



Portfolio Disclosure and Market Making Models

The portfolio disclosure and market making model adopted by a fund will depend on the type of fund. The model adopted by traditional passive index tracking funds/ETFs is an external market making model whereby they appoint a third party market maker to provide liquidity and the issuer discloses to the market the full portfolio on a daily basis. Market makers use this daily portfolio information to determine the prices at which they buy and sell units on the exchange.

Some funds do not wish to disclose their full portfolio on a daily basis as they believe this creates an unacceptable risk to the fund and holding investors, by disclosing the ongoing investment strategy for the fund. This is often the case with funds that are actively managing their portfolio, rather than passively tracking an index. Actively managed funds that are trading on Chi-X and do not want to disclose their portfolio on a daily basis, may adopt either:

- (a) an external market making model with material portfolio information (MPI) disclosure OR
- (b) an internal market making model.

Funds using either of these models must provide an intraday indicative net asset (iNAV) value and disclose their full portfolio on a delayed basis (e.g. at least quarterly with a delay of no more than two months), rather than the daily basis mentioned above.

There are some key differences between these models, although both have delayed full portfolio disclosures, and some key features and risks for each model are outlined below.

The MPI model: requires a daily disclosure of material portfolio information – this is a pricing basket agreed between the fund and the market maker that contains a selection of assets that are expected to accurately track the fair value of the fund intraday and therefore enable the market maker to determine the price at which it buys and sells units on the exchange. Funds adopting an MPI model must also disclose the correlation between the MPI and the full portfolio on at least a quarterly basis. The correlation is reported as tracking error - the lower the tracking error the higher the correlation between the MPI and the full portfolio.

The Internal Market Making Model: Unlike external market making models where a third party market maker is appointed, under an internal market making model the fund issuer adopts the role of market maker itself on the fund's behalf. The fund issuer appoints an execution agent, often referred to as a market making agent, to enter bids and offers in the fund units throughout the day on behalf of the fund. Under this model the fund itself retains the profits/loss from the market making activities. Certain risks arise for internal market making as outlined below.

Market makers appointed under external market making models may participate and receive fee relief under Chi-X's market maker fee programme. Internal market making models are not eligible for fee relief.



This table outlines some of the key features of the three main liquidity models for Chi-X quoted funds.

	<i>External Market Making</i>	<i>External Market Making with Material Portfolio Information (MPI)</i>	<i>Internal Market Making (IMM)</i>
EXAMPLE FUND	Traditional ETF	Active ETF	Active ETF
MARKET MAKER	Issuer appoints a third party market maker	Issuer appoints a third party market maker	Issuer acts as market maker on behalf of the fund, and appoints an execution agent to enter orders into the market
PROFIT/LOSS FROM MARKET MAKING	Retained by the third party market maker	Retained by the third party market maker	Retained by the fund
ISSUER DISCLOSURES	Daily NAV	Daily NAV	Daily NAV
	Daily full portfolio	Daily material portfolio information	NO daily portfolio information
		Intraday <u>iNAV</u>	Intraday <u>iNAV</u>
		Full portfolio at least quarterly (with a delay of no more than 2 months)	Full portfolio at least quarterly (with a delay of no more than 2 months)
	Correlation between the MPI and full portfolio at least quarterly		

Risks of the MPI model

There is a risk to transacting investors that unit prices determined by reference to the pricing basket during the trading day will not accurately represent the fund’s value. This risk could arise due to, for example, market volatility or stale prices in the underlying assets.

Investors cannot see the full portfolio holdings of the fund on a daily basis. Investors must rely on the expertise of the product issuer and the market maker to determine a pricing basket that will accurately track all material price movements of the fund portfolio.

Risks of the internal market making model

The fund will bear the risk of market-making activities, which may result in a profit or loss.

Investors cannot see the full portfolio holdings of the fund on a daily basis. Investors must rely on the issuer as market maker to provide bids and asks that will accurately track the fund portfolio. The fund may not always be able to make a market in times of uncertainty about values and conflicts may arise between the fund v investors or transacting investors v existing investors, for instance in relation to widening of spreads.

Funds with an internal market making model need to demonstrate how they manage these matters.