

# Frequently Asked Questions

## Swing Pricing: Protecting holders from fund dilution

*Septembre 2016*

## Preamble: Fundamental principles adopted by Mirova

In its wish to safeguard the interests of its long-term holders, Mirova has decided to introduce the swing pricing mechanism based on the methodology recommended by the French Asset Management Association's (AFG) charter and the Luxembourg Industry Association (ALFI).

The introduction of swing pricing focuses on funds that have been identified as benefiting from this mechanism. Holders can refer to the prospectus to obtain this information.

The purpose of these FAQs is to respond to likely questions of all potential investors and existing holders of the funds in scope regarding the working of the mechanism and its impacts. It applies to professional and non-professional clients within the meaning of the Markets in Financial Instruments Directive.

- This document is available at the Mirova website at the following address:  
<http://www.mirova.com/fr-FR/Mirova/Engagements/SWING-PRICING>
- This document can also be obtained on request from the Distribution Services Department by e-mailing [nam-service-clients@am.natixis.com](mailto:nam-service-clients@am.natixis.com) or sending a letter to: Mirova – Direction « des Services Clients à la Distribution » - 21 Quai d'Austerlitz – 75634 PARIS CEDEX 13
- Or through your local NGAM sales representative.

## Glossary <sup>1</sup>

**Bid-ask spread:** The amount by which the ask price exceeds the bid price. This is essentially the difference in price between the highest price that a buyer is willing to pay for an asset and the lowest price that a seller is willing to sell the same asset.

The size of the spread from one asset to the other will diverge mainly due to the difference in liquidity of each asset respectively.

**Ask price:** The price a seller is willing to accept for a security, also known as an offer price. Along with the price, the ask quote will generally also stipulate the amount of the security willing to be sold at that price.

**Bid price:** The price a buyer is willing to pay for a security. This is one part of the bid with the other being the bid size, which details the amount of shares the investor is willing to pay.

**Capital activity:** Net value of subscription, redemption and switch orders received by the transfer agent for a single fund on any one trading day.

**Dilution:** The reduction in value of a fund, and hence Net Asset Value (NAV) per share, that occurs as a result of capital activity dealt at a NAV that does not fully reflect the impact of investment / disinvestment associated with security trades undertaken by the investment manager.

**Full swing:** The NAV is adjusted each time there is capital activity, irrespective of its size or significance to the fund. The direction of the swing is determined by the net capital activity of the day.

**NAV:** The Net Asset Value of the fund is the sum of the net assets of all different share classes of a fund.

**Partial swing:** The NAV is swung only when a predetermined net capital activity threshold (the swing threshold) is exceeded at each dealing day. As with full swing the direction of the swing is determined by the net capital activity of the day. Partial swing can also be referred to as semi-swing pricing. For consistency, “partial swing” will be used throughout this document.

**Swing factor:** A swing factor is the amount (normally expressed as a percentage) by which the NAV is adjusted in order to protect existing investors in a fund from dilution caused by securities trading following capital activity. The swing factor is applied as a result of capital activity exceeding a pre-defined threshold (for partial swing) or any capital activity (for full swing).

The swing factor can also be referred to as impact adjustment.

**Swing threshold:** The level of net capital activity, expressed as a percentage of the NAV or an absolute monetary value, or both, required to trigger the swinging process where partial swing pricing is employed. Factors influencing the determination of the swing threshold are described hereafter.

For consistency “swing factor” will be used throughout this document.

**Unswung NAV:** The Unswung NAV is the NAV without application of a swing factor.

---

<sup>1</sup> source Mirova and ALFI Swing Pricing Guidelines

## What is dilution<sup>2</sup>?

The purchase and sale of securities in a fund portfolio incurs trading costs such as brokerage fees, taxes and spread effects (liquidity) relating to the fund valuation policy.

Spread effects occur as the fund net asset value (NAV) is calculated using the last-traded price while the investment manager buys underlying securities at offer and sells at bid price.

Investors buying into a fund or selling out a fund contribute to dilution by creating a need for the investment manager to trade in pursuit of the investment objectives contained within the fund prospectus.

Existing investors are exposed to such dilution by remaining invested in the fund.

## How does swing pricing protect existing holders?

The objective of swing pricing is to offset the dilution effect for existing holders by having holders trading into or out of the fund bear their share of the trading and liquidity costs.

Swing pricing is a mechanism by which the NAV is adjusted upwards (or downwards) where the balance of net inflows is positive (or negative).

Based on the principle that a low amount of subscription and redemption activity on the part of holders will not result in material trading costs, Mirova has opted for a swing pricing model with a trigger threshold (i.e. Partial swing). As such, swing pricing protection will be only activated once the Swing threshold is reached. This is done on the basis of net subscriptions and redemptions on a given day across all investors' activity in a particular fund, assessed as a percentage of the fund's net assets.

In practice, this means that if the net flows of a given fund do not trigger the Swing Threshold, the NAV does not swing.

Net in- or outflows below threshold	Net inflows above threshold	Net outflows above threshold
No swing	Swing up	Swing down

<sup>2</sup> Dilution corresponds to all the trading costs incurred by the purchase/sale of securities: transaction charges, bid/offer spreads in the markets of these securities, and taxes.

The swing mechanism always protects the interests of longer term shareholders in the fund.

- When investors redeem on a day in which cash flows in the fund exceed the pre-determined net redemption threshold, the price the investor receives is adjusted downwards by the swing factor to a notional bid price.
- When investors subscribe on a day in which cash flows in the fund exceed the pre-determined net subscription threshold, the price the investor pays is adjusted upwards by the swing factor to a notional offer price.
- When investors subscribe on a day in which the net cash flow exceeds the redemption threshold, the price will be adjusted downwards by the swing factor (and benefit them).
- When investor redeem on a day when the price swings up, due to net inflow capacity initiated by the other investors, they will redeem at a beneficial NAV.

## How is the “swung” net asset value calculated?

Based on the frequency of the NAV calculation, the net amount of subscriptions and redemptions is calculated as a percentage of the fund net assets. If this amount exceeds a pre-defined threshold, the mechanism is applied at the fund level. When applied, all share/unit classes within a fund swing in the same direction, upwards or downwards, and by the same percentage.

Where the threshold is breached (percentage), the fund is valued as on a normal business day, in compliance with the stated valuation policies in the fund’s prospectus. A basis point adjustment, known as the swing factor, is then applied to adjust the NAV upwards where there are net inflows or downwards in the case where there are net outflows.

In practice, holders will not know when the NAV has been swung as the funds are priced on single priced basis. If invoked, the swing adjustment is included in the published NAV (based on the frequency of the NAV calculation, holders will continue to receive the published NAV, whether it has been swung or not ; however, no disclosure will be made as to whether the NAV is swung or unswung).

## How are the swing factor and threshold levels determined?

A Swing Pricing Committee is responsible for setting and reviewing the Swing Factors, Thresholds and the funds in scope of swing pricing. These will be reviewed at least quarterly.

### **Swing factors:**

This is the amount by which the NAV is adjusted and it will vary depending on the type of fund, according with for example the spreads and costs associated with buying and selling securities on particular markets.

The following items are considered when deriving the swing factor:

- The bid offer spread is a key factor to be included in the swing factor
- Net broker commissions paid by the fund
- Custody transaction charges
- Fiscal charges (e.g. sales tax and stamp duty)
- Any initial charges or exit fees applied to trades in underlying funds
- Any swing factors or dilution amounts or spreads applied to underlying investment funds or derivative instruments.

### **Swing thresholds:**

The Committee sets the Swing Thresholds at a level that they believe protects holders, while minimizing NAV volatility and ensuring that the NAV does not swing where the dilution impact on the fund is deemed to be immaterial. Different funds may have different Swing Thresholds.

The following items may influence the determination of the swing threshold:

- The fund size
- The type and liquidity of securities in which the fund invests
- The costs, and hence the dilution impact, associated with the markets in which the fund invests
- The investment manager's investment policy and the extent to which a fund can retain cash (or near cash) as opposed to always being fully invested.

## Can the swing pricing parameters be obtained?

In accordance with the French AFG guidelines, Mirova will not disclose either the Swing Threshold or Swing factors for the French and Luxembourg domiciled funds it manages. It has implemented procedures to restrict access to the parameters as well as the subscription/redemption flows to prevent potential investors from using this information to invest, undermining the principles of protecting the existing holders from dilution.

## Does the implementation of swing pricing generate additional costs?

*“Swing pricing does not generate additional costs for holders. The mechanism is solely a different means of apportioning the various costs between holders<sup>3</sup>.”*

It is designed to protect existing holders and minimize the trading costs associated with the portfolio manager having to trade due to the subscriptions/redemptions of other holders into and out of the fund.

## Will the swing factor apply to all share classes?

Yes, swing pricing when applied – applies at fund level, impacting all share classes on a specific day. This occurs even if the in/out flow that generated the trigger was observed in only one share class. This is in order to protect all investors and treat all holders fairly.

## What is the impact of swing pricing on the measurement of risk and performance communicated in the reporting?

Performance and risk indicators are calculated based solely on the NAV (whether it has swung or not).

The mechanism’s application therefore has an impact on the mutual fund’s volatility level and, on a one-off basis, the performance level calculated.

As the one-off impact of swing pricing on the NAV is not related to the investment management, performance fees are calculated prior to applying the Swing factor.

---

<sup>3</sup> Charte de Bonne Conduite pour le Swing Pricing et les Droits d’Entrée et de Sortie Ajustables Acquis aux Fonds, AFG, 2014.