



## WHEN ONE BECOMES TWO AND TWO BECOMES FOUR: THE POSSIBILITIES OF LEVERAGE

Leverage can amplify investment fund returns. It can also amplify losses, which means leverage raises the potential risks to investors. It can even impair proper market function via different contagion channels in some circumstances. As a result, securities regulators have an interest in monitoring how funds use leverage.

On 13 December 2019, IOSCO published “Recommendations for a Framework Assessing Leverage in Investment Funds” (accessible [here](#)), its final report based on established national and regional regimes for analysing leverage in funds.

### But what is leverage?

When a fund uses certain financial instruments (for example derivatives) and/or borrowing to increase its market exposure beyond its net asset value, it creates leverage. The hope is that by doing so the fund will increase its gains, but it can also increase its losses.

The amount of leverage in an investment fund is typically expressed as a ratio of the fund's market exposure (however defined) over its net asset value.



Measures of market exposure can capture investment exposure taken through derivatives and through borrowing. Although derivatives can be used to amplify the potential returns (and consequently the risks) of a fund's portfolio, they don't necessarily create leverage, so they can also be used for other purposes, including:

- Hedging risks.
- Decreasing a fund's exposure to certain risk factors such as the portfolio's duration, or sensitivity to changes in credit spreads and/or interest-rates term structure.
- Enhancing liquidity in situations where derivatives are more liquid than their underlying reference assets.
- Improving transactional efficiency.
- Gaining exposure to less accessible markets.
- Cash management.

### The Leverage Framework

IOSCO has developed a way to facilitate a more meaningful monitoring of leverage in funds for financial stability purposes in a consistent manner across jurisdictions.

Its Leverage Framework (the Framework) provides a holistic approach to capturing the significant leverage-related risks of a fund (or group of funds) to give regulators the tools to assess these risks for financial stability purposes.

IOSCO acknowledges that not all funds need to be captured for financial stability monitoring purposes, not just given the immense diversity in fund structures, types and strategies, but also given the domestic legal and regulatory frameworks governing these investment vehicles. So a certain degree of proportionality is embedded in the Framework.

The Framework achieves overarching consistency through a two-step analysis, while offering a set of tools for each step that can be adjusted to the needs of a jurisdiction and the characteristics of funds:

#### Step 1

This offers regulators a means of efficiently identifying funds more likely to pose risks to the financial system. It uses at least one notional exposure metric including debt and synthetic leverage. Furthermore, information on directionality of positions is captured through the collection of data broken down by asset class and through long and short exposures. This identifies a subset of investment funds that can be taken forward for further risk-based analysis.

Under this step, IOSCO recommends regulators use baseline analytical tools such as Gross Notional Exposure (GNE) or adjusted Gross Notional Exposure (adjusted GNE). Given that these tend to overstate fund leverage within the subset of funds identified based on their application, they're likely to capture funds through the step's filtering process that may not give rise to financial stability risks. Because the application of GNE or adjusted GNE will capture funds of potential interest for financial stability monitoring purposes, regulators can evaluate gross notional exposure using either metric. Moreover, in the process of refining its Step 1 analysis, a regulator can also complement GNE or adjusted GNE metrics with netting and hedging assumptions. A regulator can also use additional data points as it sees fit. At a global level, IOSCO will aggregate GNE and adjusted GNE inputs based on information available, allowing it to monitor trends in leverage.

## Step 2

This involves a risk-based analysis of the subset of funds identified in Step 1 using relevant and risk-based adjusted metrics – either in combination or on a standalone basis – depending on the characteristics of a fund.

Here IOSCO recognises that there are no one-size-fits all risk-based metrics that regulators could apply in a relevant manner across identified funds. For instance, a standardised market risk metric will prove ineffective in assessing the potential losses of different funds in a relevant manner. In turn, this will make the monitoring of leverage-related risks for financial stability purposes ineffective. A market risk metric, such as VAR, stressed VAR or stress scenarios, will need to be adjusted to a fund's characteristics, taking into consideration investment strategy, underlying asset class volatility and liquidity, portfolio diversification, market

footprint, and/or redemption terms. Regulators may select one or more risk-based metrics and adjust the parameters and calibrations of the metrics to the characteristics of funds considered. They may ultimately find it useful or necessary to engage with an identified fund and/or its responsible entity. Regulators may take appropriate actions in accordance with their assessment of leverage-related risks.

Using the information made available to it as a result of the Framework, IOSCO intends to publish an annual report reflecting leverage trends within the asset management industry at a global level. The first report is scheduled to be published in 2021.



Should you have any questions, or wish to discuss this topic in more detail, please don't hesitate to contact us on the details listed below:

### International

#### David Morrison

Global Head of Trustee and Fiduciary Services  
[david.m.morrison@citi.com](mailto:david.m.morrison@citi.com)  
 +44 (0) 20 7500 8021

#### Amanda Hale

Head of Regulatory Services  
[amanda.jayne.hale@citi.com](mailto:amanda.jayne.hale@citi.com)  
 +44 (0)20 7508 0178

#### Ann-Marie Roddie

Head of Product Development Fiduciary Services  
[annmarie.roddie@citi.com](mailto:annmarie.roddie@citi.com)  
 +44 (1534) 60-8201

### Asia

#### Caroline Chan

APAC Head of Fiduciary Business  
[caroline.mary.chan@citi.com](mailto:caroline.mary.chan@citi.com)  
 +852 5181 2602

#### Stewart Aldcroft

Chairman Cititrust Limited  
[stewart.aldcroft@citi.com](mailto:stewart.aldcroft@citi.com)  
 +852 2868 7925

### Europe

#### Shane Baily

EMEA Head of Trustee and Fiduciary Services  
 UK, Ireland and Luxembourg  
[shane.baily@citi.com](mailto:shane.baily@citi.com)  
 +353 (1) 622 6297

#### Jan-Olov Nord

EMEA Head of Fiduciary Services  
 Netherlands and Sweden  
[janolov.nord@citi.com](mailto:janolov.nord@citi.com)  
 +31 20 651 4313

### Regulatory Services Team

#### Andrew Newson

Senior Fiduciary Technical Analyst  
[andrew.c.newson@citi.com](mailto:andrew.c.newson@citi.com)  
 +44 (0)20 7500 8410

#### Matthew Cherrill

Senior Fiduciary Technical Analyst  
[matthew.charles.cherrill@citi.com](mailto:matthew.charles.cherrill@citi.com)  
 +44 (0)20 7500 3382

[www.citibank.com/mss](http://www.citibank.com/mss)

The market, service, or other information is provided in this communication solely for your information and "AS IS" and "AS AVAILABLE", without any representation or warranty as to accuracy, adequacy, completeness, timeliness or fitness for particular purpose. The user bears full responsibility for all use of such information. Citi may provide updates as further information becomes publicly available but will not be responsible for doing so. The terms, conditions and descriptions that appear are subject to change; provided, however, Citi has no responsibility for updating or correcting any information provided in this communication. No member of the Citi organization shall have any liability to any person receiving this communication for the quality, accuracy, timeliness or availability of any information contained in this communication or for any person's use of or reliance on any of the information, including any loss to such person.

This communication is not intended to constitute legal, regulatory, tax, investment, accounting, financial or other advice by any member of the Citi organization. This communication should not be used or relied upon by any person for the purpose of making any legal, regulatory, tax, investment, accounting, financial or other decision or to provide advice on such matters to any other person. Recipients of this communication should obtain guidance and/or advice, based on their own particular circumstances, from their own legal, tax or other appropriate advisor.

Not all products and services that may be described in this communication are available in all geographic areas or to all persons. Your eligibility for particular products and services is subject to final determination by Citigroup and/or its affiliates.

The entitled recipient of this communication may make the provided information available to its employees or employees of its affiliates for internal use only but may not reproduce, modify, disclose, or distribute such information to any third parties (including any customers, prospective customers or vendors) or commercially exploit it without Citi's express written consent. Unauthorized use of the provided information or misuse of any information is strictly prohibited.

Among Citi's affiliates, (i) Citibank, N.A., London Branch, is regulated by Office of the Comptroller of the Currency (USA), authorised by the Prudential Regulation Authority and subject to regulation by the Financial Conduct Authority and limited regulation by the Prudential Regulation Authority (together, the "UK Regulator") and has its registered office at Citigroup Centre, Canada Square, London E14 5LB and (ii) Citibank Europe plc, is regulated by the Central Bank of Ireland, the European Central Bank and has its registered office at 1 North Wall Quay, Dublin 1, Ireland. This communication is directed at persons (i) who have been or can be classified by Citi as eligible counterparties or professional clients in line with the rules of the UK Regulator, (ii) who have professional experience in matters relating to investments falling within Article 19(1) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 and (iii) other persons to whom it may otherwise lawfully be communicated. No other person should act on the contents or access the products or transactions discussed in this communication. In particular, this communication is not intended for retail clients and Citi will not make such products or transactions available to retail clients. The information provided in this communication may relate to matters that are (i) not regulated by the UK Regulator and/or (ii) not subject to the protections of the United Kingdom's Financial Services and Markets Act 2000 and/or the United Kingdom's Financial Services Compensation Scheme.

© 2020 Citibank, N.A. and/or each applicable affiliate. All rights reserved by Citibank, N.A. and/or each applicable affiliate. Citi and Arc Design is a trademark and service mark of Citigroup Inc., used and registered throughout the world.

GRA31188 **Global Trustee & Fiduciary Services**

