

• **FREQUENTLY ASKED
QUESTIONS
SWING PRICING: PROTECTING
INVESTORS FROM DILUTION**

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- **1. PRELIMINARY REMARKS:
FUNDAMENTAL PRINCIPLES
ADOPTED BY OSTRUM ASSET
MANAGEMENT**

The AMF (French financial markets regulator) has authorised swing pricing in France for UCITS and AIFs since 24 June 2014. Ostrum Asset Management supports these regulatory changes and has chosen to deploy this mechanism by following the procedures recommended in the charter drawn up by the AFG (French asset management association), in order to protect the long-term interests of investors.

Swing pricing now applies to all open-ended funds, with the exception of money market funds (MMF), formula funds and open-ended funds that may only be marketed to a specific client (or a specific group of clients). This information is contained in the fund prospectus.

The purpose of this FAQ is to respond to any questions investors may have on how swing pricing works and its impacts. The swing pricing mechanism applies to professional and non-professional clients within the meaning of the Markets in Financial Instruments Directive (MiFID).

- This document is available on the Ostrum Asset Management website.
- You may obtain a copy of this document from the Client Servicing Department by emailing ClientServicingAM@natixis.com or by sending a letter to: Ostrum Asset Management – Direction des Services Clients à la Distribution – 43, avenue Pierre Mendès-France, 75 013 Paris.
- Or through your local Natixis Investment Managers International sales representative

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● 2. GLOSSARY

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 a security and the lowest price that a seller is willing to accept to sell that security.

The size of the spread will depend on how liquid the market is for the security.

Ask Price

The lowest price a seller is willing to accept for a security. The ask size is generally also stipulated, which is the number of securities available for sale at the ask price.

Bid Price

The higher price a buyer is willing to pay for a security. The bid size is also stipulated, which is the number of securities buyers are willing to buy at the bid price.

Mid Price

For a given security, this is the midpoint in the spread between the Bid Price and the Ask Price.

Net Assets

For a given fund, this is the sum of the value of the net assets held in the fund. Ostrum Asset Management's valuation policy provides for mid-price valuation.

Net Asset Value (NAV)

The Net Asset Value of a fund is the Net Assets divided by the number of units in issue. It therefore equates to the value of one unit in the relevant fund.

Net Flows

This is the net value of subscriptions and redemptions received by the Centralising Agent for a fund on a given date. It may be positive where the number of subscriptions exceeds the number of redemptions or negative where the number of redemptions exceeds the number of subscriptions. It is expressed in euros (and not in number of units).

Full Swing

With this pricing model, the price is adjusted ("swung") whenever there are net flows into or out of a fund, regardless of the size of the subscription-redemption orders received. The direction of the swing (up or down) is determined by the direction of the net flows into or out of the fund on that day (positive or negative).

Partial Swing

With this pricing model, the price is "swung" only when the net flows into or out of a fund exceed a pre-set threshold (i.e. the swing threshold).

Swing Factor

The amount (usually expressed in basis points) by which a fund's NAV is adjusted to protect existing investors in a fund from dilution caused by flows into and out of the fund. The swing factor is applied whenever the trigger threshold is reached (for partial swing pricing) or whenever there are flows into or out of a fund (full swing pricing). Upward and downward swing factors may be different because the costs of purchasing/selling securities on the market are not always equivalent (due to taxes in particular).

Swing Threshold

This is the level of net flows into or out of a fund, expressed as a percentage of Net Assets or an absolute monetary value (or both), above which the partial swing pricing mechanism is activated. If net flows are below this threshold, the mechanism is not activated.

The factors influencing the determination of the swing threshold are described in the next section.

“Unswung” NAV

This is the NAV without application of a swing factor.

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- **3. FREQUENTLY ASKED QUESTIONS**

3.1. WHAT IS DILUTION?

Within a fund (or portfolio), the purchase and sale of securities incurs costs that must be apportioned to the portfolio, such as brokerage fees, duties and taxes and spread effects (liquidity) relating to the fund valuation policy.

Spread effects occur when the fund's NAV is calculated by using the last mid price. The portfolio manager buys securities based on the ask price and sells them based on the bid price.

Existing investors in a fund are exposed to a dilution effect as a result of the trades that are performed by the manager to achieve the investment objectives stipulated in the fund prospectus.

3.2. HOW DOES SWING PRICING PROTECT EXISTING INVESTORS?

The aim of swing pricing is to offset the dilution effect for existing investors, by ensuring that incoming and outgoing investors bear their share of the costs apportioned to the portfolio.

Swing pricing is a mechanism by which the NAV is adjusted upwards (or downwards) if net flows into or out of the fund exceed the swing threshold. It is triggered in both directions, when net flows into or out of the fund in absolute value move above the threshold. Net flows into or out of the fund are calculated at the NAV calculation frequency.

Working on the assumption that a low amount of subscriptions and redemptions will not result in material trading costs, Ostrum Asset Management has opted to apply a partial swing pricing model with a swing threshold. As such, swing pricing protection will only be activated once the swing threshold is reached (by considering the net balance of subscriptions / redemptions for all investors), assessed as a percentage of the fund's net assets.

In practice, this means that the price will not be "swung" if the net flows into or out of a fund do not reach the swing threshold.

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

This mechanism is designed to protect the interests of existing investors in the fund at all times:

- Where an investor subscribes for units on a day on which net inflows into the fund (subscriptions being greater than redemptions) exceed the swing threshold, the NAV will be adjusted upwards by a swing factor (NAV swung up) that reflects the investor's disadvantage relative to a mid price;
- Where an investor redeems units on a day on which net inflows into the fund (subscriptions being greater than redemptions) exceed the swing threshold, the NAV will be adjusted upwards by a swing factor (NAV swung up) that reflects the investor's advantage relative to a mid price;
- Where an investor subscribes for units on a day on which net outflows from the fund (redemptions being greater than subscriptions) exceed the swing threshold, the NAV will be adjusted downwards by a swing factor (NAV swung down) that reflects the investor's advantage relative to a mid price;
- Where an investor subscribes for units on a day on which net outflows from the fund (redemptions being greater than subscriptions) exceed the swing threshold, the NAV will be adjusted downwards by a swing factor (NAV swung down) that reflects the investor's disadvantage relative to a mid price.

3.3. HOW IS THE “SWUNG” NET ASSET VALUE CALCULATED?

The net amount of subscriptions and redemptions is calculated at the NAV calculation frequency as a percentage of the fund's net assets. If this amount exceeds a pre-set threshold, the mechanism is applied at the fund level. Once applied, all share/unit classes within a fund swing in the same direction (upward or downward) and by the same percentage.

Where the threshold is breached (percentage), the fund is valued normally in accordance with the valuation policies defined in the fund prospectus. The swing factor is then applied to adjust the NAV upwards where the fund has registered net inflows, or downwards where it has registered net outflows.

In practice, investors are not informed when the NAV has been swung in order to keep all investors on a level playing field. Where the price has been swung, the swing adjustment will be included in the published NAV. Investors will continue to have access to the published NAV at the NAV calculation frequency, regardless of whether or not swing pricing has been applied. No information will be provided on whether swing pricing has been applied to the net asset value.

3.4. HOW ARE SWING FACTORS AND SWING THRESHOLDS DETERMINED?

Ostrum Asset Management has set up a Swing Pricing Committee, which is responsible for setting and reviewing the swing pricing parameters, including the swing thresholds and the swing factors to be applied to the relevant funds.

The swing factors to be applied to the net asset value (swinging the price up or down) vary according to the type of fund and are reviewed at least every quarter.

The swing threshold is also reviewed at least every quarter. The committee therefore sets the swing threshold at a level that will protect investors, while keeping the volatility of the net asset value to a minimum, and ensures that no swing factor is applied when the dilution effect on the fund is deemed to be immaterial.

The Swing Pricing Committee is chaired by Ostrum Asset Management's Chief Risk Officer and has a well-defined governance structure (Pricing Policy, Operating Procedures, Confidentiality Management, etc.). The relevant heads of portfolio management and a representative of Compliance and Internal Control also sit on the committee.

Swing Factor

This is the factor by which the NAV is adjusted. It will vary depending on the type of fund and the chosen investment theme. For example, a high-yield fund will likely have a higher swing factor than a euro sovereign debt fund, in view of the liquidity and the cost of purchasing securities on their respective markets. The swing factor may also vary upwards and downwards for a same given fund to take into account duties and taxes payable on securities which, in certain jurisdictions, apply to investments but not to divestments.

The following elements are taken into consideration when determining the swing factor:

- The bid-ask spread, which is the key element to be taken into account;
- Net broker fees paid by the fund;
- The custodian's transaction fees;
- Any duties and taxes payable on transactions;
- Any subscription or redemption fees on the underlying funds.

Swing thresholds

The Swing Pricing Committee sets the swing threshold at a level it believes protects holders, while keeping NAV volatility to a minimum, and ensures that no swing factor is applied when the dilution effect on the fund is deemed to be immaterial. Each fund may have a different swing threshold.

The following factors are taken into consideration when determining swing thresholds:

- Size of the fund;
- The type and liquidity of the securities in which the fund invests;
- The costs, and hence the impact of dilution, associated with the markets in which the fund invests;
- The fund's investment policy and the extent to which it can hold cash (or equivalent) or invest fully in securities;
- The particular case of funds that are being launched.

3.5. CAN THE SWING PRICING PARAMETERS BE DISCLOSED?

In accordance with the regulations in force, Ostrum Asset Management will not disclose swing pricing parameters and has implemented procedures to restrict internal access to parameters, and subscription/redemption flows, and to identify potential conflicts of interest.

3.6. DOES THE IMPLEMENTATION OF SWING PRICING GENERATE ADDITIONAL COSTS?

Swing pricing does not generate additional costs for existing investors.

It is a tool designed to ensure that existing investors do not bear the costs relating to transactions that the portfolio manager must carry out to satisfy subscription/redemption requests placed by incoming or outgoing investors in the fund, and to ensure that these costs are borne solely by the said incoming or outgoing investors.

An investor who buys or sells an asset directly on the markets bears the costs associated with this transaction. Hence, the purpose of the swing pricing mechanism is to avoid penalising investors in a fund who have not engaged in the trades, and to ensure that the costs are borne only by the investors who have engaged in the trades.

3.7. WHAT IS THE IMPACT OF SWING PRICING ON THE REPORTED MEASUREMENT OF RISK AND PERFORMANCE?

Performance and risk indicators are calculated based on the NAV, to which a swing factor may or may not have been applied. The application of swing pricing hence has an impact on the fund's volatility and, occasionally, on the calculated performance level. The fund's medium-term performance is boosted, as the costs apportioned to the portfolio are not diluted over time but rather paid at the appropriate time via the "swung" NAV.

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

ADDITIONAL NOTES

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Under Ostrum Asset Management's social responsibility policy, and in accordance with the treaties signed by the French government, the funds directly managed by Ostrum Asset Management do not invest in any company that manufactures, sells or stocks anti-personnel mines and cluster bombs.



Ostrum Asset Management

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