

While investors often focus on the Total Expense Ratio (TER) of their ETFs, it is only one component of the Total Cost of Ownership (TCO), or the true cost of ETF investing. This leaflet will look into the components of TCO and demonstrate ETF investors can save by trading Asia, in Asia.

## What is TCO?

The TCO can be divided into trading and holding costs:

$$TCO =$$

Trading costs	+	Holding costs
<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Bid/ask spread</li> <li><input checked="" type="checkbox"/> Broker commissions</li> </ul>		<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Tracking difference                             <ul style="list-style-type: none"> <li>• TER</li> <li>• Securities lending revenue</li> <li>• Investment level taxation</li> <li>• Transaction costs</li> <li>• Other factors</li> </ul> </li> <li><input checked="" type="checkbox"/> Fund and investor level taxation                             <ul style="list-style-type: none"> <li>• Dividend and interest withholding tax (WHT). See further details below</li> </ul> </li> </ul>

## Tax saved is alpha created

ETF investors spend considerable time optimising their investment strategies, but few are aware that tax reduction can be a way to maximise return. Learn more about this significant yet overlooked source of alpha:

### Three tier taxation\*

	<p><b>Investment level</b></p> <p>Taxes incurred to an ETF for its underlying investments, including stamp duty and WHT on interest, dividends received or capital gains incurred</p>
	<p><b>Fund level</b></p> <p>WHT on dividends, interests and other distributions paid by the ETF. Access to reduced or nil WHT dependent on domicile of the fund</p>
	<p><b>Investor level</b></p> <p>Taxes on an individual investor's income, capital gains, estate tax etc. dependent on the investor's profile</p>

### Location matters

Tax costs vary widely depending on domicile of the investor, domicile and type of ETF, and the jurisdiction of the underlying portfolio investments. With its tax treaty network and domestic tax rules, Hong Kong offers benefits for investors seeking to gain exposure to Asian markets.

ETF	After tax return received by Hong Kong investors
Hong Kong	\$100
Ireland	\$100
Luxembourg	\$100
US	\$70

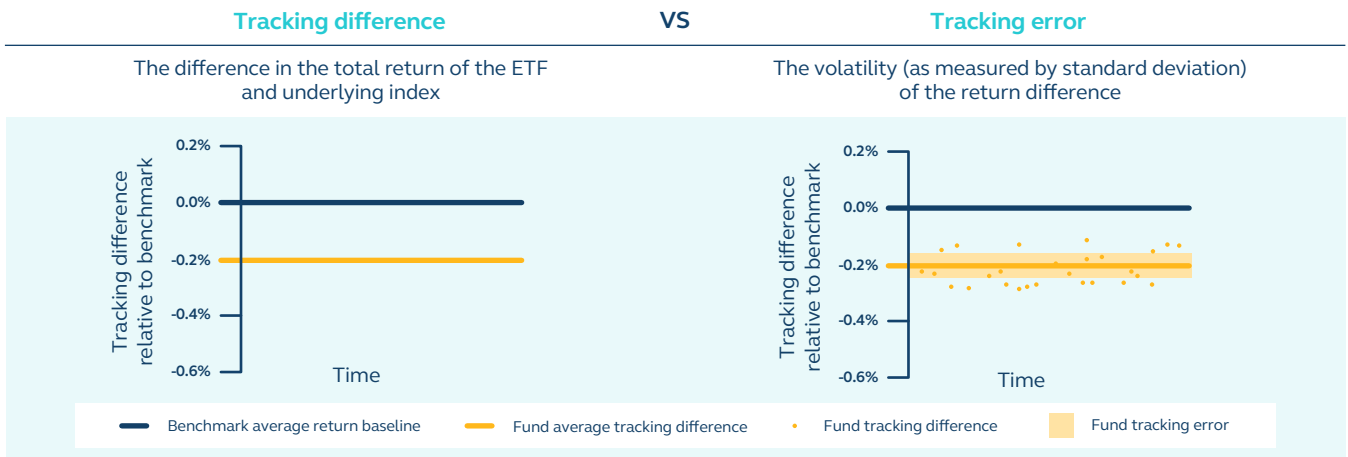
Source: EY report

Example: For Hong Kong investors, by investing in MSCI Australia Index through a Hong Kong ETF, the after tax return from ETF distribution should be 100% of the ETF distribution before three tier taxation, versus 70% using a US ETF.

\*Three tier taxation includes portfolio level, ETF level and investor level, and does not take into account any fees to intermediates.

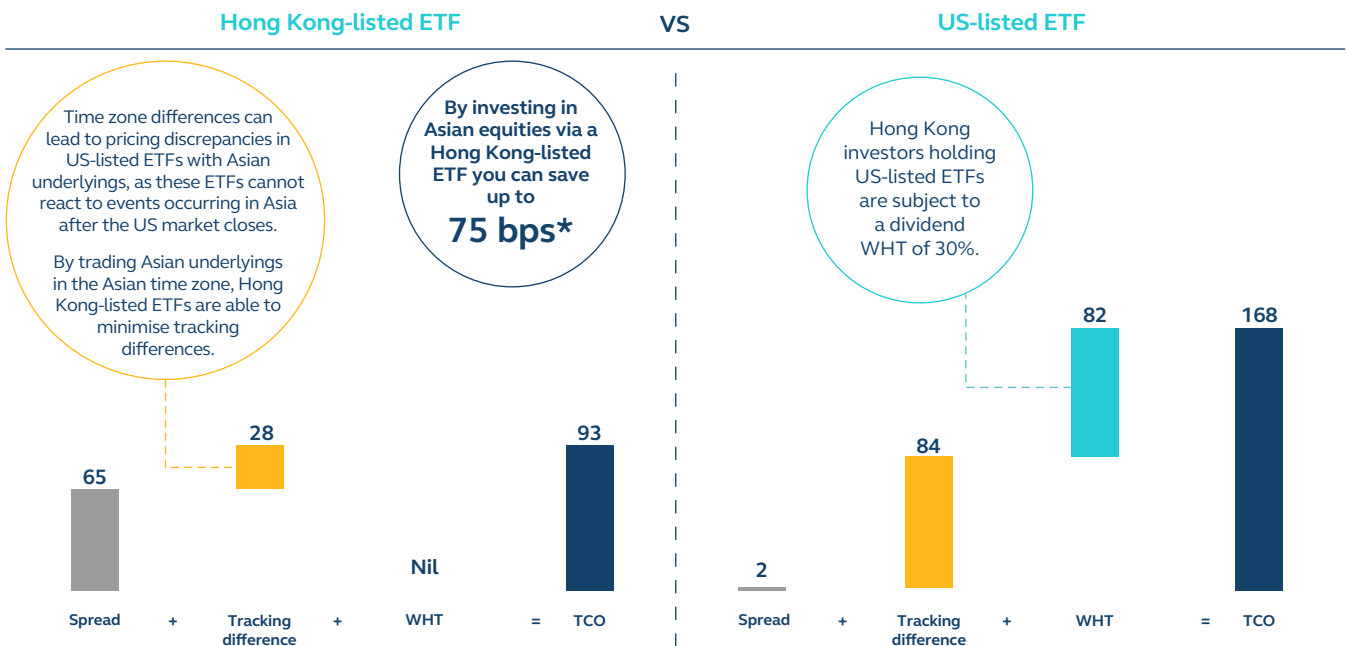
# Tracking difference vs tracking error

Tracking difference, an important component of TCO, is often confused with tracking error. Tracking error is the standard deviation of tracking differences. It measures the volatility of tracking differences.



## TCO case study: Hong Kong ETF vs US ETF

The following case study compares the TCO incurred by gaining exposure to Asian equities through ETFs listed in Hong Kong versus ETFs in the US. All figures are expressed in basis points.



\*The case study and all figures are provided for demonstrating the calculation of TCO and are for reference only. They do not constitute investment advice.

### Assumptions:

- Hong Kong ETF: iShares Core MSCI AC Asia ex Japan Index ETF (3010 HK); US ETF: iShares MSCI All Country Asia ex Japan ETF (AAXJ US)
- Tracking difference is measured over a period of 12 months as of 31 August 2022. Data sourced from BlackRock.
- Spread represents the median spread from 1 September 2021 to 31 August 2022. Data sourced from Bloomberg.
- Dividend yield based on dividend payments in the 12 months up to 31 August 2022. Data sourced from Bloomberg.

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