

Reserves Management

The investment environment was exceptionally volatile in 2022, with prices of multiple asset classes falling at the same time, undermining the conventional risk mitigating effects of holding bonds and equities. This was also the only time in almost half a century during which returns from equities, bonds and major currencies against the US dollar all recorded negative returns simultaneously. Against this background, the Exchange Fund recorded an overall negative investment return of 4.5% in 2022. As compared to the sharp losses suffered by the majority of multi-asset funds in the market during the year, the Exchange Fund's performance has shown that the HKMA's diversified long-term asset allocation as well as defensive measures and strategic adjustments taken in response to changes in the external environment were effective in mitigating the destructive impact of market storms.



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The Exchange Fund

The Exchange Fund's primary objective, as laid down in the Exchange Fund Ordinance, is to affect, either directly or indirectly, the exchange value of the currency of Hong Kong. The Fund may also be used to maintain the stability and integrity of Hong Kong's monetary and financial systems to help maintain Hong Kong as an international financial centre. The HKMA, under the delegated authority of the Financial Secretary and within the terms of the delegation, is responsible to the Financial Secretary for the use and investment management of the Exchange Fund.

Management of the Exchange Fund

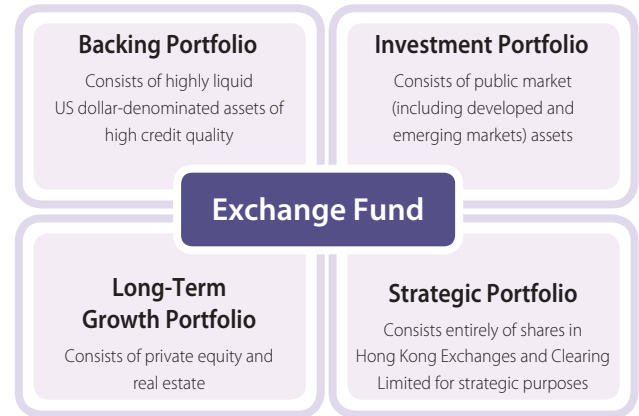
Investment objectives and portfolio structure

The Exchange Fund Advisory Committee (EFAC) has set the following investment objectives for the Exchange Fund:

- (i) To preserve capital;
- (ii) To ensure that the entire Monetary Base, at all times, is fully backed by highly liquid US dollar-denominated assets;
- (iii) To ensure that sufficient liquidity is available for the purposes of maintaining monetary and financial stability; and
- (iv) Subject to (i)–(iii), to achieve an investment return that will help preserve the long-term purchasing power of the Fund.

These objectives take full account of the statutory purposes of the Exchange Fund, and are incorporated into the portfolio structure and the target asset mix of the Fund (Figure 1).

Figure 1 Portfolio segregation of the Exchange Fund



Broadly speaking, the Exchange Fund has two major portfolios: the Backing Portfolio (BP) and the Investment Portfolio (IP). The BP holds highly liquid US dollar-denominated assets to provide full backing to the Monetary Base as required under the Currency Board arrangements. The IP invests primarily in the bond and equity markets of the member economies of the Organisation for Economic Co-operation and Development to preserve the value and long-term purchasing power of its assets.

To better manage risks and enhance returns in the medium and long term, the HKMA diversifies part of the Exchange Fund's investments in a prudent and incremental manner into a wider variety of asset classes. This includes emerging market and Mainland bonds and equities, private equity (including infrastructure) and real estate. Emerging market and Mainland bonds and equities are held under the IP, while private equity and real estate investments are held under the Long-Term Growth Portfolio (LTGP). The target asset allocation of the LTGP is determined concurrently with that of other asset classes, subject to prudent risk management principles and portfolio diversification strategy.

The Strategic Portfolio, established in 2007, holds shares in Hong Kong Exchanges and Clearing Limited that have been acquired by the Government for the account of the Exchange Fund for strategic purposes. The Strategic Portfolio is not included in the assessment of the Fund's investment performance because of its unique nature.

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Placements with the Exchange Fund

The Exchange Fund, from time to time, accepts placements by the Fiscal Reserves, Government funds and statutory bodies. The interest rate is generally linked to the performance of the IP¹, with the major exception of the Future Fund², which links its interest rate to the return of both the IP and the LTGP in accordance with the portfolio mix. The portfolio mix of the Future Fund between the IP and the LTGP was about 35:65 in 2022.

The investment process

The investment process of the Exchange Fund is underpinned by decisions on two types of asset allocation: the strategic asset allocation and the tactical asset allocation.

The strategic asset allocation, reflected in the investment benchmark, represents long-term asset allocation given the investment objectives of the Exchange Fund. Guided by the strategic allocation, assets are tactically allocated in an attempt to achieve an excess return over the benchmark. This means the actual allocation is often different from the benchmark (or strategic) allocation. The differences between the actual and benchmark allocations are known as “tactical deviations”. While the benchmark and tracking error³ limit are determined by the Financial Secretary in consultation with the EFAC, tactical decisions and allowable ranges for tactical deviations are made and set by the HKMA under delegated authority. Within the ranges allowed for tactical deviations, portfolio managers may assume positions to take advantage of short-term market movements.

Investment management

Direct investment

The HKMA’s Exchange Fund Investment Office houses the Exchange Fund’s investment and related risk management functions. Exchange Fund Investment Office staff members directly manage about 70% of the investments of the Exchange Fund, comprising the entire BP and part of the IP. The part of the IP managed internally includes a set of portfolios invested in global fixed-income markets and various derivative overlay portfolios implementing macro risk management strategies for the Fund.

Use of external managers

In addition to managing assets internally, the HKMA employs external fund managers to manage about 30% of the Exchange Fund’s assets, including all of its listed equity portfolios and other specialised asset classes. The purpose of engaging external managers is to tap the best investment expertise available in the market to realise sustainable returns, draw on diverse and complementary investment styles, and gain market insights and technical expertise in investment.

Expenditure relating to the use of external managers includes fund management and custodian fees, transaction costs, and withholding and other taxes. The expenditure is determined primarily by market factors and may fluctuate from year to year.

Risk management and compliance

The growing complexity of the investment environment underlines the importance of risk management. The HKMA sets stringent controls and investment guidelines for both internally and externally managed portfolios, and ensures a proper risk monitoring and compliance system is in place. Three lines of defence are in place to implement effective risk management and governance of investment-related activities. Key risk categories (including credit, market, liquidity and operational risks) are regularly monitored, and the risk management process provides a robust framework to support strategic planning and investment diversification.

Responsible investment

The HKMA believes that, by putting an appropriate emphasis on responsible investment and sustainable long-term economic performance, it can better achieve the investment objectives of the Exchange Fund and reduce risks associated with environmental, social and governance (ESG)- related matters of its underlying investments. The HKMA adopts responsible investment by integrating ESG factors into the investment processes for both public and private market investments of the Exchange Fund, underpinned by the guiding principle that priority will generally be given to ESG investments if the long-term risk-adjusted return is comparable with other investments. For more details about the HKMA’s responsible investment framework and implementation, see the *Responsible Investment* chapter of the *Sustainability Report 2022*.

¹ The rate is the average annual investment return of the IP for the past six years, or the average annual yield of three-year Government Bond for the previous year, subject to a minimum of 0% (whichever is higher).

² The Future Fund was established by the Government in 2016 with a view to securing higher investment returns for the Fiscal Reserves to support increasing needs in the future.

³ “Tracking error” measures how closely a portfolio follows its benchmark.

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Performance of the Exchange Fund

The financial markets in 2022

Global financial markets experienced an exceptionally volatile year in 2022, with both the bond and equity markets down notably by 16.2% and 19.8%⁴ respectively.

Major equity indices declined sharply during the year amid soaring inflation, tightening monetary policy and slowing economic growth globally. The S&P 500 Index in the US fell by 19.4%, while the Hang Seng Index in Hong Kong dropped by 15.5%, despite a slight rebound near the end of the year as investors believed inflation and interest rates might have peaked.

As central banks around the world raised interest rates aggressively to combat inflation, major government bond yields continued to surge. Ten-year US Treasury yields rose from 1.63% at the beginning of 2022 to above 4% in the fourth quarter, reaching the highest level since 2008. Inversion of the US treasury yield curve widened further during the year, deepening recession fears.

In the currency markets, the US dollar strengthened considerably against other major currencies in 2022 on the back of consecutive rate hikes by the US Federal Reserve. Other major currencies, including the euro, pound sterling, yen and renminbi, depreciated sharply against the US dollar. In particular, the pound sterling and the yen depreciated by 10.7% and 12.2% against the US dollar respectively.

The performance of major currency, bond and equity markets in 2022 is shown in Table 1.

Table 1 2022 market returns

Currencies	
Appreciation (+)/depreciation (-) against US dollar	
Euro	- 5.8%
Pound sterling	- 10.7%
Renminbi	- 7.9%
Yen	- 12.2%
Bond markets	
Relevant US Government Bond (1–30 years) Index	- 12.2%
Equity markets^a	
Standard & Poor's 500 Index	- 19.4%
DAX Index	- 12.3%
FTSE 100 Index	+ 0.9%
TOPIX Index	- 5.1%
MSCI Emerging Markets Index	- 22.4%
Hang Seng Index	- 15.5%

a. Market performance on equities is based on index price change during the year.

⁴ Based on the Bloomberg Global Aggregate Total Return Index and the MSCI All Country World Index as measured in US dollar terms.

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The Exchange Fund's performance

The Exchange Fund recorded an investment loss of HK\$205.4 billion in 2022. This comprised losses on bonds of HK\$53.2 billion, losses on equities of HK\$80.5 billion (with losses of HK\$61.0 billion from foreign equities, and losses of HK\$19.5 billion from Hong Kong equities), a negative currency translation effect of HK\$40.0 billion on non-Hong Kong dollar assets, and losses of HK\$31.7 billion on other investments held by the investment-holding subsidiaries of the Fund. Separately, the Strategic Portfolio recorded a valuation loss of HK\$8.7 billion.

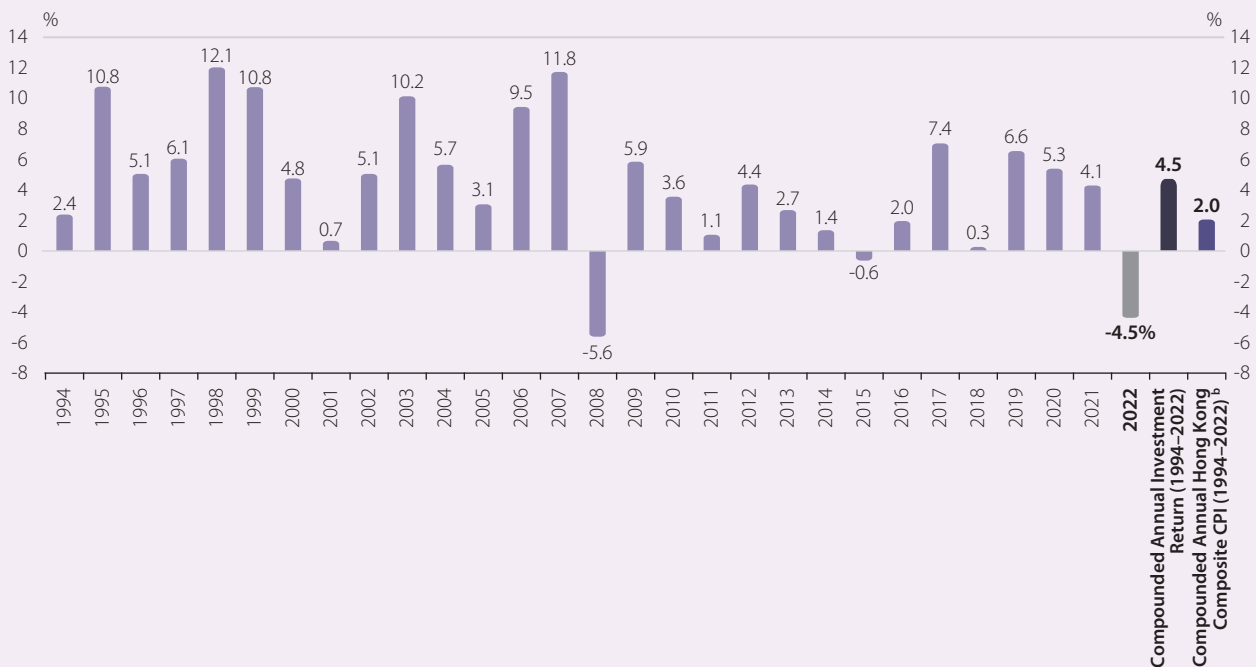
Total assets of the Exchange Fund reached HK\$4,008.0 billion at the end of the year. The market value of investments under the LTGP totalled HK\$484.7 billion, with private equity amounting to HK\$370.0 billion and real estate HK\$114.7 billion. Outstanding investment commitments of the LTGP amounted to HK\$270.8 billion.

The investment return of the Exchange Fund in 2022, excluding the Strategic Portfolio, was -4.5%. The returns of the IP and the BP were -8.6% and -0.4% respectively. The LTGP has recorded an annualised internal rate of return of 12.6% since its inception in 2009.

The annual returns of the Exchange Fund from 1994 to 2022 are set out in Chart 1. Table 2 shows the 2022 investment return and the average investment returns of the Fund over several different time horizons. The average return was 1.5% during 2020–2022, 2.3% during 2018–2022, 2.4% during 2013–2022 and 4.5% since 1994. Table 3 shows the currency mix of the Fund's assets on 31 December 2022.

See pages 173 to 281 for the audited 2022 financial statements of the Exchange Fund.

Chart 1 Investment return of the Exchange Fund (1994–2022)^a



- a. Investment return calculation excludes the holdings in the Strategic Portfolio.
 b. The Composite Consumer Price Index (CPI) is calculated based on the 2019/2020-based series.

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Table 2 Investment return of the Exchange Fund in Hong Kong dollar terms^a

	Investment return ^{b, c}
2022	-4.5%
3-year average (2020–2022)	1.5%
5-year average (2018–2022)	2.3%
10-year average (2013–2022)	2.4%
Average since 1994	4.5%

- a. The investment returns for 2001 to 2003 are in US dollar terms.
b. Investment return calculation excludes the holdings in the Strategic Portfolio.
c. Averages over different time horizons are calculated on an annually compounded basis.

Table 3 Currency mix of the Exchange Fund's assets on 31 December 2022 (including forward transactions)

	HK\$ million	%
US dollar	3,266,400	81.5
Hong Kong dollar	171,602	4.3
Others ^a	570,036	14.2
Total	4,008,038	100.0

- a. Other currencies consisted mainly of the euro, renminbi, pound sterling and yen.