities because of their potential for leverage.97 Despite this characterization, funds may still avoid the senior security treatment in their use of derivatives, so long as they establish a segregated account and cover the securities with offsetting positions.98

The segregated account requirement prescribes that liquid assets be maintained and frozen in a separate account.99 The liquid assets that “cover” within the segregated account must completely amount to and increase with the total notional amount of the obligation of the derivatives.100 A fund may also cover its obligations through ownership or holding the right to obtain the instrument that it has been obligated to deliver.101

The notional amount of a derivative is the number of assets that are stated in the derivatives contract multiplied by the value of the asset.102 If the amount of the contract is known at the beginning of the transaction, notional amount
segregation is used to calculate the amount.103 If the transaction does not involve a physical settlement, funds will use the mark-to-market approach.104 The segregated account requirement can also be met by making a designation in the fund’s books.105

II. PROPOSED RULE 18F-4

In 2011, over thirty years after issuing Release 10666, the SEC produced a Concept Release requesting comments on whether the existing law on the use of derivatives by funds was sufficient.106 After considering the comments received and making the determination that updated and complete regulations were needed, the SEC conceived Proposed Rule 18f-4.107 The exemptive rule

103 Concept Release, supra note 80, at 9. The notional amount is the full amount of the underlying asset. Id.
104 Id. at 26–27. Mark-to-market accounting values assets at the fair market value, or the current market price, of the underlying asset rather than the price paid. Michelle Clark Neely, Making Sense of Mark to Market, FED. RESERVE BANK ST. LOUIS, https://www.stlouisfed.org/publications/regional-economist/january-1994/making-sense-of-mark-to-market [https://perma.cc/4HBU-GXHN]. The daily gains or losses are calculated and then funds must be added or subtracted to compensate. See CFTC Glossary: Mark-to-Market, U.S. COMMODITY FUTURE TRADING COMM’N, http://www.cftc.gov/consumerprotection/educationcenter/cftcglossary/glossary_m [https://perma.cc/8LAD-9G2A] (covering mark-to-mark accounting). Some have argued that mark-to-market accounting led to the Financial Crisis. See Nicole Gellinas, Mark to Market: A False Culprit, 6 J.L. ECON. & POL’Y 145, 145 (2010) (rebutting the argument that mark to market caused the Financial Crisis); Elizabeth Williamson & Kara Scannell, Momentum Gathers to Ease Mark-to-Market Accounting Rule, WALL ST. J. (Oct. 2, 2008, 12:01 AM), https://www.wsj.com/articles/SB122290736164696507 [https://perma.cc/4V6F-VYKP] (outlining the push to suspend mark to market accounting). For example, if a fund entered into a futures contract to purchase 100 shares of Stock A at $100 per share, the fund would need to place $10,000 (100 shares multiplied by the notional amount of the share ($100)) in a segregated account that it could not remove until performance of the contract. See Dreyfus No-Action Letter supra note 97, at 2; Release 10666, supra note 4, at 25,132.
105 Concept Release, supra note 80, at 26.
106 Release 10666, supra note 4, at 25,128 (released in 1979); Concept Release, supra note 80, at 1. Comments are a right that the public has to address issues posed by the SEC. ALFRED AMAN & WILLIAM MAYTON, ADMINISTRATIVE LAW 41 (2014). A Concept Release is a precursor to a proposed rule that the SEC publishes to identify an area of concern and solicit questions from the public. J. WILLIAM HICKS, INTERNATIONAL DIMENSIONS OF U.S. SECURITIES LAW § 5:2, Westlaw (database updated Apr. 2017). The SEC received comments addressing the qualifying liquid covering assets, mark-to-market approach, and the cash settlement of swaps. Proposing Release, supra note 4, at 41 n.113.
is intended to provide a more extensive regulatory framework for derivatives use by registered funds in light of the expansion of derivatives use in the past few decades. In furthering that objective, Proposed Rule 18f-4 prescribes limits on derivative leverage, requires the holding of sufficient assets to cover derivative obligations, and mandates the establishment of an official risk management program before a fund can enter into derivatives transactions. Section A of this Part explores the purposes of the rule and the specific circumstances the SEC believed necessitated Proposed Rule 18f-4. Section B outlines the portfolio limitations that Proposed Rule 18f-4 would prescribe. Section C outlines the asset segregation requirements for derivative transactions and the additional provisions of the proposed rule, including the derivatives risk management program, recordkeeping requirements, and proposed amendments to Form N-PORT and Form N-CEN.

**A. Background and Purpose of Proposed Rule 18f-4**

Substantial increases in the volume and complexity of derivatives led the SEC to conclude that investors were exposed to increasing portfolio risks because of derivative use. In order to further § 18 of the ICA’s goal of protecting investors, the SEC moved to modernize and broaden the regulation of fund use of derivatives through Proposed Rule 18f-4. Two interconnected deter-
minants drove the SEC to take a new approach: (1) changes in derivative use that occurred after Release 10666 and (2) current derivative uses that implicate § 18 of the ICA. According to the SEC, existing regulations did not contemplate the current market or sufficiently mitigate the risks involved with the use of derivatives. Specifically, Release 10666 was found to insufficiently address new fund practices because the total amount of leverage that a fund could obtain under Release 10666’s segregated account approach was much greater than initially envisioned. The mark-to-market approach for cash settled derivatives allowed under Release 10666 had been expanded to a broader set of cash settled derivatives, sometimes for any cash settled derivative. This allowed for greater exposure because a mark-to-market approach permits a fund to only cover losses during each day. In addition, funds could use “any” liquid assets to cover the obligations, allowing funds to use less liquid and higher risk investments that could then lead to an increase in capital for funds. Id. at 276. The SEC concluded that an increase in investor protection could, in turn, lead to an increase in confidence amongst investors who will then be more likely to invest in these kinds of financial instruments. Id. By providing more solidified regulation than the no-action letter and interpretive guidance that currently controls, the proposed rule could also reduce costs. Id. at 277. Funds would, however, bear one-time costs and ongoing costs in meeting the requirements of the rule. Id. at 319. The extent of the costs was hypothesized to differ depending on an individual fund’s use of derivatives as well as differing investment strategies, portfolio compositions, market reactions, and incentives to move out of the § 18 limitations. Id. Transactions costs could result if funds shift away from derivatives to other instruments or assets. Id. Proposing Release, supra note 4, at 14–30. Release 10666 echoed the leverage and asset coverage concerns of § 18 of the ICA. Release 10666, supra note 4, at 25,128. Section 18 of the ICA governs the capital structure of a fund. 15 U.S.C. § 80a-18. The SEC’s conclusions rely heavily on the DERA White Paper on the Use of Derivatives by Registered Investment Companies (“DERA White Paper”), a study done on a random sample of 10% of funds. See Proposing Release, supra note 4 (citing DERA White Paper over forty-five times); see also DELI ET AL., supra note 3, at 1 (explaining the general concepts of the study). Morningstar and semiannual reporting documents aided the random sampling. DELI ET AL., supra note 3, at 1–2. The DERA White Paper uses Morningstar’s nine categories of funds. Id. at 1 n.2. Alternate strategy funds, as used in the Proposing Release, include Morningstar’s alternative, nontraditional bond, and commodity funds categories. Proposing Release, supra note 4, at 109 n.87. Proposing Release, supra note 4, at 22, 34 (finding that certain fund practices allow for funds to circumvent regulations). Id. at 22, 37; see also supra note 91–105 and accompanying text (explaining the segregated account approach). The SEC presented two chief concerns in Release 10666: (1) the ability of funds to obtain leverage; and (2) the ability of funds to meet their obligations. Proposing Release, supra note 4, at 33. Under the mark-to-market approach, a fund might not have to segregate any of its assets. Id. at 37. For example, the SEC found that some funds had obtained notional exposures ten times of net assets. See id. at 38. Proposing Release, supra note 4, at 21. Id. For example, if a fund that was involved in cash-settled futures took the long position, the fund would only need to segregate assets to cover the obligation if, by the end of the trading day, the obligation would have a loss instead of segregating the total obligation. See id. Some funds use the approach for all cash settled derivatives. See id. Cash settlement occurs when settling a futures contract where cash is provided rather than the physical asset. HULL & BASU, supra note 1, at 857.
assets than what was initially required under Release 10666. The SEC concluded that, through the use of both mark-to-market and the nature of the covering assets, funds could segregate a significantly smaller and insufficient amount of assets to cover obligations and therefore could be unable to perform their obligations.

The SEC also found that the current use of derivatives by funds implicated the senior security concerns in § 18 of the ICA raised by undue speculation and insufficient assets to cover obligations. Funds’ derivatives use caused undue speculation concerns addressed in § 1(b)(7) of the ICA through extensive derivatives leveraging. Through their leveraging, funds achieved notional investment exposure that far exceeded their net asset values, with some funds maintaining alarming exposures as high as 900% of their assets. Additionally, the SEC found that derivative use by some funds implicated the insufficient assets concerns in § 1(b)(8) of the ICA. Due to the leverage inherent in some derivatives, a transaction could cause losses that surpass delivered collateral or margin. Consequently, fund advisors may have to sell fund in-

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120 Proposing Release, supra note 4, at 36. This approach was allowed by the Merrill Lynch No-Action Letter that expanded liquid assets to mean any liquid asset to cover obligations in segregated accounts. Id. at 36 n.99. For example, a fund can now use equity securities and lower grade debt securities that it maintains in its portfolio to cover its obligations. Id. at 21. By using less liquid, meaning more difficult to convert to cash, assets to cover, a fund may not be able to fulfill an obligation when it comes due. Id.

121 Id. at 35. For example, a fund could enter into a derivatives transaction and use its portfolio equity to cover its obligation, instead of using more liquid assets like cash, and would only need to segregate assets to cover a daily loss. Id. The mark-to-market approach does not take into consideration the future losses. Id. The approach only accounts for losses that have already been sustained. Id. The SEC found that some funds had obtained notional exposures that were greatly in excess of net assets and had the potential to increase exposures. See id. at 38. Exposure is the greatest amount of loss due to a counterparty default. HULL & BASU, supra note 1, at 863.

122 Proposing Release, supra note 4, at 25.

123 Id. at 25–26. In addressing derivative use risks, leverage is a chief concern of the SEC. Id. at 12. The SEC quoted the definition of leverage from Release 10666: “leverage exists when an investor achieves the right to a return on a capital base that exceeds the investment which he as personally contributed to the entity or instrument achieving a return.” Id. Leverage magnifies changes in the value of the underlying asset. See Ang et al., supra note 49, at 38 (defining characteristics of leverage).

124 Proposing Release, supra note 4, at 27, 102. The notional investment exposure is the number of assets that are stated in the derivatives contract multiplied by the value of the asset. Feder, supra note 41, at 683. Net asset values are calculated by subtracting the fund’s total liabilities from total assets. Fast Answers: Net Asset Value, SEC, https://www.sec.gov/answers/nav.htm [https://perma.cc/A34J-U4AY].


126 Proposing Release, supra note 4, at 28.
vestments that could lead to investor losses and the possible insolvency of the fund.\footnote{127}{Id. at 29. Liquid assets would need to be produced from the fund’s investments in the event of a derivative transaction that results in a loss magnified by leverage. Id. The margin is a cash amount required as a deposit for an option or future trade. HULL & BASU, supra note 1, at 867; see also supra note 49 and accompanying text (explaining margin account).

B. Portfolio Limitations for Derivatives Transactions

With the intent of addressing § 1(b)(7)’s undue speculation and leverage concerns triggered by current fund practices, Proposed Rule 18f-4 requires adherence to one of two portfolio limitations before a fund can enter into a derivative transaction.\footnote{128}{Proposing Release, supra note 4, at 64–65. The limitations also have a secondary aim of ensuring that funds can adequately meet their obligations to counterparties in order to prevent the liquidation of fund assets. Id. at 65 n.152.

1. Exposure-Based Portfolio Limitation

The exposure-based portfolio limit constrains a fund’s leverage gained through senior securities by limiting the fund’s total exposure, or the total risk of loss from derivatives transactions.\footnote{129}{Id. at 64. Mandated by section 4(a)(5)(i) of the Proposed Rule, the fund’s board of directors and a majority of uninterested directors would need to approve of the portfolio limitation that the fund will use. Id. at 411. The fund’s board of directors is the overseer for the fund’s dealings and the investment advisor. CARNELL ET AL., supra note 60, at 651. A fund would only need to comply with the limitation after it entered into a senior security transaction. Proposing Release, supra note 4, at 150. If the transaction resulted in an increase in exposure that was greater than the limits, the fund does not have to terminate the transaction, but the fund could not enter into another transaction until it complied with the limit. Id. at 150–51.

130 Under this portfolio limit, the maximum amount of total calculated exposure cannot surpass 150% of the fund’s net assets.\footnote{131}{Proposing Release, supra note 4, at 66. Exposure is generally defined in section 4(c)(3)(i)-(iii) of the Proposed Rule as the sum of the fund’s aggregate notional amount of senior securities transactions. Id. at 414, 418 (defining “senior securities transaction” as including derivatives, financial commitment transaction, and any other senior security transaction entered into pursuant to § 18 or § 61 of the ICA). Senior securities are defined in the Proposing Rule and the ICA as obligations or instruments that are both a security and signal indebtedness and stock that has priority over classes that distribute assets or pay dividends. Proposing Release, supra note 4, at 414; see also 15 U.S.C. § 80a-18(g) (defining “senior security”).

151 In deciding on the 150% limit, the SEC considered numerous factors. Id. at 92. The SEC considered lower percentages (50% and 100%) but concluded that those thresholds could prevent beneficial uses of derivatives. Id. at 93–94. Higher levels were viewed by the SEC as possibly promoting speculative use. Id. at 95. The SEC made the conclusion that fund strategies would not be greatly impacted due to their finding that most funds use derivatives with small notional amounts. Id. at 95–96. Lastly, the SEC made the determination that, although the 150% limit would not alone prevent all losses driven by derivatives, other provisions of Proposed Rule 18f-4 would sufficiently aid in mitigation. Id. at 96.}
hopes that the overall limit will provide sufficient flexibility for funds to continue to use derivatives but to limit the risks involved.132 Exposure is calculated as the total of: (1) the total adjusted notional amounts of derivatives transactions; (2) the total obligations under financial commitment transactions; and (3) the total indebtedness caused by other senior securities transactions pursuant to § 18 or § 61 of the ICA.133

The first part of the exposure calculation, the total notional amount of derivatives transactions, measures the fund’s exposure to the underlying asset.134 Notional amount is generally defined in Proposed Rule 18f-4 as the “market value of the underlying reference asset or the principal amount on which payment obligations under the derivatives transaction are calculated.”135 This definition was adopted to measure fund exposure while capturing the wide variety of derivative uses.136

Three types of special derivatives transactions would be subject to an adjusted notional amount calculation.137 For the first type of derivatives transactions, those that yield returns contingent upon leveraged performance of an

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132 Id. at 71–72.
133 Id. at 66; see infra note 135 and accompanying text (setting forth the Proposed Rule’s definition of notional amount).
134 Proposing Release, supra note 4, at 67.
135 Id. at 415–16. It is “notional” because there has been no payment or receipt of the asset. See Hull & Basu, supra note 1, at 868 (explaining why the term “notional” is used with derivatives). The principal is the face value of the instrument. Id. at 870. The payment obligation that the definition refers to is the margin requirements of some derivatives transactions. Id. at 867. The margin is a cash amount required as a deposit for an option or future trade. Id.; see also supra note 49 and accompanying text (explaining margin account).
136 Proposing Release, supra note 4, at 67. It was also generally consistent with both the use of notional amount in other agencies’ regulations and the private market’s calculation of exposure in the market. Id. at 67–68. The U.S. Commodity Futures Trading Commission (“CFTC”) also uses notional amount to measure exposure. Margin Requirements for Uncleared Swaps for Swap Dealers and Major Swap Participants, 79 Fed. Reg. 59,898 (proposed Oct. 3, 2014). The CFTC has jurisdiction over derivatives exchanges. Brunet & Shafe, supra note 6, at 668. The Chicago Mercantile Exchange Group Inc., International Swaps and Derivatives Association, and the Bank for International Settlements, all financial institutions that facilitate derivatives trading, use a similar definition. See Glossary: Notional Value, CME GROUP, http://www.cmegroup.com/education/glossary.html [https://perma.cc/UAM8-MKEM]; BANK FOR INT’L SETTLEMENTS, GUIDE TO THE INTERNATIONAL FINANCIAL STATISTICS 31 (July 2009) (hereinafter BIS Guide), http://www.bis.org/statistics/ntfinstatsguide.pdf [https://perma.cc/G5XX-RWLM] (same). The SEC concedes, however, that the definition does have limitations but the difficulty in shaping future fund tactics and uses of derivatives make notional amount a more attractive choice compared to other definitions. Proposing Release, supra note 4, at 70–71. Measurements of leverage can discount notional amount. Id. at 70–71. Additionally, some measurements have more precise calculations of hedging. Id. at 70–71. The definition does not precisely differentiate the different risks involved with different derivative uses. Id. at 70. Two derivative transactions could have the same notional amount but have vastly differing risks. Id. The SEC made the determination that notional amount was the most effective and administrable definition and addressed the issue that leverage can be calculated in more precise ways. Id. at 70–71.
137 Proposing Release, supra note 4, at 72. In these cases, the SEC found that the standard notional amount calculation would not adequately measure exposure. Id.
underlying asset, the notional amount is multiplied by the leverage factor to calculate the adjusted notional amount. For the second type of transaction, those where the underlying asset is an investment managed account/entity or an index of a managed account/entity, the fund must do what is referred to as a “look-through.” Such a process references the fund’s “pro-rata share” of the notional amounts of the derivatives transactions of such account/entity to determine the adjusted notional amount. The third and last type of transaction addressed, those involving complex transactions, have notional amounts that are difficult to calculate. For any complex derivatives transaction, the notional amount would be equal to another non-complex derivatives transaction, called a substituted instrument, which would have the same market risk.

The final two parts of the exposure calculation is the addition of the total amount of exposure created by financial commitment transactions and other securities. The amount of exposure that is added is the total of the amount of

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138 See id. For example, a total return swap with a notional value of $100 that provides a return that is three times the index would have a notional amount of $300 under the Proposed Rule. Id. Without this added calculation, a fund could avoid limitation requirements. Id. at 72–73. The SEC believes that if such additional requirements were not in place, funds could structure around exposure limitations. Id. at 73. The leverage factor, sometimes called the leverage ratio, is determined by the ratio of the debt to equity. See id. The leverage factor is calculated by multiplying the delta by the underlying price and dividing the sum by the derivative price per underlying unit. Derivatives: Leverage Factor, INV. & FIN., http://www.investment-and-finance.net/derivatives/l/leverage-factor.html [https://perma.cc/QLZ4-643U]. The delta is the “rate of price change of the derivative contract with the price of the underlying asset,” or, in other words, the number of units held to completely hedge all risk. HULL & BASU, supra note 1, at 860.

139 Proposing Release, supra note 4, at 73.

140 Id. These transactions are deemed to be equal to a direct investment in the derivatives traded by the managed account or entity. Id. at 73–74. Thus, a fund could get around exposure limitations. Id. at 74. This type of calculation would apply to the swaps on pooled investment vehicles that are primarily investing in derivatives transactions such as leveraged ETFs, hedge funds, and managed futures funds. Id. If there was no “look-through” calculation, a fund could get around the portfolio limitations by investing in funds that are highly engaged in derivatives transactions and would not have to invest in derivatives itself. Id. at 73–74.

141 Id. at 74. A complex derivatives transaction is defined by section 4(c)(1) of the Proposed Rule as any derivative transaction for which the amount payable by either party upon settlement date, maturity or exercise: “(1) is dependent on the value of the underlying reference asset at multiple points in time during the term of the transaction; or (2) is a non-linear function of the value of the underlying reference asset, other than due to optionality arising from a single strike price.” Id. at 414. Linear function refers to payouts changing on dollar for dollar basis as the value of the underlying asset changes. Id. at 76. Examples of the first category would include path dependent options, American lookback options, barrier options, and Asian options, the payoff of each depending on the price of the underlying asset in addition to the spot price. See id. at 76 n.177; HULL & BASU, supra note 1, at 668 (explaining path dependent options). Examples of the second category include variance swaps, where the payoffs are based on variance. Proposing Release, supra note 4, at 76.

142 Proposing Release, supra note 4, at 79. Barrier options, which can sometimes be hedged by standard options (a non-complex derivative), could be calculated to have an aggregate notional amount the same as an option that would hedge a barrier option. Id. at 79–80.

143 Id. at 82. Financial commitment transactions and other senior securities bear resemblance to derivatives in that they evidence indebtedness. Id. These types of investments include bank borrow-
cash or other assets that the fund is conditionally or unconditionally obligated to pay or deliver under any financial commitment transactions and the total debt created by any other senior securities transactions that the fund enters into.144

In computing the sum aggregate notional exposure of a derivative transaction, a fund may net offsetting derivatives transactions.145 Reference asset, maturity, and other material terms must, however, be the same in both transactions.146 The exposure-based portfolio limitation, however, does not permit a fund to calculate hedging or cover transactions in the total notional amount.147

2. Risk-Based Portfolio Limitation

A fund can instead choose to adopt the risk-based portfolio limit approach and, by doing so, maintain greater exposure levels than the exposure-based portfolio limit permits.148 In order to meet the requirements of this portfolio limit, a fund must satisfy the Value at Risk (“VaR”)—based test.149 The test focuses on derivative use rather than exclusively a fund’s exposure.150 After

ings and insurance of debt or preferred shares a closed-end fund or business development company. Id. at 82 n.194.

144 Id. at 82.

145 Id. at 80. Netting is the when a trader can “aggregate reciprocal claims.” Adam R. Waldman, OTC Derivatives & Systemic Risk: Innovative Finance or the Dance into the Abyss?, 43 AM. U. L. REV. 1023, 1059 (1994). For example, if Trader A entered into two transactions with Trader B and Trader A was owed $100 from one transaction with Trader B and was indebted $50 from the second transaction with Trader B, netting would allow Trader B to give Trader A $50. See id. The netting provision would generally apply to situations where a fund uses an offsetting transaction to settle a transaction before its maturity or expiration. Proposing Release, supra note 4, at 80.

146 Proposing Release, supra note 4, at 81. Netting can only be undertaken when the instruments used by each party are the same and the underlying asset of the contracts are the same. Id. The Proposed Rule does not define material terms. Id. at 414–19 (providing the definitions section of the proposed rule).

147 Id. at 110. Cover transactions were permitted by the SEC through the Dreyfus No-Action Letter. Dreyfus No-Action Letter, supra note 97, at 2. Difficulty in providing an appropriate standard, imperfect hedges, and the complicated nature of some offsetting transactions, were cited as reasons to why the SEC did not deem them fit for the calculation. Proposing Release, supra note 4, at 111–14. The SEC found that due to the fact that most funds in the DERA White Paper study did not exceed the 150% limit, additional reductions were not needed. Id. at 111.

148 Proposing Release, supra note 4, at 115. The SEC concluded that the Value-at-Risk (“VaR”) test was the best choice to measure risk because it allows portfolio risk to be measured consistently and its ability to measure the effect holding a certain position on market risk. See id. at 119–21. Additionally, the SEC found that funds are already likely to have the capacity to conduct the VaR test. See id. at 123.

149 Id. at 115–16. The SEC defines market risk as the risk of financial loss resulting from changes in market prices. See id. at 116 n.249. The definition includes general market risk—the risks connected to the market as a whole—and specific market risk—the risk connected with changes in the price of the underlying asset. Id; see Michael S. Bennett & Michael J. Marin, The Casablanca Paradigm: Regulatory Risk in the Asian Financial Derivatives Markets, 5 STAN. J.L. BUS. & FIN. 1, 6 n.37 (1999) (defining “market risk”).

150 Proposing Release, supra note 4, at 117; see supra notes 128–144 and accompanying text (discussing exposure calculation). This is in contrast to the exposure-based portfolio limitation, which
passing the VaR test, the fund must calculate its exposure and be within the exposure limitation of 300% of the fund’s net assets.  

VaR is an estimate of potential losses on an instrument or portfolio, expressed in positive dollars, over a stipulated time horizon, and at a certain confidence level. The VaR test requires that, after the fund enters into a senior securities transaction, the fund’s full portfolio VaR be lower than the fund’s securities VaR. Full portfolio VaR is defined to include securities, derivatives transactions, and other investments. Securities VaR is the full portfolio minus any derivatives transactions.

Fund calculations of VaR are limited by specific model and parameters requirements. A fund’s model must incorporate all significant, identifiable

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151 Proposing Release, supra note 4, at 116. The exposure calculation that a risk-based portfolio limitation uses is identical to that of the exposure-based portfolio limitation. See id. at 414 (presenting section 4(c)(3), the calculation method for determining exposure); see also notes 146–160 and accompanying text (explaining the exposure calculation). The 300% limitation would help to relieve concerns about VaR limitations while still allowing funds to use the flexibility of VaR. Proposing Release, supra note 4, at 146.

152 Proposing Release, supra note 4, at 119 (citing to Proposed Rule 18f-4(c)(11)(i)(A)). This definition comports with other regulatory definitions and scholarly literature. See id. A time horizon, measured in days, is the length of time the investment is held. HULL & BASU, supra note 1, at 523–24. A confidence level, expressed as a percentage, is the certainty that a loss will occur. Id. at 523–24. It is used across the industry to provide a single number that quantifies total risk. Id. at 522. Essentially, it presents a number representing the worst-case scenario. See id. at 523. The SEC addresses the fact that VaR has limitations, chiefly its inability to reflect tail risks and its tendency to miscalculate loss under stressed market conditions. See Proposing Release, supra note 4, at 126–29.

153 Proposing Release, supra note 4, at 118. For example, a fund with a Securities VaR of $10 million wishes to hedge with certain swaps. See id. If the full portfolio VaR of the fund is less than $10 million after purchasing the swaps, the fund meets the risk-based VaR test. See id. at 124.

154 Id. at 118. Other investments would include securities and investments that the fund has within its portfolio. Id.

155 Id. at 118–19. Derivatives transactions would not include derivatives transactions that do not have future payment obligations. Id. at 119 n.253. A fund that has a portfolio VaR that is greater than its securities VaR will presumably be using derivatives in a manner that decreases overall exposure to market risk. Id. at 122.

156 Id. at 134. There are many different models that funds use when computing VaR. See BNY MELLON, RISK ROADMAP: HEDGE FUNDS AND INVESTORS’ EVOLVING APPROACH TO RISK 1, 16 (Aug. 2012), https://www.thehedgefundjournal.com/sites/default/files/riskroadmap.pdf [https://perma.cc/2VU2-6YT4] (finding that funds use multiple models). See generally Christopher Culp et al., Value at Risk: Uses and Abuses, 10 J. APPLIED CORP. FIN. 26, 26–38 (1998) (exploring the vast amount of uses of VaR by many different financial institutions). A fund would not be limited to using historical simulation and could choose from Monte Carlo and parametric models as well. Proposing Release, supra note 4, at 135–36. Historical simulation requires the creation of a database that is composed of daily movements in market variables during a period of time. HULL & BASU, supra note 1, at 546. Three years of historical data would be required to estimate historical VaR, if the fund uses historical simulation See id. at 137. Monte Carlo simulation uses hypothetical changes in market values and simulates profits and losses. See Kate Litvak, Monte Carlo Simulation of Contractual Provisions: An Application to Default Provisions in Venture Capital Limited Partnership Agreements, 98 CORNELL
market risks factors. In calculating VaR, the confidence interval must be a minimum of 99%. The time horizon used must be not less than ten and not more than twenty days. Finally, the fund must apply its VaR model consistently between the securities and portfolio VaR in order to prevent a fund from using different models to attain greater exposure.

C. Asset Segregation Requirements for Derivatives Transactions and Additional Provisions

1. Asset Segregation

With the intent of directly addressing § 1(b)(8) of the ICA’s asset coverage concerns triggered by current fund practices, Proposed Rule 18f-4 requires adherence to asset segregation requirements. Under this requirement, a fund must preserve an amount of liquid assets to a sum, calculated by adding the mark-to-market coverage amount and the risk-based coverage amount, that would allow the fund to meet obligations incurred from derivatives transactions. The coverage amount for derivatives transactions must be equal to the sum of: (1) the mark-to-market coverage amount or the amount that would be payable by the fund if the fund were to exit the derivatives transaction at the time of determination and (2) the risk-based amount or a “reasonable estimate” of the “potential amount payable by the fund were to exit the derivatives transaction under stressed conditions.”

L. REV. 1495, 1496 (2013) (defining Monte Carlo simulation). Parametric models estimate key parameters to create hypothetical returns. Proposing Release, supra note 4, at n.293. Proposing Release, supra note 4, at 135. These risk factors include, but are not limited to, equity price risk, interest rate risk, credit spread risk, foreign currency risk, and commodity price risk. Id. These risks account for changes in the value of an asset held. Id. A fund would also need to address risks from “nonlinear price characteristics” for derivatives that have “embedded optionality.” Id. Id. at 138. This is also called a one-tailed confidence level. Id. at 138 n.302. Id. at 139. This calculation deviates from typical time parameters that only reflect the period an investment is being held. Id. By having such a time horizon, the SEC is attempting to balance short time horizons that are inefficient in identifying VaR risk fluctuations and longtime horizons that could cause estimated losses to drop. Id. at 139–40. Id. at 142. Inconsistent use could allow a fund to change the results of the test and allow the fund to use derivatives in a manner inconsistent with the proposed rule. Id. Id. at 153. Asset segregation was first addressed in Release 10666. See Release 10666, supra note 4, at 25,132 (covering asset segregation). Proposing Release, supra note 4, at 156; see supra note 103 and accompanying text (discussing mark-to-market). The required assets would need to be those liquid assets that the Proposed Rule has defined as qualified. Proposing Release, supra note 4, at 178. Unlike the previous practice proscribed by Release 10666, funds would not be required to place qualifying assets in a separate segregated account. See id. at 179 n.366; Release 10666, supra note 4, at 25,128. The term segregate is now meant to mean that the qualifying coverage amounts are identified as such on the fund’s books. Proposing Release, supra note 4, at 179 n.366. Proposing Release, supra note 4, at 156. A similar requirement would exist under Proposed Rule 18f-4 for financial commitment transactions. Id. at 228. The SEC defines financial commitment
Under the mark-to-market coverage amount, calculations would need to be done daily. A fund may net its payment obligations and use assets that are variation margin or collateral to reduce the required coverage amount.

The more flexible risk-based coverage amount is meant to measure the amount of assets needed in the event of stressed market conditions that led to future losses. Under the risk-based coverage amount, calculations would also need to be done once daily in conjunction with the mark-to-mark daily calculation. The calculations allow for netting and margin or collateral to reduce the required coverage amount.

The actual characterization of the qualifying coverage assets required to meet the total amount calculated by the mark-to-market and risk-based coverage amounts must fall under two categories: “cash and cash equivalents” or the particular asset that could satisfy an obligation under a derivative transaction that required the particular asset to be delivered.

transactions under Proposed Rule 18f-4 as any firm or standby commitment agreement or similar agreement, any reverse repurchase agreement, or short sale borrowing. Id. at 229. Financial commitment obligation under Proposed Rule 18f-4 is defined as the amount of cash or other assets that the fund is conditionally or unconditionally obligated to pay or deliver under a financial commitment transaction. Id. Where the fund is conditionally or unconditionally obligated to deliver a particular asset, the financial commitment obligation under the proposed rule would equal the value of the asset. Id. Only specific assets qualify as coverage assets for financial commitment transactions. Id. Assets that would be deemed to be sufficient under the proposed rule would be: (1) cash and cash equivalents; (2) with respect to any financial commitment transaction under which the fund may satisfy its obligations under the transaction by delivering a particular asset, that particular asset; or (3) assets that are convertible to cash or that will generate cash, equal in amount to the financial commitment obligation. Id. The rule limits the use of these transactions by funds by requiring that the funds cover each transaction with an equal qualifying asset. Id. In other words, each financial commitment transaction would need to be covered with a value that is equal to the amount of the financial commitment obligation associated with the transaction. Id.

Id. at 158. Funds may choose to calculate more than once daily. Id. at 66 n.335.

Id. at 160–61. Netting is the “ability to offset contracts with positive and negative values in the event of a counterparty default.” HULL & BASU, supra note 1, at 868; see also supra note 49 and accompanying text (explaining margin account).

Proposing Release, supra note 4, at 166–67. The SEC concluded that this measurement was necessary due to a finding that the mark-to-market coverage amount would not adequately measure future loss. Id. at 166. The fund’s board would need to determine procedures for the risk-based coverage amount. Id. at 167.

Id. at 166. The risk-based coverage amount is a new addition to the coverage amount calculation set out in Release 10666. See Release 10666, supra note 4, at 25,128.

Proposing Release, supra note 4, at 171–73. These calculations are determined the same way as the mark-to-market coverage amount is determined. Id.

Id. at 178. The total amount of “coverage assets could not exceed the fund’s net assets.” Id. at 183. The SEC posits that allowing a fund to maintain additional coverage assets could allow a fund to maintain a greater amount of leverage. Id. at 184–85. Cash and cash equivalents are considered qualified due to their extremely liquid nature. Id. at 179. Cash equivalents include short-term, highly liquid investments that are easily turned into cash, such as treasury bills, agency securities, bank deposits, commercial paper, and shares of money market funds. Id. Deliverable assets are the particular assets that would satisfy an obligation but not a derivative that provides offsetting exposure. Id. at 182. The SEC prohibits such offsetting to be considered as qualifying because there is counterparty risk and a
2. Derivatives Risk Management Program

Funds that exceed the threshold of fifty percent notional derivatives exposure or that use any complex derivatives would also be required to maintain a formal derivatives risk management program. A fund’s program would be required to have policies and procedures that: (1) assess the risks of derivatives transactions that the fund has entered into; (2) manage derivatives risks through monitoring of derivatives use and communication with fund management; (3) segregate program functions from portfolio management; and (4) review and update the risk management program.

First, a fund must evaluate the risks associated with the use of derivatives transactions through identifying the derivatives it currently in use and those it plans to use in the future. The fund must then evaluate five risks related to the derivative. Second, the fund must establish policies and procedures that align with the fund or its investment advisor’s investment guide. The fund would be required to inform the portfolio manager of derivatives risks. Third, the functions related to the administration of the risk management program would need to be reasonably segregated from those related to portfolio

fund could end up with insufficient assets to cover its obligations. Id. Counterparty risk is the risk of default. Id. at 207–08.

Id. at 190. The 50% requirement mirrors the 50% threshold set out in § 18 of the ICA that limits fund borrowing from banks. Id. at 193–94. Complex derivatives are deemed to have special risk characteristics that the SEC believes require greater attention in order to facilitate safe use. Id. at 200.

Id. at 191. A titled derivatives risk manager would run the program. Id. In addition to the required elements, the proposed rule specifies certain requirements for the administration of the program. Id. at 221. A board-approved individual within the fund would need to be charged with administering the program’s policies and procedures. See id. The board, along with a majority of uninterested directors, must approve of the derivatives risk manager. Id. This individual would need independence to administer the program. Id. at 222. Furthermore, the fund’s board would need to have an understanding of the program’s objectives as well as approve the program, approve any material changes to the program, and review the derivatives risk manager. Id. at 225–27.

Id. at 205.

Id. at 205–06. The fund must evaluate five stated risks but can choose to identify other potential risks. Id. at 210. The first risk to be identified is leverage risk, which includes the risks connected to the magnification of “effects by changes in market value underlying derivatives transactions where the value of the underlying asset exceeds the initial investment.” Id. The second risk is market risk, which includes the risk related to possible adverse market changes that may impact derivative returns and obligations. Id. at 207–08. The third risk is counterparty risk, which is the risk that a counterparty defaults on its obligation and the related risk of having many derivatives transactions with one counterparty. Id. at 208. The fourth risk is liquidity risk. Id. at 209. Liquidity risk is the risk that a fund could not meet requests to redeem shares issued by the fund that are expected under normal conditions without materially affecting the fund’s net asset value. Id. The final risk is operational risk, which is the risk associated with documentation issues, settlement issues, system failures, and human error. Id. at 210.

Id. at 212. The fund would not be required to impose risk limits. Id. A fund might consider written guidelines at revisiting contingency plans. Id. at 214.

Id. at 215. As risks present themselves or are anticipated, those risks would need to be reported to the portfolio manager. Id.
Lastly, the fund would be required to annually review its policies and procedures to evaluate the efficiency of the program and update the program as necessary.177

3. Recordkeeping

Proposed Rule 18f-4 would also require funds to comply with recordkeeping requirements that mandate the disclosure of information relating to the compliance with the portfolio limitations, asset segregation, and the formalized risk management program requirements.178 These records would need to be easily accessible for five years for examiners to evaluate compliance.179

4. Amendments to Proposed Forms

The final adjustments to current regulations that Proposed Rule 18f-4 would make are the amendments to two of the SEC’s proposed forms.180 Amendments to Proposed Form N-PORT include the addition of fund’s gamma

\[\text{gamma}\]

176 Id. at 216. The SEC intends the segregation to be a way to independently assess risk, cross check portfolio management, and “enhance the protections provided by the program.” Id. at 216–17. Without such a separation, the risk management program could be harmed by a lack of checks and balances. Id. at 217. A variety of methods could be used to sufficiently segregate. Id. Communication between the two managements would still be allowed, however, as the SEC believes that such communication would be key to the program’s success. Id. The SEC proposes that a “firewall” be in place between the two managers. Id. The SEC believes that this could create issues for entities that have a limited number of employees. Id. at 217 n.435.

\[\text{Id. at 218. The SEC requires review of models, measurement tools, and policies and procedures. Id. The SEC believes that a fund should consider reviewing more than once per year.}\]

\[\text{Id. at 246. The recordkeeping requirement consists of three major provisions that provide that a fund maintain records relating to: (1) the fund’s chosen portfolio limitation; (2) compliance with other requirements; and (3) the risk management program if a fund is required to maintain one.}\]

\[\text{Id. at 246–47. Under the first provision, the fund would need to have records of the determination of which portfolio limitation, either the exposure-based portfolio limitation or the risk-based limitation.}\]

\[\text{Id. at 247. Changes to portfolio limitations and the initial determination would need to be recorded for SEC examiners to evaluate.}\]

\[\text{Id. Under the second provision, funds would be required to maintain written records of its compliance with requirements.}\]

\[\text{Id. at 227–28. The fund would need a written record of its maintenance of qualifying coverage amounts, compliance with portfolio limitations, and the fund’s mark-to-market and risk-based coverage amounts.}\]

\[\text{Id. at 228. Further, the fund would need to have written records of senior securities transactions “immediately after entering into” such a transaction, its full portfolio VaR, and its securities VaR.}\]

\[\text{Id. For derivatives transactions, the fund would need to have written records of the total amount of coverage amounts rather than the assets maintained for each specific derivatives transaction.}\]

\[\text{Id. Such records would need to be compiled daily in conjunction with the coverage amount calculations.}\]

\[\text{Id. Under the third provision, funds would be required to possess records of its derivatives risk management program.}\]

\[\text{Id. at 249. The fund would need to maintain written records of the program’s policies and procedures, materials relating to the approval of the program, and documents relating to the periodic updates and review of the program.}\]

\[\text{Id. at 247.}\]

\[\text{Id. at 251. These forms were proposed on May 20, 2015, in an attempt to modernize fund disclosure. Investment Company Reporting Modernization, supra note 18, at 1.}\]
III. PROPOSED RULE 18F-4 IS NECESSARY BUT MUST SPECIFICALLY ADDRESS SPECULATIVE DERIVATIVE USE TO ALIGN REGULATIONS WITH THE ICA

The systemic and specific risks to investors that derivatives use poses are well documented. The exponential expansion of the overall derivatives market and the increase in use by funds, however, strongly suggest that derivatives are still highly valued financial instruments. This Part argues that, although the political tide is turning against regulation, the SEC has a duty to implement

181 Proposing Release, supra note 4, at 250. Proposed Form N-PORT originally just maintained a delta requirement. Id. at 254. Delta is the rate of change of the price of a derivative with the price of the underlying asset. HULL & BASU, supra note 1, at 860. Gamma “measures the sensitivity of delta.” Proposing Release, supra note 4, at 255; HULL & BASU, supra note 1, at 864 (stating that gamma is the “rate of change of delta with respect to the asset price”). Vega measures the “amount that an options contract’s price changes in relation to a 1% change in the volatility of an underlying asset.” Proposing Release, supra note 4, at 255. Volatility is the measured uncertainty of the return realized on an asset. HULL & BASU, supra note 1, at 875.

182 Proposing Release, supra note 4, at 256.

183 See In re Claymore Advisors, LLC, Investment Company Act Release No. 30308 (Dec. 19, 2012) (involving a fund that lost 45% of its assets due and eventual liquidation due to derivative use); In re UBS Willow Management L.L.C. and UBS Fund Advisor L.L.C., Investment Company Act Release No. 31869 (Oct. 16, 2015) (settled action) (involving a fund that was forced to liquidate after derivative use led to immense losses); OFF. OF FIN. RESEARCH, supra note 9, at 19 (finding that current use of derivatives pose risks to financial stability); RECHTSCHAFFEN, supra note 9, at 160 (explaining AIG and Bear Stern’s derivative losses); Baker, supra note 9, at 1292 (arguing for more transparency of derivative use due to their possible systemic impact); Markham, supra note 90, at 361 (finding that several mutual funds saw great losses in the 1990s due to derivative use); Simkovic, supra note 9, at 14 (arguing that there should be greater regulation of OTC derivatives); Dieterich & Banerji, supra note 91, at 1 (covering a $600 million loss incurred by a mutual fund’s use of derivatives); Dizard, supra note 9, at 3 (stating that the OTC derivative market is under collateralized at about $3.69 trillion despite efforts to use central clearing); Edwards, supra note 6, at 9–13 (explaining the circumstances behind Metallgesellschaft’s losses); Fitzpatrick et al., supra note 56, at 2 (covering J.P. Morgan’s over $2 billion loss caused by derivative use); Valladares, supra note 9, at 1 (highlighting the concentration of derivatives in few financial institutions); Partnoy Testimony, supra note 6, at 58–62 (outlining how Enron traders used derivatives to hide losses).

184 See Proposing Release, supra note 4, at 4 (acknowledging the beneficial uses of derivatives); BIS, EXCHANGE-TRADED FUTURES, supra note 1, at 1 (providing statistics on the 2016 derivative market size and showing that the derivatives market has septupled in size since the 1990s); RECHTSCHAFFEN, supra note 9, at 159 (stating that derivatives are a means to shift risk to parties who are willing to take it on or are better suited to take it on); Sill, supra note 11, at 20 (explaining that derivatives aid in risk allocation); Tian, supra note 12, at 1 (arguing that derivatives are an important function of the market to maintain efficient risk allocation); Valladares, supra note 9, at 2 (highlighting some of the major developments in growth); Michael S. Gibson, Credit Derivatives and Risk Management 1 (Fed. Reserve Bd., Divs. of Research & Statistics & Monetary Affairs, Working Paper No. 47, 2007) (“The growth of credit derivatives suggests that market participants find them useful for risk management.”); Antoniewicz, supra note 10 (arguing that there are many benefits for derivatives and that derivatives risk can be overstated when simple measurements are used).
Proposed Rule 18f-4 given the possible risks to investors.\textsuperscript{185} The Proposed Rule, however, must take the additional step of eliminating speculative derivative use in order to align regulations with the ICA.\textsuperscript{186} Section A asserts that Proposed Rule 18f-4 is a necessary rule given the ICA’s policy of protecting the national public and investors and derivatives’ documented risks to the financial system and investors.\textsuperscript{187} Section B asserts that, in regulating their use, the SEC should make a greater distinction between derivatives used for speculation purposes and derivatives used for hedging.\textsuperscript{188}

\textit{A. 18f-4 Is a Necessary Starting Point for Fund Use of Derivatives}

The stated policy of the ICA requires that its provisions be interpreted to “eliminate the conditions” that have an adverse effect on the “national public interest and the interest of investors.”\textsuperscript{189} Not only has derivatives use been found to pose systemic risk, but research also suggests that funds are institutions whose failure could have an impact on the greater financial system.\textsuperscript{190} These public funds are invested in by unsophisticated and unaccredited investors who possess neither the knowledge nor the assets to be exposed to the risks of derivatives use.\textsuperscript{191} Exactly to what extent funds use derivatives is also not well documented.\textsuperscript{192} The SEC must act on its Congressionally mandated

\textsuperscript{185} See infra notes 189–225 and accompanying text.
\textsuperscript{186} See infra notes 189–208 and accompanying text.
\textsuperscript{187} See infra notes 209–221 and accompanying text.
\textsuperscript{188} See infra notes 222–225 and accompanying text.
\textsuperscript{190} See FIN. CRISIS INQUIRY COMM’N, supra note 7, at 279 (concluding that the massive losses of major financial institutions were due to derivatives); FIN. STABILITY BD., PROPOSED POLICY RECOMMENDATIONS TO ADDRESS STRUCTURAL VULNERABILITIES FROM ASSET MANAGEMENT ACTIVITIES 1–2 (2016) (laying out the financial stability risks that certain asset management firms pose); OFF. OF FIN. RESEARCH, supra note 9, at 18–19 (finding that current use of derivatives pose risks to financial stability and that large asset management firms could pose risks to the financial system); Adam & Guettler, supra note 7, at 1 (stating that the use of certain derivatives caused substantial losses at banks and funds during the 2008 Financial Crisis).
\textsuperscript{191} See CLIFFORD J. ALEXANDER & ARTHUR C. DELIBERT, MONEY MANAGER’S COMPLIANCE GUIDE ¶ 710, Westlaw (database updated Mar. 2015) (outlining the public nature of investment companies under the ICA); Paul Justice, Warning: Leveraged and Inverse ETFs Kill Portfolios, MORN-INGSTAR, Jan. 22, 2009 (finding that investors do not understand derivative laden products); Charlie Wells, An Alternative Investment by Any Other Name Is Still . . ., WALL ST. J. (Aug. 10, 2015), https://www.wsj.com/articles/an-alternative-investment-by-any-other-name-is-still-1439172115 [https://perma.cc/NGU2-4RL3] (finding that some mutual fund brokers avoid the use of the word “derivatives” when marketing to investors because of the lack of understanding); supra note 62 and accompanying text (laying out investor requirements under the ICA).
\textsuperscript{192} See DELI ET AL., supra note 3, at 3 (finding that accessible data on derivative use by funds is not available); Piwowar Statement, supra note 19, at 2 (stating that he could not support the proposed rule because the SEC did not do a high-quality analysis of comprehensive data on fund use of derivatives).
duty and use its powers to bring derivatives under the purview of the ICA through enacting Proposed Rule 18f-4. 193

Fund derivative use poses substantial dangers to the national public because of the systemic risks involved with derivatives and the outsized role of funds in the financial system. 194 The 2008 Financial Crisis clearly enumerated the systemic risks that derivatives pose to the national public. 195 Funds are institutions that maintain important positions in the financial system. 196 The fact that 45% of fund assets are concentrated in the largest five complexes makes fund use of derivatives especially dangerous. 197 The growth of fund use of derivatives has continued for over a decade, but the fund industry has seen a recent influx of competitive tactics and the entrance of investment banks—developments that may increase the likelihood of funds to seek out alternate strategies that use derivatives in order to maximize returns. 198

193 15 U.S.C. §§ 80a-1, a-38 (stating the policy of the ICA and granting the SEC the power to make necessary rules under the ICA); FIN. STABILITY BD., supra note 190, at 1–2 (laying out the financial stability risks that certain asset management firms pose); OFF. OF FIN. RESEARCH, supra note 9, at 18–19 (finding that current use of derivatives poses risks to financial stability and that large asset management firms could pose risks to the financial system). The current political climate is against regulation. See Exec. Order No. 13,771, 82 Fed. Reg. 9339 (Jan. 30, 2017) (requiring that two existing regulations must be identified as to be repealed when an agency or executive department proposes for notice and comment); Exec. Order No. 13,772, 82 Fed. Reg. 9965 (Feb. 3, 2017) (setting out the “Core Principles” of regulation for the Trump administration and order the Financial Stability Council to report on current regulations); see also supra note 21 and accompanying text (addressing regulatory policy changes).

194 See FIN. CRISIS INQUIRY COMM’N, supra note 7, at 279 (concluding that the massive losses of major financial institutions were due to derivatives); FIN. STABILITY BD., supra note 190, at 1–2 (laying out the financial stability risks that asset management firms pose); Adam & Guettler, supra note 7, at 1 (stating that the use of certain derivatives caused substantial losses at banks and funds during the Financial Crisis); see also supra note 57 and accompanying text (discussing systemic risk).

195 See FIN. CRISIS INQUIRY COMM’N, supra note 7, at 279 (concluding that the massive losses of major financial institutions were due to derivatives); Lynch, supra note 14, at 84–94 (covering the dangers of derivative use); Adam & Guettler, supra note 7, at 1 (stating that the use of certain derivatives caused substantial losses at banks and funds during the Financial Crisis); Sheri M. Markose, Systemic Risk from Global Financial Derivatives: A Network Analysis of Contagion and Its Mitigation with Super-Spreader Tax 47–48 (Int’l Monetary Fund, Working Paper 12/282, 2012) (finding that derivatives systemic risk was evident in the Financial Crisis); McDonald & Paulson, supra note 7, at 12–18 (explaining AIG’s derivative use).

196 See CARNELL ET AL., supra note 60, at 643 (explaining the importance of funds); KIRSCH, supra note 26, §§ 1:1, 1B:1 (highlighting the importance of funds); supra notes 60–79 and accompanying text (discussing funds and their role in the markets).

197 INV. CO. INST., supra note 2, at 17 (covering the concentration of assets); see Adam & Guettler, supra note 7, at 1 (finding that concentration of derivative use increases systemic risk). The largest twenty-five complexes control 75% of assets. INV. CO. INST., supra note 2, at 17. Additionally, although data on fund use of derivatives is incomplete, the risks of leverage are very well known through ties to the Great Depression and the 2008 Financial Crisis. See DELI ET AL., supra note 3, at 3 (finding that accessible data on derivative use by funds is not available).

198 See DELI ET AL., supra note 3, at 2–3 n.7 (finding that there has been an increase in fund use of derivatives over the past decade); Krouse, supra note 73, at 1 (covering a new move by an asset manager to obtain more flexibility in selecting fund managers); Loder, supra note 73, at 1 (highlight-
incident of fund use of derivatives under current regulations, the market felt substantial tremors as a single fund lost $600 million due to options trading. 199

Individual investors in funds are often unsophisticated and likely have neither the knowledge to comprehend nor the assets to sustain the risks of derivatives. 200 It is, therefore, against the policy of the ICA to allow individual investors to be exposed to such risks. 201 Indeed, even scholars and practitioners struggle with understanding derivatives. 202 There is also no minimum income or net worth requirement for investors in funds. 203 But, the assets managed by funds are particularly important to individuals in that an immense amount of retirement assets, with sixty-three percent of 401(k)’s under management of funds. 204 With some fund use of derivatives mirroring that of private funds, individual investors in funds are exposed to risks that should be contained to more sophisticated hedge fund investors. 205

The SEC should move to emplace regulations while continuing to gather data on fund derivative use so as to properly regulate derivatives under the ICA, a move not entirely objected to by the industry. 206 The SEC cannot con-

199 See Dieterich & Banerji, supra note 91, at 1; supra note 90 and accompanying text (explaining the fund loss).

200 See SEC v. Ralston Purina Co., 346 U.S. 119, 119 (1953) (laying out the sophisticated investor requirements); 17 C.F.R. § 230.501 (2017) (defining “accredited investor”); Justice, supra note 191, at 1 (finding that investors do not understand derivative laden products); Wells, supra note 191, at 1 (finding that some mutual fund brokers avoid the use of the word “derivatives” when marketing to investors because of the lack of understanding).

201 See Wells, supra note 191, at 1 (finding that some mutual fund brokers avoid the use of the word “derivatives” when marketing to investors because of the lack of understanding); supra note 62 and accompanying text (laying out investor requirements under the ICA).

202 See Awrey, supra note 3, at 271–73 (explaining some particularly complex derivative uses by funds); Lynch, supra note 14, at 9 (explaining that many practitioners misunderstand derivatives); Stout, supra note 5, at 5–6.


204 See KIRSCH, supra note 26, § 1A:2.5[C]. Currently, over 43% of U.S. households invest in mutual funds. INV. CO. INST,, supra note 2, at 112.

205 See DELI ET AL., supra note 3, at 2 (finding that some funds use derivatives in a similar manner to hedge funds); INV. CO. INST,, supra note 2, at 42 (finding an increase in alternative strategy funds). Alternative strategy funds often use hedge fund strategies of hedging risk. See Singer, supra note 85, at 498 (same); Horejs, supra note 85, at 2 (explaining alternative strategy funds). The Catalyst Futures incident occurred when a hedge fund converted to a mutual fund and maintained its hedge fund derivative strategies. Dieterich & Banerji, supra note 91, at 1.

206 15 U.S.C. §§ 80a-1, a-38 (stating the policy of the ICA and granting the SEC the power to make necessary rules under the ICA); Fidelity Comment Letter, supra note 19, at 2 (supporting updated regulations); FIN. STABILITY BD., supra note 190, at 1–2; OFF. OF FIN. RESEARCH, supra note 9, at
tinue to rely on Release 10666 and subsequent no-action letters, all of which do not directly address derivative use and are loosely interpreted to the detriment of some funds. The Proposed Rule’s portfolio limitations and asset segregation would serve to limit fund exposure to derivatives use and, thus, curb both the systemic and individual risks posed. Additionally, the Proposed Rule can help collect the data needed to determine exactly the extent to which funds use derivatives.

B. Properly Aligning Proposed Rule 18f-4’s Portfolio Limitations with the ICA’s Undue Speculation Policy

The SEC should make a distinction between derivatives used for hedging and derivatives used for speculation in order to properly align Proposed Rule 18f-4 with the ICA’s policy to eliminate undue speculation. Derivative use with the intention of hedging assets or other derivatives transactions maintains value for the entire financial system. Hedging through derivatives can de-
crease risk to investors and absent a safe harbor for hedging transactions in the proposed rule, these valuable transactions could be discouraged.\footnote{212}{See Gerding, Code, Crash, and Open Source, supra note 43, at 195 (finding that hedging is vital to the marketplace); Lynch, supra note 14, at 18–19 (finding that derivatives used for hedging can create value by offering insurance).}

Calculations of leverage caused by hedging may be difficult, but the SEC may curtail the beneficial and vital use of hedging if it does not allow for hedging to be added into the calculation.\footnote{213}{See Proposing Release, supra note 4, at 110, 115–16; COMM. ON FED. REGULATION OF SEC., supra note 12, at 6; Tian, supra note 12, at 1. Risk management and risk sharing are considered the “primary purpose” of derivative use by mutual funds. See Tian, supra note 12, at 1. Difficulty in providing an appropriate standard, imperfect hedges, and the complicated nature of some offsetting transactions were cited as reasons to why the SEC did not deem them fit for the calculation. See Proposing Release, supra note 4, at 110. Withholding cover transactions from the calculation could also lead to disincentivizing funds from using these potentially beneficial transactions. See Tian, supra note 12, at 1.}

Conversely, speculative derivatives use neither provides efficient risk allocation nor creates any wealth.\footnote{214}{See Thomas Lee Hazen, Rational Investments, Speculation, or Gambling?—Derivative Securities and Financial Futures and Their Effect on the Underlying Capital Markets, 86 NW. U. L. REV. 987, 994 (1992) (pointing out speculative derivative use’s similarities with gambling); Lynch, supra note 34, at 82–83 (explaining the particular dangers of derivatives speculation); Lynn A. Stout, Betting the Bank: How Derivatives Trading Under Conditions of Uncertainty Can Increase Risks and Erode Returns in Financial Markets, 21 J. CORP. L. 53, 57 (1995) (highlighting the much greater risk involved with speculative derivative use). Purely speculative derivatives are sometimes viewed as zero-sum transactions that do nothing more than transfer wealth. See Lynch, supra note 34, at 84.}
The portfolio limitations should therefore distinguish between derivatives use for hedging and derivatives use for speculation and curtail speculative use through an Expected Shortfall calculation instead of VaR.\footnote{215}{See Proposing Release, supra note 4, at 110; Robert P. Bartlett, III, Making Banks Transparent, 65 VAND. L. REV. 293, 331–32 (2012) (explaining that expected shortfall calculates for the worst-case scenarios for portfolio loss). The exposure-based portfolio limitation does not permit a fund to calculate hedging or cover transactions into the total notional amount. See Proposing Release, supra note 4, at 111–14. The SEC found that due to the fact that most funds in the DERA White Paper study did not exceed the 150% limit, additional reductions were not needed. See id. at 111.}

In the alternative, speculative derivative use should be prohibited by funds entirely and then portfolio limitations should be lifted to allow for greater hedging use.\footnote{216}{See Proposing Release, supra note 4, at 111, 115–16; Hazen, supra note 214, at 994 (pointing out speculative derivative use’s similarities with gambling); Lynch, supra note 34, at 82–83 (explaining...}}
Under the first approach to portfolio limitations, speculative derivative use would be permitted but contained through an Expected Shortfall calculation of risk and hedging would be calculated into the exposure limitation.\textsuperscript{217} Such an approach would better align the Proposed Rule with the ICA because, by separating speculative derivatives transactions from hedging transactions, undue speculation caused by derivative transactions could properly be constrained.\textsuperscript{218}

Generally, Expected Shortfall measures the total risk of loss in a portfolio and accounts for tail risk.\textsuperscript{219} It would replace the current VaR model in calculating for exposure, which only measures expected risk and fails to measure what is tail-end risk.\textsuperscript{220} VaR was shown to have significant failings under market stress during the 2008 Financial Crisis and should not be used when attempting to protect investors.\textsuperscript{221} The first approach would also allow for hedging to be calculated into the exposure limitations.\textsuperscript{222} Hedging can be distinguished from speculative derivative transactions by appropriately matching a derivatives transaction with the asset it is hedging.\textsuperscript{223}

The alternative approach to portfolio limitations entails banning all speculative derivative use by funds and lifting portfolio limitations for hedging.\textsuperscript{224}
This approach would be safer and would more properly align the Proposed Rule with the ICA because the ICA’s policy is to “eliminate” undue speculation. Although speculative derivatives use by funds would be completely barred, funds would be able to use hedging transactions with greater leeway. The new asset segregation requirements would act as a sufficient backstop to hedging transactions that could maintain some speculative characteristics.

CONCLUSION

Investment company use of derivatives continues to increase. Proposed Rule 18f-4 sets out long overdue and reasonable provisions to mitigate the risks involved with the continued increases of derivative use. Though there is now an anti-regulation wind blowing in government, Proposed Rule 18f-4 should not be abandoned so as to prevent hazardous derivative use by registered funds. The rule should, however, allow for the beneficial use of hedging in its calculation of fund exposure to risks and use the calculation of tail-end risk in place of the VaR model. Such augmentations to the rule would allow funds to benefit from derivatives but track the greater risks that can follow. In the alternative, the Proposed Rule should entirely prohibit speculative derivatives use and lift the portfolio limitations for hedging. Failing to emplace Proposed Rule 18f-4 contravenes the SEC’s duty under the ICA to interpret its provisions to eliminate undue speculation.

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225 See 15 U.S.C. § 80a-1(b)(7) (2012); Hazen, supra note 214, at 994 (pointing out speculative derivative use’s similarities with gambling); Lynch, supra note 34, at 82–83 (explaining the particular dangers of derivatives speculation). Stout, supra note 214, at 57 (highlighting the much greater risk involved with speculative derivative use).

226 See Proposing Release, supra note 4, at 159; HAAS, supra note 8, at 119 (explaining the useful use of derivative hedging); RECHTSCHAFFEN, supra note 9, at 159–60 (explaining that derivatives are a means to shift risk to parties who are willing to take it on or are better suited to take it on and that derivatives lower fund costs, allow for hedging, help manage assets, and increase profits); Macey, supra note 10, at 72–81 (stating that derivatives allow parties to shift risk).

227 See Proposing Release, supra note 4, at 159. Hedging, in the context of Credit Default Swaps, does not always result in a full mitigation of risk. See Fletcher, supra note 43, at 865 (stating that “a perfect hedge is almost impossible”); see also supra notes 159–176 and accompanying text (discussing asset segregation requirements). Indeed, the distinction between hedging and speculation can be difficult to distinguish, one author noting close to a century ago that “courts are between the devil and the deep sea” when making the distinction. See Patterson, supra note 43, at 878 (discussing the difficulties with distinguishing between hedging and speculative derivative use).