

White Paper Series: Swing Pricing

Swing Pricing protects long-term investors from the impact of transaction costs resulting from subscription and redemption activity into funds. Swing Pricing is implemented in a clear and systematic fashion.

What is Investor Dilution?

Whenever a fund buys or sells an asset, it has to pay certain costs to execute the transaction. For example, the purchase price of an asset (offer price) and sale price of an asset (bid price) often differ. This difference is termed the 'bid/offer spread'. Other transaction costs may include dealing fees, commissions and taxes. These trading costs reflect a loss of value to the fund, and therefore the more a fund trades, the more the value of an investor's position is reduced or diluted. When an investor subscribes or redeems a significant proportion of a fund's Net Asset Value (NAV¹), a large number of transactions will need to be executed within that fund—to either invest that subscription into eligible portfolio assets, or to sell portfolio assets to raise cash to meet that redemption. In the absence of anti-dilution measures, the trading costs incurred by subscribing or redeeming investors are borne proportionally by all investors in a given fund. This means that the value of all existing investor's holdings decreases due to the actions of other investors, and is called "Investor Dilution".

Barings has implemented processes which prevent existing investors from being significantly affected by trading costs caused by other investors entering or leaving a portfolio. One method Barings uses is Swing Pricing.

What is Swing Pricing?

"Swing Pricing" is a mechanism designed to manage Investor Dilution. Swing Pricing aims to allocate trading costs to just the subscribing or redeeming investors that are responsible for activity, rather than to all existing investors in the fund.

How does Swing Pricing work?

Swing Pricing works by adjusting the NAV of a fund to exclude the estimated impact of Investor Dilution. When swing pricing is implemented, the NAV of the fund is adjusted up or down by a set amount (the "Swing Factor"). On any day when there are net subscriptions into the fund, the Swing Factor increases the NAV price so that transacting investors are charged a higher unit price to compensate for the trading costs that would otherwise cause Investor Dilution. Likewise, on any day where there are net redemptions, the Swing Factor reduces the NAV price so that transacting investors transact at a lower unit price to mitigate Investor Dilution.

Full vs Partial Swing Pricing

"Full Swing Pricing" occurs on every day there are net subscriptions or net redemptions in a fund, regardless of the size of the net amount. Similar to many other managers, Barings implements "Partial Swing Pricing" and not Full Swing Pricing. Partial Swing Pricing works in exactly the same way as Full Swing Pricing, except that swing pricing only occurs on days when net subscriptions or net redemptions are greater than a pre-determined threshold (the "Swing Threshold"). We consider Partial Swing Pricing more appropriate than Full Swing Pricing, as net subscriptions or net redemptions under the Swing Threshold would not trigger material Investor Dilution (i.e. below the Swing Threshold, the fund manager may not trade any material amount of the portfolio of assets to meet net subscriptions or net redemptions).

Determining the Swing Factor and Swing Threshold

Swing Factors and Swing Thresholds vary per fund and may vary over time. For example, bid/offer spreads on portfolio assets may change over time according to general market conditions. Lower weighted-average bid/offer spreads would imply a lower Swing Factor. The Barings Pricing Committee is responsible for the ongoing monitoring and approval of Swing Factors and Swing Thresholds. Typically, these values are calculated and approved by this committee at least once per quarter, but may be adjusted more frequently at times to respond to market-specific circumstances. The continuous review of trading costs will ensure that the Swing Factors and Swing Thresholds are set at appropriate levels.

- Swing Factors and Swing Thresholds apply to all investors equally.
- Swing Factors may be different for net subscriptions or net redemptions (i.e. transaction taxes, such as stamp duty, may only be payable on purchase or sale of assets).
- Swing Factors may be provided to investors on request. For further information, please contact your Barings representative.
- Swing Thresholds are not provided to investors, as doing so may enable the investor to 'game' the swing pricing mechanism (i.e. subscribe or redeem at a value just below the Swing Threshold). Such practices could materially disadvantage other investors.

1. NAV is the market value of one share (or unit) of a fund. This amount is derived by dividing the total value of all the assets in the fund's portfolio (less any liabilities) by the number of fund shares (or units) outstanding.

Impact on Investors

See the table below for the impact on subscribing, redeeming and non-dealing investors who remain in a fund.

	Net subscriptions above Swing Threshold <i>NAV price swings upward</i>	Net subscriptions/redemptions below Swing Threshold <i>NAV price not adjusted</i>	Net redemptions above Swing Threshold <i>NAV price swings downward</i>
Investor subscribing	Subscribing investor pays estimated transaction costs via subscribing in at a higher swung NAV (example below).	Transaction costs deemed immaterial. No additional costs passed on to subscribing investor.	Subscribing investor (on a day where there are net redemptions) benefits from subscribing at a lower swung NAV.
Investor redeeming	Redeeming investor (on a day when there are net subscriptions) benefits from redeeming at a higher swung NAV (example below).	Transaction costs deemed immaterial. No additional costs passed on to redeeming investor.	Redeeming investor pays estimated transaction costs via redeeming out at a lower swung NAV.
Investors remaining in the fund	Estimated transaction costs borne by dealing investors. No material impact on remaining investors.	Transaction costs deemed immaterial. No material impact on remaining investors.	Estimated transaction costs borne by dealing investors. No material impact on remaining investors.

Funds that apply Swing Pricing

Typically Swing Pricing applies for a significant number of Barings' open-ended comingled fund products. However there are some funds to which Swing Pricing does not apply. For questions on whether or not Swing Pricing applies for a particular fund, please contact your Barings representative.

Does Swing Pricing apply to switching/exchange trades?

Yes. Where fund documents allow switching between funds, investors should be aware that Swing Pricing may apply, if one or both of the funds' NAVs are swung on that particular day. This should be considered no different to any subscription or redemption, as the investment manager on the exiting or entry fund will still have to incur costs in the case of material inflows/outflows. Switching intra-fund (i.e. remaining fully invested in the same fund, but switching from one share class to another) may be done at a swung price. However, there will be no net effect to the dealing investor if that investor remains fully invested in the same fund—as Swing Pricing is applied for all share classes in a fund, not at an individual share class level.

EXAMPLE APPLICATION OF SWING PRICING

Pre-dilution-adjustment NAV per share	100.00 USD
Total fund AUM [A]	100,000,000 USD
Swing Factor ¹	0.50%
Swing Threshold ² (%) [B]	5.00%
Swing Threshold (\$) [A*B]	5,000,000 USD

Investor Flows

Investor 1—Subscription ³	1,000,000 USD
Investor 2—Subscription	40,000,000 USD
Investor 3—Redemption ⁴	-20,000,000 USD
Net Subscription/(Redemption)	21,000,000 USD

Determine whether or not to apply Swing Pricing

Net Subscription (21 million USD) is greater than Swing Threshold (5 million USD). Therefore, **apply Swing Pricing**.

Determine post-dilution-adjustment NAV per share

Net subscriptions, therefore Swung NAV = pre-dilution-adjustment NAV per share multiplied by (1 + Swing Factor)
= 100 USD * (1 + 0.5%) = **100.50 USD**.

Hence, Investors 1, 2 and 3 subscribe/redeem at a NAV price of 100.50 USD.

(If there were net redemptions above the Swing Threshold, Swung NAV = pre-dilution-adjustment NAV per share x (1 - Swing Factor) = 99.50 USD)

- Swing Factor of 0.5% is illustrative only and may not represent actual Swing Factors, which vary per fund and may vary over time. Please contact your Barings representative to obtain a current Swing Factor.
- Swing Threshold of 5.0% is illustrative only. Swing Thresholds are not provided to investors to prevent 'gaming'. 5.0% is not—and therefore should not be considered by investors as—a typical Swing Threshold. Actual Swing Thresholds may be considerably larger or smaller than 5.0%.
- Even though this individual subscription is below the Swing Threshold, aggregate net subscriptions for the day are greater than the Swing Threshold. Hence, Investor 1 subscribes into the fund at the swung NAV, despite the relative size of Investor 1's subscription trade.
- Suppose this redemption was -40 million USD and not -20 million USD. Under this scenario, net subscriptions would be 1 million USD (= 1 million + 40 million - 40 million), which would be below the Swing Threshold of 5 million USD. In this amended scenario, swing pricing would not apply.

Barings is a \$354+ billion global financial services firm dedicated to meeting the evolving investment and capital needs of our clients and customers. Through active asset management and direct origination, we provide innovative solutions and access to differentiated opportunities across public and private capital markets. A subsidiary of MassMutual, Barings maintains a strong global presence with business and investment professionals located across North America, Europe and Asia Pacific.*

IMPORTANT INFORMATION

Any forecasts in this document are based upon Barings opinion of the market at the date of preparation and are subject to change without notice, dependent upon many factors. Any prediction, projection or forecast is not necessarily indicative of the future or likely performance. Investment involves risk. The value of any investments and any income generated may go down as well as up and is not guaranteed by Barings or any other person. **PAST PERFORMANCE IS NOT NECESSARILY INDICATIVE OF FUTURE RESULTS.** Any investment results, portfolio compositions and or examples set forth in this document are provided for illustrative purposes only and are not indicative of any future investment results, future portfolio composition or investments. The composition, size of, and risks associated with an investment may differ substantially from any examples set forth in this document. No representation is made that an investment will be profitable or will not incur losses. Where appropriate, changes in the currency exchange rates may affect the value of investments. Prospective investors should read the offering documents for the details and specific risk factors of any Fund discussed in this document.

Barings is the brand name for the worldwide asset management and associated businesses of Barings LLC and its global affiliates. Barings Securities LLC, Barings (U.K.) Limited, Barings Global Advisers Limited, Barings Australia Pty Ltd, Barings Japan Limited, Baring Asset Management Limited, Baring International Investment Limited, Baring Fund Managers Limited, Baring International Fund Managers (Ireland) Limited, Baring Asset Management (Asia) Limited, Baring SICE (Taiwan) Limited, Baring Asset Management Switzerland Sarl, and Baring Asset Management Korea Limited each are affiliated financial service companies owned by Barings LLC (each, individually, an "Affiliate"), together known as "Barings." Some Affiliates may act as an introducer or distributor of the products and services of some others and may be paid a fee for doing so.

NO OFFER:

The document is for informational purposes only and is not an offer or solicitation for the purchase or sale of any financial instrument or service in any jurisdiction. The material herein was prepared without any consideration of the investment objectives, financial situation or particular needs of anyone who may receive it. This document is not, and must not be treated as, investment advice, an investment recommendation, investment research, or a recommendation about the suitability or appropriateness of any security, commodity, investment, or particular investment strategy, and must not be construed as a projections or predictions.

In making an investment decision, prospective investors must rely on their own examination of the merits and risks involved and before making any investment decision, it is recommended that prospective investors seek independent investment, legal, tax, accounting or other professional advice as appropriate.

Unless otherwise mentioned, the views contained in this document are those of Barings. These views are made in good faith in relation to the facts known at the time of preparation and are subject to change without notice. Individual portfolio management teams may hold different views than the views expressed herein and may make different investment decisions for different

clients. Parts of this document may be based on information received from sources we believe to be reliable. Although every effort is taken to ensure that the information contained in this document is accurate, Barings makes no representation or warranty, express or implied, regarding the accuracy, completeness or adequacy of the information.

OTHER RESTRICTIONS:

The distribution of this document is restricted by law. No action has been or will be taken by Barings to permit the possession or distribution of the document in any jurisdiction, where action for that purpose may be required. Accordingly, the document may not be used in any jurisdiction except under circumstances that will result in compliance with all applicable laws and regulations.

Any service, security, investment or product outlined in this document may not be suitable for a prospective investor or available in their jurisdiction.

Any information with respect to UCITS Funds is not intended for U.S. Persons, as defined in Regulation S under the U.S. Securities Act of 1933, or persons in any other jurisdictions where such use or distribution would be contrary to law or local regulation.

This is not an offer to sell or an invitation to apply for any product or service of Barings and is by way of information only. Before investing in any product we recommend that retail investors contact their financial adviser.

With respect to UCITS funds, the Key Information Document (KIID) must be received and read before investing.

All other relevant documents relating to the product such as the Report and Accounts and the Prospectus should also be read. The information in this document does not constitute investment, tax, legal or other advice. Compensation arrangements under the Financial Services and Markets Act 2000 of the United Kingdom will not be available in respect of any offshore funds.

Copyright and Trademark

Copyright © 2020 Barings. Information in this document may be used for your own personal use, but may not be altered, reproduced or distributed without Barings' consent.

The BARINGS name and logo design are trademarks of Barings and are registered in U.S. Patent and Trademark Office and in other countries around the world. All rights are reserved.

FOR PERSONS DOMICILED IN SWITZERLAND:

This is an advertising document. The Swiss representative and paying agent is BNP Paribas Securities Services, Paris, succursale de Zurich. Documents such as the prospectus, Key Investor Information Documents (KIID), articles of association, annual and semi-annual reports are available from www.barings.com. For Swiss investors, the documents may be obtained free of charge from BNP Paribas Securities Services, Paris, succursale de Zurich, Selnaustrasse 16, 8002 Zurich, Switzerland.

LEARN MORE AT BARINGS.COM

*As of September 30, 2020

20-1378444