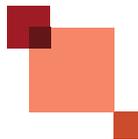


SWING PRICING
AND VARIABLE
ANTI DILUTION LEVIES
(ADL)
CODE OF CONDUCT FOR
ASSET MANAGERS

2016 modified November 2020

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1. OBJECTIVES OF THE CODE

The purpose of this Code is to define and promote standards on the use of Swing Pricing and variable anti dilution levies (ADL).

- **Swing Pricing** is a mechanism by which the net asset value is adjusted upwards (or downwards) if the change in liabilities is positive (or negative) in such a way as to reduce for existing investors the portfolio restructuring costs linked to subscription / redemption movements in the fund.
- **The variable anti dilution levies** (hereafter ADLs) allow adjusting entry and exit charges

upwards (or downwards) if the change in fund liabilities is positive (or negative) so as to reduce for existing investors the portfolio restructuring costs linked to subscription / redemption movements in the fund.

These two mechanisms help reinforce fair treatment of investors.

The Code applies to all collective investment schemes - i.e. UCITS and AIFs - for which the management company (AFG member) has decided to implement these mechanisms.

2. GENERAL PRINCIPLES

Swing Pricing and ADLs are mechanisms aimed at reducing the costs to remaining holders of units or shares in collective investment schemes of re-adjusting portfolios as a result of subscriptions or redemptions, by allocating some or all of those costs to subscribing and / or redeeming investors.

They are intended for use under normal market conditions.

These mechanisms may only apply in case of significant subscriptions / redemptions.

The costs taken into account may include transaction fees, related taxes and liquidity costs.

- The use of these mechanisms does not exempt the management company from its obligations in respect of best execution, liquidity management, asset eligibility and fund valuation. Their implementation must not affect the investment or security selection policy, particularly in terms of liquidity and valuation.

Except eventual minor administrative costs due to the mechanism's implementation, the use of ADLs or Swing Pricing does not generate additional costs for the fund: these mechanisms only affect the way in which costs are distributed among investors.

- It is the management company's responsibility to define the investors affected by this type of mechanism, the types of funds to which it is likely to apply such mechanisms and the implementation method, and to implement and monitor the mechanism in accordance with the principles laid down in this Code. These aspects should be described in a Swing Pricing and ADL policy elaborated and maintained up to date by the management company.

The management company must also identify and manage potential conflicts of interest arising from the use of these mechanisms.

3. COMMON PROVISIONS

3.1 Calculation methodology

The process of calculating the “swung” net asset value per share or the ADLs can be broken down into two stages: estimating the total cost to the fund of subscriptions / redemptions, and allocating this total cost among remaining, subscribing and redeeming investors. The cost determination phase is identical for Swing Pricing and ADLs.

The management company is responsible for determining the nature of the costs taken into consideration and the methodology used to estimate and allocate them. These details must be documented in the management company’s Swing Pricing and ADLs policy.

The following terms will be used hereafter:

N: Number of units including subscriptions and redemptions

S: Number of units subscribed

R: Number of units redeemed ($R > 0$)

NAV_{gross}: “Gross” unit value, calculated before Swing Pricing is applied

NAV_{swung}: Net asset value per unit after Swing Pricing is applied

ADL_{subscription}: ADLs per unit applicable to subscriptions

ADK_{redemption}: ADLs per unit applicable to redemptions

C: Estimated cost of readjusting the portfolio (expressed as an amount)

For illustrative purposes, examples consistent with these principles are set out in Appendix 2.

3.1.1 Estimating the total cost arising from subscriptions and redemptions

The estimated cost of readjusting the portfolio is calculated based on the net balance of subscriptions and redemptions.

This readjustment cost may reflect the following:

- Transactions actually undertaken in connection with subscriptions or redemptions;
- A theoretical investment or disinvestment in proportion to existing assets in the portfolio;
- A theoretical investment or disinvestment in proportion to the fund’s benchmark.

The management company may base its calculation of this portfolio readjustment cost on costs (transaction fees, bid-ask spreads, taxes, settlement charges) by asset class, market segment

(country, sector, maturity), type of instrument or security. It should establish these parameters either daily or periodically, such calculation period not exceeding six months.

Cost estimates must be documented and based on justifiable data.

Furthermore, estimated liquidity costs must take into account the fund’s valuation policy (mid or bid price).

3.1.2 Cost allocation: swing Pricing

For Swing Pricing, the previously estimated readjustment cost is incorporated into the net asset value in proportion to the fund’s total assets, giving a total impact of $C * N / |S - R|$.

It causes the net asset value to increase if net subscriptions are positive, or to decrease if net subscriptions are negative. The net asset value per unit is thus as follows:

- If $S > R$: $NAV_{swung} = NAV_{gross} + C / (S - R)$
- If $S = R$: $NAV_{swung} = NAV_{gross}$
- If $S < R$: $NAV_{swung} = NAV_{gross} - C / (R - S)$

3.1.3 Cost allocation: swing Pricing with a trigger threshold (“partial” swing Pricing)

In the case of a Swing Pricing mechanism with a trigger threshold, Swing Pricing is applied to all assets but only beyond a certain threshold:

- If $S - R > THRESHOLD_{subscription}$: $NAV_{swung} = NAV_{gross} + C / (S - R)$
- If $THRESHOLD_{subscription} \geq S - R \geq THRESHOLD_{redemption}$: $NAV_{swung} = NAV_{gross}$
- If $THRESHOLD_{redemption} > S - R$: $NAV_{swung} = NAV_{gross} - C / (R - S)$

Rules governing the definition of thresholds should be laid down in the Swing Pricing policy. These rules may allow for variable thresholds (depending, in particular, on liquidity conditions) so that the mechanism can be adjusted in line with market conditions, thus limiting the possibility of an investor optimising his / her transactions by virtue of his / her knowledge of the mechanism.

Furthermore, the Swing Pricing policy may stipulate that Swing Pricing should not be applied to the closing net asset value.

3.1.4 Cost allocation: adls

In particular, the following two allocation rules are accepted:

- Cost fully borne by subscribing or redeeming investors:
 - If $S > R$, $ADL_{subscription} = C/S$ and $ADL_{redemption} = 0$
 - If $S < R$, $ADL_{subscription} = 0$ and $ADL_{redemption} = C/R$
- Cost borne on a pro rata basis by subscribing and redeeming investors:
 - $ADL_{subscription} = C / (R + S)$ and
 - $ADL_{redemption} = C / (R + S)$

As for the Swing Pricing with a swing threshold, the management company may stipulate thresholds, laid down in the ADLs policy, below which the fund will not collect any ADLs.

The methodology may be adapted to distinguish the readjustment cost depending on subscription and redemption methods; for example, it could distinguish the cost of subscriptions made by contribution in kind from the cost of cash subscriptions so that costs are allocated appropriately to the relevant investors. The ADLs policy may also provide for the recognition of a net balance of subscriptions and redemptions for investors undertaking opposite transactions based on the same net asset value.

Clarification for exchange-traded funds (ETFs)

Notwithstanding the above, costs for ETFs dealing directly with authorised participants, and where the costs are confirmed while the orders are still revocable, are determined by considering each order individually. In this context, the management company may base its calculation of the portfolio readjustment cost on costs (transaction fees, bid-ask spreads, taxes, settlement charges) by asset class, market segment (country, sector, maturity), type of instrument or security. It should establish these parameters either daily or periodically, such calculation period not exceeding six months.

Cost estimates must be documented and based on justifiable data.

Furthermore, estimated liquidity costs must take into account the fund's valuation policy (mid or bid price, etc.).

3.2 Governance

The management company should define its policy on Swing Pricing and ADLs. In particular, this policy should specify the nature of the costs taken into account, the methodology used to estimate such costs and rules on allocating such costs among subscribing, redeeming and remaining investors. It should set the parameters necessary to this methodology on the basis of documented and justifiable criteria and revise them at least twice a year. It should document the whole set of methodologies and calculations such that they are traceable and ensure that records are kept.

It should identify risks specific to Swing Pricing and ADLs and implement a suitable monitoring mechanism.

3.3 Preventing and managing conflicts of interest

The management company should implement procedures to identify and manage conflicts of interest linked to Swing Pricing or ADLs; in particular, such procedures should ensure that investors cannot take advantage of knowledge of subscriptions or redemptions so as to benefit from more advantageous subscription or redemption conditions. The policy on Swing Pricing and ADLs must not affect the principle of valuation on a forward pricing basis.

In particular, the policy should cover the following conflict situations:

- The use, for the benefit of an investment fund, a client or a proprietary account of the management company, of knowledge of a change in liabilities to place an opposite transaction under favourable conditions;
- The use, for the benefit of an investment fund, a client or a proprietary account of the management company, of detailed knowledge of Swing Pricing or ADL parameters to place subscriptions or redemptions orders in the fund under preferential conditions;
- Subscription or redemption by an investment fund, or on a proprietary basis for the management company, of an investment fund subject to Swing Pricing in order to increase or reduce its net asset value and thus influence its performance, and more specifically its classification relative to other investment funds.

Furthermore, transactions operated in the market relative to subscriptions or redemptions of units of investment funds subject to Swing Pricing or ADLs shall be subject to the management company's best execution policy.

3.4 Regulatory documents, investor information and transition period for existing funds

3.4.1 Regulatory documentation

The management company shall inform the AMF and the investment fund's independent auditor of the implementation of Swing Pricing or ADLs, and makes available to them the previously established procedures.

3.4.2 Investor information

The management company states in the statutory materials that they make use of Swing Pricing or ADLs. In particular, it indicates the general principles of the chosen methodology. Furthermore, it should not disclose parameters that are too detailed and recent so that to enable an investor to amend his/her subscription or redemption strategy so as to take advantage of more advantageous conditions and thus reduce the Swing Pricing mechanism's efficiency. In particular, the management company does not communicate (in writing or orally) the current levels of the trigger thresholds. To this end, it notably ensures that the internal circuits of information are restricted to favour the conservation of the confidential character of this piece of information.

The principles used for Swing Pricing should be set out in the valuation and accounting rules laid down in the prospectus. Where applicable, the impact of Swing Pricing on the Synthetic Risk and Reward Indicator (SRRI) may be indicated in the narrative explaining the fund's level of risk.

ADLs should be indicated in the "Costs" section of the Key Investor Information Document (KIID).

3.4.3 Transition for existing funds

The introduction by a fund of Swing Pricing is considered equivalent to a refining of that fund's valuation and accounting rules for assets; as such, investors are informed by all means. This piece of information will be reported in the fund's next reporting.

Investors must be given individual notification when ADLs are introduced for a fund, and must be given the option to redeem their investment free of charge.

4. SPECIAL PROVISIONS GOVERNING SWING PRICING

4.1 Use of net asset value and disclosure

The "swung" net asset value per share shall be the fund's only net asset value. It alone shall be disclosed to investors.

The management company shall thus publish, in its regulatory documentation, performance and risk indicators calculated on the basis of the "swung" net asset value per share. In particular, the Synthetic Risk and Reward Indicator (SRRI) shall be calculated on this basis.

However, by exception, performance fees are calculated before Swing Pricing is applied so that the fund is not rewarded for performance not linked to the investment strategies applied (furthermore, the application of performance fees to a "swung" net asset value per share would reduce the effect of Swing Pricing in proportion to the performance allocation ratio, thus reducing the effects of Swing Pricing in terms of fair treatment of investors). Total performance paid to investors thus includes both the effects of Swing Pricing and any variable remuneration of the management company. The methodology must be duly documented and all calculations auditable.

4.2 Swing Pricing accounting

In the general case where the methodology used does not allow a price to be deduced for each security in the portfolio, Swing Pricing is obtained by applying the corresponding amount to an adjustment account.

In the specific case where the methodology used consists of determining bid prices (in the case of net redemptions) or ask prices (in the case of net subscriptions) for each security in the portfolio, Swing Pricing can be obtained by applying those prices to the valuation of each relevant holding.



APPENDIX 1. GLOSSARY

- **Swing Pricing:** A mechanism by which the net asset value is adjusted upwards (or downwards respectively) if the change in liabilities is positive (or negative) in such a way as to reduce the cost for remaining investors in the fund of readjusting the portfolio as a result of changes in liabilities.
- **Swing Pricing with a trigger threshold:** This term is preferred over the more ambiguous “partial Swing Pricing”. In the case of Swing Pricing with a trigger threshold, Swing Pricing is applied to all assets but only if the change in net liabilities exceeds a predetermined threshold.
- **Trigger threshold:** In the case of Swing Pricing with a trigger threshold, it is the threshold above which Swing Pricing is applied. Different upward and downward thresholds may be used. Thresholds may be expressed as an amount, a number of units or a percentage of assets.
- **Swing factor:** An adjustment applied to the pricing net asset value, expressed as a percentage of net asset value prior to the application of Swing Pricing.
- **Anti dilution levies accruing to funds:** A mechanism by which entry and exit charges are adjusted upwards (or downwards) if the change in liabilities is positive (or negative) in such a way as to reduce the cost for remaining investors of readjusting the portfolio as a result of changes in liabilities.
- **Anti dilution levies accruing to funds with a trigger threshold:** In this case, the mechanism is only applied if the change in net liabilities exceeds a predetermined threshold.
- **Application threshold for anti dilution levies charges accruing to funds:** The threshold beyond which the mechanism is applied. Different upward and downward thresholds may be used. Thresholds may be expressed as an amount, a number of units or a percentage of assets.

APPENDIX 2. EXAMPLES OF CALCULATION

For illustrative purposes, the following examples are consistent with the principles set out above.

We will use the terms defined previously:

N: Number of units before subscriptions and redemptions

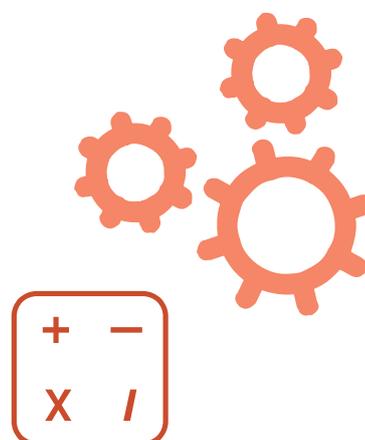
S: Number of units subscribed

R: Number of units redeemed ($R > 0$)

NAV_{gross}: “Gross” unit value, calculated before swing pricing or ADLs are applied

NAV_{swing}: Net asset value per unit after swing pricing is applied

C: Estimated cost of readjusting the portfolio (expressed as an amount)



Example 1

Assumptions

FuND: Fund valued on a mid-price basis with a fixed income benchmark.

Estimated cost: Cost of liquidity only; measured on the basis of daily bid-ask spreads per security; based on an assumption of buying/selling underlying securities in proportion to positions held in the portfolio.

Readjustment cost

- If $S > R$: $C = (S - R) * \sum QuANTITY_i * (ASK_i - MID_i) / N$
- If $S < R$: $C = (R - S) * \sum QuANTITY_i * (MID_i - BID_i) / N$

where $QuANTITY_i$, BID_i , ASK_i and MID_i , represent the quantities and bid, ask and mid prices of securities held by the fund.

Swung net asset value per share

- If $S > R$: $NAV_{swung} = NAV_{gross} + \sum QuANTITY_i * (ASK_i - MID_i) / N = \sum QuANTITY_i * ASK_i / N$
- If $S < R$: $NAV_{swing} = NAV_{gross} - \sum QuANTITY_i * (MID_i - BID_i) / N = \sum QuANTITY_i * BID_i / N$

This amounts to calculating the net asset value on the basis of bid or ask prices.

Example 2

Assumptions

FuND: Fund valued on a mid-price basis with a eurozone credit benchmark.

Estimated cost: Cost of liquidity only; the management company estimates an average quarterly bid-ask spread for the eurozone credit market; based on an assumption of buying / selling underlying securities in proportion to the benchmark.

Readjustment cost

- If $S > R$: $C = NAV_{gross} * (S - R) * SPREAD / 2$
- If $S < R$: $C = NAV_{gross} * (R - S) * SPREAD / 2$

where $SPREAD$ represents the average bid-ask spread.

Swung net asset value per share

- If $S > R$: $NAV_{swung} = NAV_{gross} * (1 + SPREAD / 2)$
- If $S < R$: $NAV_{swing} = NAV_{gross} * (1 - SPREAD / 2)$

This amounts to applying a swing factor of a half spread.

Example 3

Assumptions

FuND: Flexible euro equity fund.

Estimated cost: Tax only (applicable on sales and in only one country); based on an assumption of buying / selling underlying securities in proportion to positions held in the portfolio.

Readjustment cost

- If $S > R$: $C = 0$
- If $S < R$: $C = NAV_{gross} * (R - S) * TAX * EXPO_CTRY$

where TAX is the applicable tax (as a %) and $EXPO_CTRY$, is the fund's current exposure to the country in question (as a %).

Swung net asset value per share

- If $S > R$: $NAV_{swung} = NAV_{gross}$
- If $S < R$: $NAV_{swing} = NAV_{gross} * (1 + TAX * EXPO_CTRY)$

This amounts to applying only a downward swing factor.

Example 4

Assumptions

FuND: Bond fund.

Estimated cost: Cost of liquidity only; measured on the basis of the difference between transaction prices and valuation prices; based on actual transactions carried out to readjust the fund.

Readjustment cost

- If $S > R$: $C = \sum QuANTITY_i * (TRANSACTION_i - VALUATION)$
- If $S < R$: $C = \sum QuANTITY_i * (VALUATION - TRANSACTION_i)$

where $QuANTITY_i$, $VALUATION$ and $TRANSACTION_i$, relate to securities actually traded so as to readjust the fund.

The French asset management association
(*Association Française de la Gestion Financière – AFG*)
represents and promotes the interests of third-party
portfolio management professionals.

It brings together all asset management players
from the discretionary and collective portfolio management segments.
These actors manage more than €4,000 billion worth of assets,
i.e. a quarter of continental Europe's portfolio management market.

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Published by the Asset Management division of AFG
Adina Gurau Audibert, Head of Asset Management Division | T : +33 (0) 44 94 94 31 | a.gurau.audibert@afg.asso.fr
