

We are pleased to submit our thoughts and general observations in connection with the efforts by the staff of the Securities and Exchange Commission to craft proposals to address recent problems suffered by money market funds.

Mutual fund arbitrage has once again raised its ugly head. This time it was offshore institutions, which reportedly sold over \$100 billion in money fund assets, using, in effect, the dollar NAV to guarantee a price that was otherwise unlikely to be supported in the relevant securities markets.

Money funds offer a source of funding for corporate America and a competitive option for average Americans' cash needs, but the incentives under which large mutual fund management companies operate distort their good judgment.

In the midst of the turmoil created by The Reserve Fund's "breaking the buck," large institutional (sovereign) investors arbitrated money markets by reportedly selling over \$100 billion in assets in a given day. This was an unfair and one-sided action by institutional investors, as they stole money from small investors and mystified money market fund sponsors. No market around the globe can support these types of sales, and the Investment Company Act should not be used as a vehicle to enable this type of mistreatment of retail investors.

Two major problems come to mind as one reviews the past year: 1) individual mutual funds are not able to support the greater good of all investors, and 2) large institutions should not be allowed to arbitrage the share prices of funds subject to regulation under the Investment Company Act.

While the Investment Company Institute's recommendations attempt to address these issues, they will fail to prevent this from happening in the future. Two things took place that frightened the money fund world: Firstly, The Reserve Fund broke the buck because of a large holding in Lehman Brothers' paper, and secondly, offshore institutions sold huge positions in money fund holdings thereby severely depressing and largely freezing the short-term securities market. Unfortunately the Lehman paper had a high credit score by all rating agencies at the time it was purchased, so the recent call for quality standards would have had no impact. The Reserve Fund simply exhibited poor judgment and questionable behavior that clearly should be investigated. I would suggest there are already laws that prohibit some activities alleged at The Reserve Fund. Huge institutions should not be able to escape the market impacts they impose on any mutual fund.

I would suggest forcing large mutual fund and money market trades to bear their own transaction costs.

Once news of The Reserve Fund's debacle became known in Asia, sovereign funds there chose to reduce their US holdings by selling money fund shares rather than Treasuries. These market participants knew that even the US Treasury market would not bear \$100 billion in sales in a single day. This was, in effect, an attack on US financial institutions.

To defend against this type of mass redemption in the future, we should force the institutional investors to bear the market impact of their transactions. This can be done two ways:

- 1) Delivery of securities in-kind, and
- 2) “Swing” pricing

Naysayers will suggest that delivery in-kind could further impact the market. This is true, but these institutions are sophisticated and will act according to the changed incentives. We must remove the damaging incentive behind the trade. By removing the ability to arbitrage the NAV, these institutions (which themselves dwarf our country’s average fund company) would see the trade’s incentive removed.

Delivery in-kind would have a number of positive effects. Panics are often caused by increased velocity of sell orders. In this case, forcing an in-kind redemption would require back office planning for the delivery, likely adding a day to the receipt. This would force the owner to find its own buyer for the securities and, most importantly, to bear the cost of the trade (market impact). To further protect shareholders we would suggest allowing the fund to exclude the 10% most liquid securities for trades, then to deliver a prorated portion, allowing the shareholders some protection from the action of a large shareholder.

In Europe a process known as “swing pricing” is common (see attached ALFI whitepaper). This strategy is implemented for trades that exceed 3% of a fund’s AUM. It allows the fund (any fund, not just money funds) to sell securities and deliver the NAV-trading cost (including market impact) to the shareholder whose actions precipitated the sale. This at least protects the other shareholders from bearing the transaction cost, while forcing the institutional investor to consider its impact on the entire portfolio. Indeed this is a benefit for both small and long-term investors.

Either of these strategies could have an important role in protecting the average shareholder, regardless whether that shareholder is part of a pension plan or is a worker saving for retirement.

The current money fund recommendations limit new entrants into the industry while supporting the behemoths whose past conduct has been the root of the problem.

I urge you to return to the goals of the Investment Company Act and protect small investors and require that the industry address the real issues.

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Reports and
Guidelines

Swing Pricing





Contents

	<i>Page</i>
Section 1 – Introduction and terms of reference	2
Section 2 – Glossary of terms	3
Section 3 – Swing pricing – An overview	4
Section 4 – Calculating the swing factor	6
Section 5 – Pros & Cons of Swing Pricing	7
Section 6 – Operational considerations	8
Section 7 – Single share classes, multi share classes and pooling	10
Section 8 – Performance considerations	12
Section 9 – Audit and legal considerations	13



SECTION 1 - SWING PRICING

INTRODUCTION, TERMS OF REFERENCE AND KEY PRINCIPLES

In 2004 the CSSF published Circular 04/146 on Market Timing and Late Trading. To assist members, ALFI issued a guidance paper that provided practical advice on the subject.

The ALFI Market Timing Working Group (ref. F5) was asked to look at practical ways in which some of the recommendations included in the paper could be implemented. Swing pricing has been identified as a possible means of compensating a fund for the dilution effect of frequent trading which is also a characteristic of market timing activity. A group was created to consider the pros and cons of swing pricing and to develop guidance on how this technique can be implemented should it be deemed appropriate for a given investment fund.

This paper outlines the findings of the Group

Scope and terms of reference

The primary purpose of this paper is to understand the issues and limitations relating to swing pricing and to provide considered responses to such issues. It is not, however, within the terms of reference of the Group to consider the pros and cons of swing pricing relative to other methods of dealing with dilution or market timing. Moreover, the Group has not been asked to recommend swing pricing, or any other tool, as an industry standard. In the event that a promoter decides to implement swing pricing, the paper will provide practical guidance relating to the key issues to be considered and to recommend standards of best practice as endorsed by ALFI.

Key principles

Two main principles evolved as the study progressed and the paper was compiled. Firstly, there should only be one NAV reported for all external performance and comparison purposes. Therefore if swing pricing is employed it is the swung price that is reported. This is based on the premise that the evolution of a fund's NAV and ultimate return to investors is impacted by various factors above and beyond the performance of the investment manager. Examples of such factors include the policy for pricing securities, the application of fair value pricing and the accounting policies and conventions adopted by the fund.

The second key principle is that swing pricing combats dilution at a fund level. Although this ultimately benefits the investor, it is not an investor level tool such as a back or front end investor specific levy. Consequently, the benefit of swinging the NAV is realised by the fund and in the case of a multi-share class fund, is attributed to all of the fund's share classes on the same basis as with any fund level revenue or capital item.

SECTION 2 - GLOSSARY OF TERMS

Summarised below are the definition of key terms used in this paper. The concepts are further developed in Section 3.

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 NAV per share, that occurs as a result of shareholder transactions dealt at a NAV that do not reflect the dealing costs associated with security trades undertaken by the investment manager.

Full swing

The NAV is adjusted each time there is capital activity. The direction of the swing is determined by the net capital flows of the day.

Partial swing

The NAV is swung as for full swing but only when a pre-determined net capital activity threshold (i.e. the swing threshold) is exceeded. Partial swing is also sometimes referred to as semi-swing pricing. For consistency, "partial swing" will be used throughout this document.

Swing threshold

The net capital flow, expressed in percentage terms of the NAV, required to trigger the NAV swing process where partial swing pricing is employed. Factors influencing the determination of the swing threshold are described in Section 3

Swing factor

The amount by which the NAV is swung when the swing pricing process is triggered. The swing factor is normally described as a basis point value. (See Section 4 – Components included in the swing factor)

SECTION 3 - SWING PRICING – AN OVERVIEW

The issue - dilution

A characteristic of frequent trading is that transaction costs increase and this dilutes the value of existing shareholders' interests in a single-priced fund, such as a SICAV or FCP. This fall in value happens because the single price at which investors buy and sell the fund's shares only reflects the value of its assets. It does not take account the dealing costs that arise when the portfolio manager has to trade as a result of money flowing into or out of the fund incurring a spread on the underlying securities. In other words, the charges incurred fall not on the client who has just traded, but on all investors in the fund.

The costs associated with an active shareholder will impact the value of the fund and therefore all long-term shareholders suffer to some extent. As investment horizons have reduced in recent years, the dilution impact of trading costs on investment funds is emerging as a key challenge within the industry.

It is worth noting that whilst swing pricing is particularly relevant to single-priced funds, dilution can also occur in a dual priced fund to the extent that the spread between the fund's bid and offer NAV does not reflect all the underlying security dealing costs.

Swing pricing – a method of counteracting dilution

The CSSF published Circular 04/146 and ALFI has issued a guidance paper on Market Timing and Late Trading. Whilst both documents describe various methods of combating dilution, this paper is limited to explaining swing pricing.

Swinging a fund's NAV price is an attempt to pass on the cost of underlying capital activity to the active shareholders and thus to protect long term investors from costs associated with capital movements. However, it must be understood that swing pricing affords protection against dilution at the fund level and is not designed to address specific shareholder transactions.

The operational process

The primary operational considerations associated with swing pricing comprise:

1. Should full or partial swing be adopted?
2. If partial swing is adopted, what is the appropriate swing threshold for a particular fund?
3. Once the decision is made to swing the NAV, what is the appropriate swing factor for a particular fund?

Each of these questions is dealt with below.

1. Full or partial swing

Generally, swing pricing operates such that once the net capital flow is known the NAV is swung using one of the following methods:

(a) **Full swing:** The price is swung on every dealing date on a net deal basis regardless of the size of the net capital flow. No threshold is therefore applied in the full swing model.

(b) **Partial swing:** The process is triggered, and the NAV swung, only when the net capital flow exceeds a predefined threshold known as the "swing threshold".

The pros and cons of full and partial swing are considered in Section 5. At a high level, however, the key questions to consider are equal treatment of shareholders; the relationship between capital flows and underlying investment activity; operational complexity and the potential impact on the different entities in the distribution chain.

2. Factors determining the swing threshold

In principle, the swing threshold should reflect the point at which a net capital flow triggers the investment manager to trade a fund's securities. As an example, the policy would state that a net capital movement greater than X% would trigger swing pricing. Factors influencing the determination of the swing threshold might include:

- (a) Fund size
- (b) The type and liquidity of securities in which the fund invests
- (c) The costs, and hence the dilution impact, associated with the markets in which the fund invests
- (d) 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

Ideally the application of swing pricing should be mechanistic and triggered on a consistent basis.

3. Determining the appropriate swing factor

Generally, swing pricing operates such that once the net capital activity is known for a given dealing date and the swing pricing process is triggered, the NAV is swung on the following basis:

- Net inflows- the price used to process all transactions is adjusted upwards by the swing factor to a notional offer price
- Net outflows- the price used to process all transactions is adjusted downwards by the swing factor to a notional bid price

There are two main approaches to determine the amount by which the NAV is swung once the swing process is triggered as outlined below.

Approach One

The first approach is to use actual bid and offer spreads together with actual costs relating to the relevant underlying security transactions to reflect the swing factor. This is achieved by valuing the portfolio of investments using both bid and offer prices. Actual transaction costs are captured and added to or deducted from the NAV price depending on the net capital movement, giving a revised NAV price. This might be difficult to apply in practice, bearing in mind the following considerations:

- Bid and offer prices may not be quoted on certain exchanges depending on the type of security;
- Thinly traded securities may not have a current market price;
- There may be accounting systems limitations that prevent the calculation of a bid, offer and mid NAV;
- The extent to which it is possible to capture actual transaction costs (e.g. broker and transaction costs) and apply them to the swing factor in a timely manner for a daily valued fund;
- The costs associated with systems enhancements required to achieve the aforementioned points.

Approach Two

An alternative approach is to calculate the NAV using the standard method defined in the prospectus and then apply the swing factor (see section 4 calculating the swing factor) to arrive at the dealing NAV. The issues that need to be considered are:

- Determining an appropriate swing factor;
- Periodic validation of the spread;
- Monitoring the portfolio for changes in composition.

Finally, a variation on the methods described above is to develop a model that uses a combination of actual elements to be included in the swing factor (e.g. actual transaction and dealing costs) and an estimated component (e.g. an estimate for the bid/offer spread on the underlying securities).



SECTION 4 - CALCULATING THE SWING FACTOR

The bid / offer spread is a key factor to be included in the swing factor. If it is not possible to calculate a NAV based on the bid and offer prices of underlying securities, then an estimate of the bid / offer spread applicable to the market in which the securities are traded would be reasonable.

Additionally, the following items should be considered when deriving the swing factor:

1. Net broker commissions paid by the fund;
2. Custody transaction charges;
3. Fiscal charges (e.g. stamp duty and sales tax);
4. Foreign exchange costs where relevant.

Other points to be considered include:

- The tiering of the swing factor to reflect the size of the net capital flow thus taking account of the sliding scale of broker costs associated with trade size. For example, larger trades might result in better broker arrangements.
- The sale of a less liquid security could impact the market price if the resulting security trade is of sufficient size. Although difficult to quantify, arguably this element could be included in the swing factor.
- If the fund's NAV is calculated on a T+1 basis, it might be possible to include the actual costs associated with investment activity. However, for funds valued intraday, this would not be possible and a basis point estimate would have to be calculated to cover broker, transaction and fiscal charges.

Periodic verification of the swing factor

It is recommended that the swing factor should be monitored to ensure reasonability when compared to the charges incurred and should be revised as and when necessary. The objective is to ensure that the swing factor is consistent with the fund's security and investment profile, the markets in which it invests and the various cost components identified above. This should be undertaken by a swing pricing committee under the supervision of the fund's Board of Directors or equivalent responsible body. Once determined, it is recommended that back testing is performed using historic data to validate both the threshold and the swing factor. Similarly once swing pricing is used as part of the daily pricing process, both the threshold employed and the swing factor should be periodically reviewed for suitability.

SECTION 5 - CONCEPTUAL CONSIDERATIONS

The pros and cons of swing pricing

In deciding whether or not to introduce swing pricing, there are various factors that need to be taken into account. The significant advantages and disadvantages of this tool are summarised below:

Advantages

- Is complementary to single-priced funds that are more commonly available within the mutual fund industry. Single NAV pricing is also regularly used in systems employed within transfer agents, fund accountants and distributors' operations;
- Reduces the drag on performance from capital activity and therefore protects long term investors;
- Protects against dilution at the fund level;
- Acts as a deterrent against frequent trading activity;
- Acts as a deterrent against market timing activity.

Disadvantages

- Whilst the fund is protected, swing pricing is a relatively blunt instrument in that it does not address individual shareholder activity;
- Fairness to investors – without a client specific swing mechanism, certain investors will unduly benefit or suffer owing to the actions of other investors as of the relevant dealing day;
- Swing pricing may not be transparent to investors;
- Ordinarily increases performance volatility in the short term;
- Large transactions from an investor(s) are always likely to trigger a price swing.

The relative merits of full swing pricing

If it is decided that swing pricing is the appropriate tool for a given fund, the next question is whether full or partial swing should be adopted. The relative merits of full versus partial swing are considered below.

Advantages of full swing	Disadvantages
<ul style="list-style-type: none"> • Transparent and easy to understand. Therefore relatively easy to explain to sales and marketing teams and clients 	<ul style="list-style-type: none"> • Greater NAV volatility as the price is swung each dealing day. However if a fund is constantly growing, the NAV will always tend to offer pricing (and vice versa for a shrinking fund). Hence, if a fund is consistently experiencing net capital flows in one direction, full swing could actually reduce NAV volatility
<ul style="list-style-type: none"> • Consistent treatment of shareholder transaction on all dealing dates 	<ul style="list-style-type: none"> • Small net capital flows may not require the investment manager to trade. This leads to the investment manager retaining a small cash balance in the fund. In such circumstances swinging the NAV is not justified as the fund does not incur any trading costs.
<ul style="list-style-type: none"> • Always benefits the fund 	<ul style="list-style-type: none"> • Increased risk of swinging the price the wrong way due to the late capture of capital activity or an error in processing shareholder transactions.

The relative merits of partial swing pricing:

Advantages	Disadvantages
<ul style="list-style-type: none"> • As the capital flow must exceed the swing threshold before the NAV price is swung, there is a lower exposure to NAV miscalculations as a result of operational errors compared to using full swing. 	<ul style="list-style-type: none"> • Determining and monitoring the appropriate swing threshold is onerous.
<ul style="list-style-type: none"> • As the price is not swung on each valuation date there is normally a lower impact on NAV volatility and fund performance 	

SECTION 6 - OPERATIONAL CONSIDERATIONS

Objective

When debating whether to implement 'swing pricing', consideration should be given to the implications on the production and publication of NAV prices to ensure that there are no adverse consequences for recipients further down the process chain (e.g. transfer agent, newspapers, etc.). NAV delivery will typically be dependent upon the times set for deal cut-off and the valuation point. Swing pricing will introduce the additional factor being the time required for the transfer agent to consolidate the day's dealing (capital) activity.

Dealing Information

A partial swing model requires the capital flows for a fund to be known before determining whether to swing the NAV price on any particular dealing day. This can be either a total monetary amount or a percentage of total net assets. Unit orders are more problematic to value than consideration based orders and normally require that their value is estimated using the last available NAV price. The consolidation of all dealing activity on any given day may be time consuming depending on the number of orders received by the transfer agent. As this information is required before it can be determined whether or not to swing the NAV of the fund this may delay the completion of the pricing process.

Swing Percentage/Capital Threshold Verification

The Board of Directors is responsible for determining the swing factor and the swing threshold. Although the prospectus will detail the swing pricing mechanism (see Section 9), there should be no obligation to disclose details of the swing threshold and or factors. A swing pricing committee can be put in place to confirm periodically the capital thresholds as well as the swing percentages. Board approval of the levels should also be considered. Consultation with the investment manager is recommended.

Other operational issues to be considered

- Market holidays when the fund is open for capital trading – should we swing the price? This should follow the criteria agreed to swing the price on a normal dealing day;
- Variable expenses – they should normally be based on swung prices;
- Fair value pricing and interaction of swing pricing – it is recommended that the swing factor should be applied to the fair value NAV;

- Fund of funds and funds investing in other single priced securities – the NAV for a fund-of-funds investing in single price securities or funds should have a swing factor equivalent to the entry charges or transaction costs of acquisition;
- Basis of fee calculations – should performance, management and other NAV based fees be calculated based upon the un-swung NAV or swung NAV? This question is developed in the next section.

Recording the swing factor

The last point raises the broader question as to the accounting treatment when adjusting for the swing factor. When calculating the NAV, the production process might not allow a further adjustment, to introduce the swing factor, once the NAV has been determined. Therefore it may be necessary to make the swing adjustment outside of the main fund accounting systems on the valuation date. The swing adjustment would then be posted in the next NAV valuation within the capital account of the fund using the capital movement information provided by the transfer agent.

Both methods of accounting for the swing factor are valid, the results will be the same regardless of the method employed. The pros and cons are set out in table (i).

Table (i)

Pros & cons of the two methods when accounting for swing pricing

	One-Line Adjustment	Outside of Fund
Pros	<ul style="list-style-type: none"> Fund Accounting NAV is the same as dealing NAV Easy to implement NAV fluctuations may make the impact to variable expenses immaterial 	<ul style="list-style-type: none"> No impact to variable expenses Parallel processing possible so less impact to NAV delivery The net benefit to the fund can easily be tracked by reference to the fund-level "swing adjustment".
Cons	<ul style="list-style-type: none"> Potential impact to NAV delivery due to sequential processing requirements If the fund is growing there may be a significant impact on variable expenses 	<ul style="list-style-type: none"> Fund accounting NAV is not the same as dealing NAV Requirement to make fund level adjustment when processing capital share activity Technology builds required

As noted above, both methodologies are equally valid and the option selected will largely be dependent on workflows and system limitations and, if applicable, any restrictions that may exist in the prospectus/agreements regarding the basis of charging NAV based fees.



SECTION 7 - SINGLE SHARE CLASSES, MULTI SHARE CLASSES AND POOLING

As noted in the introduction, dilution is the reduction in the value of shares in a single-priced fund that occurs whenever an investor buys or sells shares in the fund.

In the case of a fund with a single share class the costs associated with an active shareholder will impact the future value of the fund and therefore all shareholders suffer to some degree from the impact of an active shareholder.

Swinging fund NAV prices is an attempt to pass on the cost of underlying activity to the active shareholders and protect buy and hold investors from costs associated with capital movement.

Funds with a single share class

NAV prices could swing according to net dealing activity within the fund. A net subscription will lead to the NAV price per share swinging upwards to offer, and a net redemption will lead to the NAV per share price swinging downwards to bid. This swing isolates buy and hold investors from the impact of any trades within the fund associated with the net capital movement.

The benefits and costs of swinging prices are not necessarily spread evenly across all active shareholders, with the activities of one investor having potential financial impact on other active investors. For example, consider the impact of a large subscriber on the returns of a smaller redeemer on the same day. The net deal at fund level is a subscription, and so the NAV per share price is increased to compensate the fund for the future transaction and investment costs associated with investing this net subscription. The subscriber pays a higher price for the shares he has purchased. The price he pays is not impacted by the activities of the redeeming shareholder and therefore he receives no benefit or lower costs as a result of the redemption activity. The redeeming shareholder however will benefit from the fact that the NAV has been increased, and will receive a higher than anticipated level of proceeds from his redemption. This additional benefit is received, indirectly, from the subscribing shareholder. As the NAV is always swung according to the net capital flow, the overall objective of eliminating dilution of the fund is always achieved.

In summary, and in comparison to a fund without any provision for swinging prices:

- The fund and the long term investors are better off, as there is no impact as a result of transaction and investment costs incurred from investing / disinvesting subscription / redemption proceeds;
- Active shareholders transacting in the direction of the net capital movement of the day will incur dilution of their investment, though the level of dilution is not necessarily made better or worse by the impact of activity of other shareholders;
- Shareholders transacting in the opposite direction to the net capital movement at fund level will benefit from a swinging price.

Funds with multiple share classes

If we accept the above premise of active shareholders impacting the value of other active shareholders, we can apply the same premise to a fund with multiple share classes. Economic activity takes place at fund level, so the decision to swing prices should take place only after considering all activity at fund level.

The single share class fund example is extended. We will see situations where one share class within a fund has a net subscription, with another share class having a net redemption. Assuming the net activity of the two share classes is significant enough to trigger a swinging prices adjustment, the active shareholders in one share class will suffer dilution on their subscription / redemption. The economic benefit of this dilution being passed to the fund (to compensate it for future transaction and investment costs) and to any other shareholder transacting in the opposite direction to the net deal. In this case these other shareholders could be within the same share class, or in any other share class within the fund.

Funds operating a pooled investment structure

Again we extend the premise considered above. If we agree that the activities of investors in one share class can impact the activities of investors in other share classes, then we can apply the same logic to funds investing in common pools. Economic activity takes place at pool level, so the decision to swing prices should take place only after considering all activity at pool level. Without swinging prices the activities of one fund will impact the performance of another fund sharing a common pool (transaction and investment costs are incurred at pool level, and so the impact of such costs is shared between all pool owners). Swinging prices at pool level will allow costs associated with capital activity to be isolated to active funds, leaving passive funds sharing the same pools unaffected.

The same principle applies whereby economic cost and benefit will be transferred between active shareholders within different funds sharing common pools, but that no shareholder is worse off than he would have been had he transacted in isolation, and that certain active shareholders and all passive shareholders are better off than they would have been without any provisions for dilution.

It is true to say that swinging prices at pool level will impact the value of top level funds holding in these pools, in effect automatically swinging top level fund prices sufficiently to compensate for any dilutionary impact. As noted previously economic activity takes place at pool level, so the decision to swing prices should take place only after considering all activity at pool level.

Summary

The costs and benefits associated with the capital activity of an individual shareholder within a share class will impact other shareholders;

- within the same share class,
- within other share classes within the same fund (in the case of multiple share classes), or
- within other funds or share classes sharing a common pool (in the case of funds using a pooled investment structure).

Swinging prices within funds and pools will not eliminate this transfer of cost / benefit between shareholders. However swinging prices will spread costs and benefits more equitably between categories of investors, and will isolate buy and hold investors (and underlying fund performance) from the future costs associated with investment / disinvestment of capital activity.

SECTION 8 - PERFORMANCE CONSIDERATIONS

Swing pricing and the impact on performance

The primary objective of swing pricing is to combat dilution. The successful use of this technique as an anti-dilution mechanism should improve fund performance for the benefit of the long-term investor. However, there are certain points to consider.

Swing pricing could increase the tracking error (i.e. the difference in return based on the swung NAV compared to benchmark) and potentially result in an increase in NAV volatility as discussed in section 5. This creates a number of issues that are outlined below:

1. Risk assessment

The introduction of swing pricing is likely to increase the level of tracking error between a fund and the index against which it is benchmarked. This may in turn result in investors incorrectly estimating the inherent level of portfolio risk of a given fund. This is explained when considering that performance is measured using the swung NAV which is likely to contain an increased level of volatility compared to the returns of the unswung NAV price. It is therefore important to clearly disclose the use of 'swing pricing' so that persons using performance data are informed.

2. Competitor and peer performance analysis

The swing effect will (to some extent) mask the investment manager's performance in the short-term if performance is measured using the swung NAV.

The use of the swung price is considered most appropriate for investment performance reporting because investors are impacted by the return of the fund as a whole and not just the performance of the manager. Since the purpose of swing pricing is ultimately to protect the long-term investor, the impact of swing pricing on performance is seen as a valid component of long-term return to investors.

This point is based on the strongly supported view that the users of NAV data are only interested in one NAV – the traded NAV – swung or unswung as the case may be.

Fund performance reporting - external

Again, the same problem exists for performance reporting in monthly fact sheets and marketing material. Based on the arguments above, use of the swung price should be used and disclosure of the unswung price would be optional.

Fund performance reporting – internal

Performance reporting for internal purposes could be based on either the unswung NAV or the swung NAV. However, contributors have argued that Investment Managers are generally more concerned with the performance divergence between the NAV based upon Valuation Point prices and closing market prices than the impact of swing pricing.

Disclosure of information – external reporting

Transparency and clarity of information is critical for the investor. However, a key concern is that by providing too much information, it might lead to confusion. Similarly if partial swing is used, a frequent trader may be able to determine the probability that the price will swing if too much information is made available.

A question therefore arises regarding the amount of information that should be provided in the fund's prospectus, financial statements and supplementary information included in investor performance reporting. The recommendation would be that the principles of swing pricing is something that should be disclosed to investors but the details should remain confidential to ensure that this information cannot be used to the detriment of the fund.

Performance fee calculations

Performance fees, unlike NAV based fees, are specifically calculated to remunerate the investment manager for out-performance of a benchmark. Further, because performance fees are ordinarily crystallised on a specific date, the use of the swung price could significantly distort the performance fee calculation. As such using the unswung NAV price will more accurately reflect the actual level of performance fees, however the unswung price will not necessarily be the published NAV price or that obtained by shareholders trading on days when swing pricing is invoked. It is therefore particularly important when using the unswung price for calculating performance fees, that this is clearly disclosed in the funds Prospectus (see 'Prospectus disclosure' on page 20).

Given the sensitivity of performance fees, care should be taken to ensure that the calculation methodology is documented and mechanically applied by the fund administrator. The Management Company or Directors of the fund are ultimately responsible for the on-going monitoring and consistent application of the performance fee calculation process and policy. The verification of the accurate and consistent application of the calculation methodology should be checked as part of the work performed in the fund's annual audit.

SECTION 9 - POTENTIAL AUDIT ISSUES AND LEGAL CONSIDERATIONS

As a general comment, it should be noted that it might be necessary to review a fund's Articles of Incorporation to ensure that they do not restrict the introduction of swing pricing.

1. Transfers in kind (TIK)

Although a capital inflow/outflow by definition, a TIK involves the transfer of assets, and not cash, and as such it is not considered appropriate to include TIK activity for the purposes of determining net capital flows and whether the NAV should be swung. Furthermore, it is also considered inappropriate to apply the swung NAV to process the in species transaction. A consideration, therefore, is that two NAVs could be applied to TA activity on a given dealing date.

This last point raises two concerns; namely which NAV will be considered to be the official NAV and what is the legal impact of this approach.

Where the TIK is a subscription, management should ensure the make-up of the portfolio is appropriate for the fund and if a significant portion of the TIK will need to be sold to align the overall portfolio, then the use of a swing price becomes more relevant. Additionally, if there is a significant portion of cash within the TIK, management should consider applicability or otherwise of a swing price for all or part of the transaction. (GW to comment). When considering TIKs it has been assumed that the value of TIK will be sufficiently large so that the costs incurred are immaterial and would not impact existing shareholders if paid for by the fund.

2. Financial reporting

In the event that the price is swung on a financial reporting date (semi-annual or annual), the question arises as to which net asset value should be included within the statements themselves - the swung or traded NAV or the un-swung NAV. Financial statements represent a description of the underlying assets and liabilities of the fund at a specific point in time as valued in accordance with the rules of the Fund as defined in the prospectus and in accordance with Luxembourg accounting principles. Since the swing factor itself is not reflective of any actual asset and liability held by the fund, it is not considered appropriate to disclose the factor on the face of the financial statements. It would, however, be acceptable to disclose the swung NAV in a footnote to the financial statements that also provides a reconciliation of the traded NAV to that disclosed within the primary statements.

In the event that Approach 1 as referred to in section 3 is utilised (i.e. portfolio values are adjusted to reflect bid or offer price together with estimated transaction costs), then the swung NAV could be used as the basis for financial statement purposes if the swung pricing methodology is appropriate vis-à-vis the prospectus and Luxembourg

regulations since the swing mechanism reflects a change in the basis of valuation of specific assets rather than a lump-sum estimate.

3. Swing errors

Within the context of Circular 2002/77, materiality thresholds have been established with regard to NAV errors. At present, an error caused by incorrect or late booking of capital activity is unlikely to cause a material net asset value error since such errors would usually not cause any or only minimal impact to the net asset value of the Fund. In the event that capital stock activity is miss-processed and as a result an incorrect decision is made to swing or not swing the price, then the impact of the (non) application of the swing factor should also be considered in determining materiality of the error. The introduction of swing pricing, therefore, introduces a heightened level of risk that capital activity processing issues could cause an NAV error.

It is understood that whether the incorrect or late booking of capital flows should be considered an error should be determined in conjunction with the auditor of the Fund taking into account the principles of the CSSF circular 2002/77.

4. Prospectus Disclosure

The primary aim of prospectus disclosure should be to provide information as to the fact that swing pricing is applied consistently and the basic methodology to be applied, but should not provide sufficient information for certain investors to seek to manipulate the process by, for example, splitting large trades over a number of days. It is recommended that prospectus disclosure should consider the following specific areas:

1. Ability of the Fund to swing the NAV;
2. A brief description of the basis of the swing mechanism – i.e. that the fund will at certain specific levels of net capital flows adjust the NAV to take into account costs of dilution;
3. It is not considered necessary, or appropriate, to disclose either thresholds or factors applied. Similarly, separate disclosure of this information to certain investors should be prevented;
4. The funds to be included/excluded - for example, money market funds would likely be excluded from any swing pricing process;
5. When a Fund wishes to charge performance fees on the basis of the unswung NAV price, the fund's Prospectus and relevant supporting legal agreements should contain the appropriate disclosure.

5. German Tax Reporting

Since Aktiengewinn (AG) is reported as a percentage of net assets, should the swing adjustment be taken into consideration when calculating AG? One could take the argument a step further and ask whether the adjustment should be split, pro rata, as part of the overall German Tax calculation. Since the swing adjustment is a mechanism to recoup trading costs associated with large investments/divestitures and is not a true reflection of the underlying securities' value and the associated gains and losses of the fund, one could argue not to include the adjustment in the calculation of AG. If German tax were to be taken into consideration, there would probably be an adverse impact to the ultimate NAV delivery.

Since the concept of swing pricing is not one that is recognised within German tax regulation, there is currently no formal position supported by any official guidance regarding its application to required reporting. As such, exclusion of any swing factor in this regard could be considered appropriate or, at least, could currently not be challenged from a technical perspective. It is felt that a further driver for exclusion of the swing factor from German tax reporting is operational efficiency - this is especially so since the impact to the tax calculation of inclusion/exclusion is expected to be negligible, if any. Consulting with your funds' tax adviser for a final opinion on the issue of German Tax is the advisable approach taking into account any further clarification surrounding this point issued subsequent to this paper.

