TATA CONSULTANCY SERVICES

Building on belief

Achieving compliance with the new SEC derivatives regulation for funds

Banking, Financial Services and Insurance

Abstract

The Investment Company Act of 1940 enforced by the US Securities and Exchange Commission (SEC) permits investment management firms and business development companies to use derivatives in mutual funds, exchange traded funds (ETFs), and closed end funds, excluding money market funds. The Act allows derivative exposure of up to 10 percent of assets under management (AUM).

In October 2020, the SEC enhanced the regulatory framework for derivatives use by firms with increased focus on investor protection, product innovation, and risks related with complex portfolios. The SEC has also introduced Rule 18f-4 that allows exemptions provided certain conditions are met. One of these conditions requires firms to introduce a comprehensive framework for derivatives risk management in compliance with prescribed risk guidelines, stress testing, and other reporting aspects, among others. The objective is to facilitate effective supervision of derivatives risk management while considering developments over the last couple of decades and create a level playing field. The SEC has set a compliance deadline of August 2022. This white paper discusses the implications of this rule for asset management firms and custodians as well as the changes required to business capability and regulatory reporting processes.

The SEC derivatives regulation at a glance

With Rule 18f-4, the SEC has made it mandatory for firms to implement a comprehensive derivatives risk management program (DRMP) to manage derivative risk, ensure compliance with stipulated norms, and confidentially report non-compliance to the fund's board of directors and the SEC (see Table 1).

Derivatives risk management program

- Each fund's **board of directors to approve** the appointment of a derivatives risk manager (DRM), who will be responsible for administering the fund's DRMP.
- Key DRMP elements: Program administration, **risk identification and assessment, risk guidelines, stress testing, back testing,** internal reporting and escalation, periodic review and recordkeeping.
- Thresholds
  - Relative VaR : 200% or 250%
  - Absolute VaR : 20% or 25%

Fund Management

- Limited derivatives user - Risk management policies and procedures to be established
- Threshold monitoring and breach remediation
- Reporting to **fund board**

Investor protection

Recordkeeping

Regulatory reporting

- For funds non-compliant for more than **five business days,** the DRM must take remedial action and **confidentially report to SEC** through Form N-RN (replacing Form N-LIQUID), before and after compliance
- Funds currently filing **Forms N-PORT and N-CEN will be required to provide certain additional information** about their derivatives use

Table 1: A High-Level Overview of Key Rules

US Securities and Exchange Commission, SEC Adopts Modernized Regulatory Framework for Derivatives Use by Registered Funds and Business Development Companies, October 2020, Accessed August 2021, https://www.sec.gov/news/press-release/2020-26

The rule also prescribes the appointment of a derivatives risk manager (DRM) to administer the program. It covers risk management of hedging and instruments such as derivatives, short-sale borrowings, reverse repo, unfunded commitment agreements, and forward-settling securities.

The rule exempts funds with derivatives exposure of less than 10% of its net assets (limited users) from implementing the DRMP. However, policies and procedures need to be in place to manage the fund's derivatives risks.

Implications for asset management firms

The SEC derivatives regulation affects existing funds, which use derivatives for hedging and other purposes, and acts as an enabler for funds that do not extensively use derivatives. Funds must use the value at risk (VaR) calculation model to manage derivative risk and conduct back testing and stress testing of their portfolio to unearth hidden risk. Segregation of liquid assets to cover their obligations is not necessary. The rule allows funds the option to treat reverse repurchase agreements or similar financing transactions as derivatives transactions, rather than including such transactions in the fund's asset coverage calculations.

Implications for custodians

The regulation affects front-, middle-, and back-office functions of investment management firms. Custodians must assess segment-wise customer demand for derivatives in their funds. The next step is to conceptualize the service offerings and identify the partnerships needed to enhance solutions to cater to additional requirements. Custodians must conduct a detailed impact analysis, and arrive at a product strategy focusing on client segment, service catalog, engagement models, fund types, channels, pricing model, revenue model, and operating model.

Achieving compliance

To ensure timely compliance, firms will need to adopt a step-by-step approach (see Figure 1).

Figure 1: Step-by-step Compliance Approach

Federal Register, Use of Derivatives by Registered Investment Companies and Business Development Companies, December 2020, Accessed September 2021, https://www.federalregister.gov/documents/2020/12/21/2020-24781/use-of-derivatives-by-registered-investment-companies-and-business-development-companies

Preliminary exposure analysis

Firms should begin with a detailed assessment to determine their current derivatives exposure across all their funds.

Identify DRM and initiate DRMP

Currently, derivatives risk management functions are handled at the firm level. However, for funds with derivative exposure of more than 10% of net assets, the new rule requires the risk management function to be handled at the fund level by the DRM. The DRM is responsible for establishment, maintenance, and enforcement of risk management guidelines. So, firms must appoint DRMs on priority and get the appointments approved by the board of directors. This will help the boards of the funds to fulfil their responsibility of ensuring derivative risks are within mandated limits.

Impact assessment

Firms should perform a detailed impact assessment and further develop a firm-wide business strategy for derivatives use. A comprehensive target operating model and implementation roadmap should be defined based on these decisions.

Business strategy

The DRM must identify a designated reference portfolio that will serve as a benchmark to perform relative VaR test. The relative VaR helps understand the leverage risk generated from the use of derivatives and compare it with internal and regulatory limits. In the absence of suitably designated reference portfolio, the DRM must perform absolute VaR test to achieve the above objectives.
The DRM must closely work with portfolio managers to administer the program and manage the risk methodology and modeling. The risk methodology involves fund risk identification, leverage assessment, pre-trade derivatives risk management, modeling and VaR methodology definition, back testing, stress testing, as well as model risk management and governance. The DRM must update the board on the risk management function, the basis for the DRMP implementation strategy, present annual or more frequent status reports of the program, and non-compliance reports.

Target operating model and roadmap

Once the business capability gaps are identified, firms should identify third-party product vendors for risk management and reporting aspects. They should also define a roadmap with clear timelines for development, testing, and implementation to ensure compliance within the final deadline.

Leveraging cloud and AI for compliance

The capabilities required to achieve compliance present ample opportunities to adopt cloud and artificial intelligence (AI) technologies to improve scalability and reduce compliance costs. In the asset management industry, cloud adoption for portfolio risk computation is picking up because of cost and scalability advantages. Computationally intensive tasks such as daily VaR computation and weekly calculations needed for stress tests are suitable for cloud adoption. However, before embarking on implementation, firms must consider certain aspects like lead time to meet requirements, system configuration needs, access controls, level of control over data and infrastructure, and data security aspects.

As firms continue to embrace an automation-first approach to improve efficiency and reduce cost, there are multiple use cases for deployment in this context. For example, machine learning (ML) models can be evaluated for application of time series modeling used for VaR computation and stress testing. Other techniques such as natural language generation (NLG) are increasingly becoming popular to simplify repetitive data analysis and report writing tasks. VaR, stress testing and back testing result analysis and reporting to board and portfolio managers are areas that would benefit from NLG adoption.

Changes to business capabilities

To capitalize on the opportunities offered by the SEC derivatives regulation, investment management firms and custodians should enhance key business capabilities across the derivatives risk management function (see Figure 2).

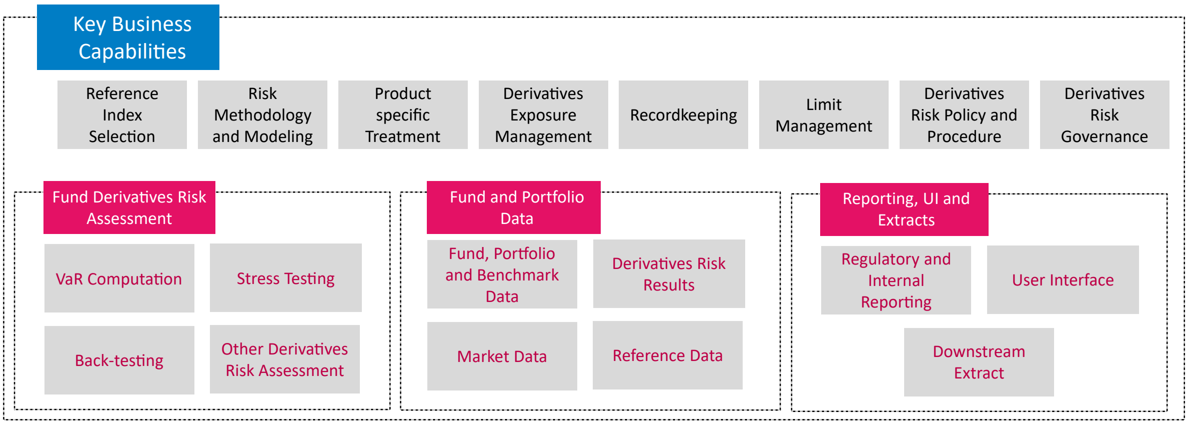

Figure 2: A Business Capability Map

Such transformation must center on reference index selection, risk methodology and modeling, product-specific treatment, derivatives exposure management, record keeping, limit management, derivatives risk policy and procedures, and derivatives risk governance. Firms will have to enhance risk assessment capability by relooking at VaR computation, stress testing, back testing, and other derivatives risk assessment solutions. To enhance reporting and user interfaces (UI), as well as enable downstream extracts, derivative risk results, along with fund, portfolio, benchmark, market, and reference data, will be needed.

To expedite compliance, firms must analyze their existing capability and consider leveraging the wider ecosystem of third-party solution providers for specific functions such as stress testing, back testing, reporting, and so on. This will help firms flawlessly adhere to new risk management regulatory guidelines and provide holistic and unbundled services to customers. In addition, it has the potential to help firms build a purpose-driven ecosystem with emphasis on investor protection.

Changes to regulatory reporting

The regulation envisages major changes to regulatory reports and public disclosures (see Table 2).

	Changes	Impact on public disclosure
N-RN (earlier known as N-LIQUID)	• Mandatory to complete parts E -G whenever VaR test breaches occur, and confidentially report when compliance is achieved.	• SEC does not intend to make this information public, but they may use it for enforcement.
N-PORT	• Derivatives VaR related term definitions have been introduced or modified. • Part B (new questions) on derivatives exposure for limited derivatives and VaR information have been introduced. • Median daily VaR, if absolute VaR is calculated, needs to be reported	• Information reported in Form N -PORT for the third month of each fund's fiscal quarter will be made public 60 days after the end of the fund's fiscal quarter.
N-CEN	• New requirements with respect to leverage, reverse repo, unfunded commitment agreements, and forward -settling securities have been introduced.	• No change, information reported in Form - N-CEN will continue to be public.

Table 2: Forthcoming Changes in Regulatory Reporting

Firms must evaluate and implement changes required to the applications that help source the new data needed to create these reports as well as applications that generate and disseminate these reports.

The bottom line

Existing risk management programs for funds and ETFs are light in nature and do not encompass all the changes mandated by the SEC through Rule 18f-4. Hence, firms must consider entering into partnerships to enhance capabilities in derivatives risk calculations, benchmark comparisons, daily stress testing and back testing, test result analysis, and external and internal reporting. Firms must proactively identify and engage with the right partners on priority to ensure the implementation of an efficient and cost-effective solution before the deadline.

About the authors

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