

HONG KONG MONETARY AUTHORITY

2022 Exchange Fund Results

30 January 2023



INVESTMENT OBJECTIVES OF THE EXCHANGE FUND

Investment objectives of the Exchange Fund:

- (1) to preserve capital;
- (2) to ensure that the entire Monetary Base at all times will be fully backed by highly liquid US dollar denominated assets;
- (3) to ensure sufficient liquidity for the purpose of maintaining monetary and financial stability; and
- (4) subject to (1) (3), to achieve an investment return that will preserve the long-term purchasing power of the Fund.



US GOVERNMENT BOND YIELDS SOARED



MAJOR EQUITY MARKETS DIPPED SHARPLY





MAJOR CURRENCIES WEAKENED SIGNIFICANTLY AGAINST USD

Normalised FX Level Against USD (2021 year-end=100)





EXTREMELY CHALLENGING INVESTMENT ENVIRONMENT

The investment environment was exceptionally volatile in 2022, with prices of multiple asset classes falling at the same time, undermining the conventional complementary effects of bonds and equities. This was also the only time in almost half a century where returns from equities, bonds and major non-US dollar FX all recorded negative returns simultaneously. US Treasuries posted their worst performance in nearly half a century.

Performance of different indices in a given year

| | Asset class | 1974 | 1977 | 1981 | 1990 | 1992 | 2000 | 2001 | 2002 | 2008 | 2011 | 2015 | 2018 | 2022 |
|----------|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|--------|--------|
| | MSCI All Country World Index (Developed and Emerging Markets) | N/A | N/A | N/A | -18.6% | -6.7% | -15.1% | -17.3% | -20.5% | -43.5% | -9.4% | -4.3% | -11.2% | -19.8% |
| | MSCI World (Developed Markets) | -27.8% | -2.5% | -7.9% | -18.7% | -7.1% | -14.1% | -17.8% | -21.1% | -42.1% | -7.6% | -2.7% | -10.4% | -19.5% |
| Equities | S&P 500 Index | -29.7% | -11.5% | -9.7% | -6.6% | 4.5% | -10.1% | -13.0% | -23.4% | -38.5% | 0.0% | -0.7% | -6.2% | -19.4% |
| | Hang Seng Index | -60.5% | -9.8% | -4.6% | 6.6% | 28.3% | -11.0% | -24.5% | -18.2% | -48.3% | -20.0% | -7.2% | -13.6% | -15.5% |
| Bonds | Bloomberg Global Aggregate Total Return Index | N/A | N/A | N/A | N/A | 5.8% | 3.2% | 1.6% | 16.5% | 4.8% | 5.6% | -3.2% | -1.2% | -16.2% |
| | Bloomberg US Treasury Index | 7.1% | 2.7% | 9.2% | 8.5% | 7.2% | 13.5% | 6.7% | 11.8% | 13.7% | 9.8% | 0.8% | 0.9% | -12.5% |
| FX | A basket of currencies against USD* | 5.0% | 7.8% | -15.8% | 10.8% | -10.6% | -7.5% | -6.6% | 12.8% | -6.0% | -1.5% | -9.3% | -4.4% | -8.2% |

^{*} Return of DXY Index with reversed signs. The DXY Index indicates the general inter-nation value of USD against a basket of currencies (incl. EUR, JPY, GBP, CAD, etc)



MAINTAINING DEFENSIVE MEASURES

- The majority of mixed-asset funds in the market, irrespective of their investment strategies (i.e. with different bond to equity ratios), suffered significant losses in 2022
- The Exchange Fund registered loss of 4.4% of its assets in 2022

| Common investment portfolios in the market | Investment return 2022* | | | | |
|--|-------------------------|--|--|--|--|
| 20% bonds, 80% equities (more aggressive allocation) | -17.9% | | | | |
| 50% bonds, 50% equities (balanced allocation) | -17.3% | | | | |
| 80% bonds, 20% equities (more conservative allocation) | -16.7% | | | | |
| Exchange Fund | -4.4% | | | | |

^{*} Assuming investment portfolios of different equity-bond mixes being invested in the Bloomberg Global Aggregate Total Return Index and MSCI All Country World Index



INVESTMENT INCOME

| | | 2022 — | | 2021 | 2020 |
|--------------------------------|-----------|------------|---------|-----------|-----------|
| | (1 | unaudited) | | | |
| (HK\$ billion) | Full year | 2H | 1H | Full year | Full year |
| Hong Kong equities* | (19.5) | (11.0) | (8.5) | (21.0) | 4.0 |
| Other equities | (61.2) | 12.0 | (73.2) | 68.8 | 69.9 |
| Bonds | (53.3) | 2.6 | (55.9) | 12.6 | 92.7 |
| Foreign exchange# | (40.1) | (27.3) | (12.8) | 16.8 | 9.6 |
| Other investments [®] | (28.3) | (13.3) | (15.0) | 114.7 | 59.6 |
| Investment (loss)/income | (202.4) | (37.0) | (165.4) | 191.9 | 235.8 |

^{*} Excluding valuation changes of the Strategic Portfolio.

[#] This is primarily the effect of translating foreign currency assets into Hong Kong dollar after deducting the portion for currency hedging.

Including valuation changes of private equity and real estate investments held under the Long-Term Growth Portfolio. This figure reflects the valuations at the end of September 2022. Valuation changes of these investments from October to December are not yet available.



INCOME AND EXPENDITURE

2022 -

2021

2020

| | • | ZUZZ | | 2021 | 2020 |
|---|-----------|-------------|---------|-----------|-----------|
| | (| (unaudited) | | | |
| (HK\$ billion) | Full year | 2H | 1H | Full year | Full year |
| Investment (loss)/income | (202.4) | (37.0) | (165.4) | 191.9 | 235.8 |
| Other income | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 |
| Interest and other expenses | (18.7) | (14.6) | (4.1) | (6.1) | (14.6) |
| Net (loss)/income | (220.9) | (51.5) | (169.4) | 186.0 | 221.4 |
| Fee payment to Fiscal Reserves*# | (35.0) | (14.6) | (20.4) | (93.0) | (69.8) |
| Fee payment to HKSAR Government funds and statutory bodies* | (22.1) | (11.5) | (10.6) | (16.8) | (11.5) |

^{*} The rate of fee payment is 5.6% for 2022, 4.7% for 2021 and 3.7% for 2020.

This does not include the 2022 fee payment to the Future Fund because such amount will only be disclosed when the composite rate for 2022 is available.
(The composite rate was 17.8% for 2021 and 12.3% for 2020. Fee payable to the Future Fund was HK\$58.6 billion for 2021 and HK\$37.2 billion for 2020.)



EXCHANGE FUND ABRIDGED BALANCE SHEET

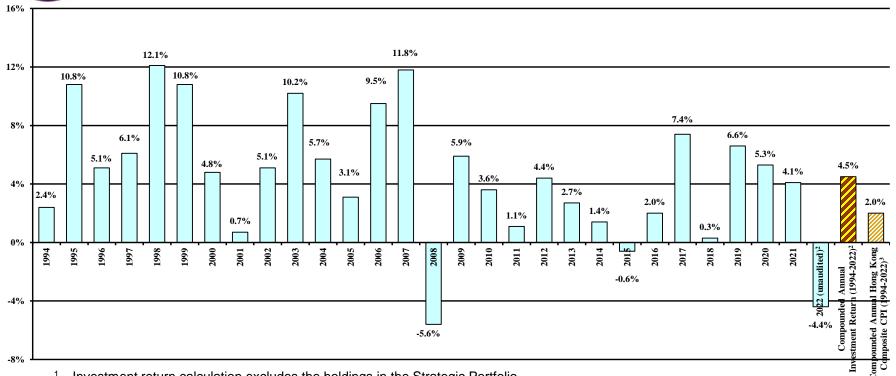
| (HK\$ billion) | At 31 Dec 2022 | At 31 Dec 2021 | Change |
|--|----------------|----------------|--------------|
| ASSETS | (unaudited) | | |
| Deposits | 367.2 | 300.8 | 66.4 |
| Debt securities | 2,774.9 | 3,290.0 | (515.1) |
| Hong Kong equities* | 150.4 | 183.2 | (32.8) |
| Other equities | 470.5 | 561.8 | (91.3) |
| Other assets# | 248.1 | _234.4 | 13.7 |
| Total assets | 4,011.1 | 4,570.2 | (559.1) |
| LIABILITIES AND EQUITY | | | |
| Certificates of Indebtedness | 606.0 | 592.4 | 13.6 |
| Government-issued currency notes and coins in circulation | 13.1 | 13.1 | - |
| Balance of the banking system | 96.2 | 377.5 | (281.3) |
| Exchange Fund Bills and Notes issued | 1,200.3 | 1,148.6 | 51.7 |
| Placements by banks and other financial institutions | 99.5 | - | 99.5 |
| Placements by Fiscal Reserves® | 765.2 | 973.3 | (208.1) |
| Placements by HKSAR Government funds and statutory bodies | 449.0 | 394.3 | 54.7 |
| Placements by subsidiaries | 30.6 | 26.2 | 4.4 |
| Other liabilities | 194.8 | 238.0 | _(43.2) |
| Total liabilities | <u>3,454.7</u> | 3,763.4 | (308.7) |
| Accumulated surplus | 555.5 | 805.9 | (250.4) |
| Revaluation reserve | 0.9 | 0.9 | - |
| Total equity | _556.4 | _806.8 | (250.4) |
| Total liabilities and equity | <u>4,011.1</u> | 4,570.2 | (559.1) |
| * Including shares of the Hong Kong Exchanges and Clearing Limited in the Strategic Portfolio. | | | |

Including fund injection to Exchange Fund's investment holding subsidiaries at a carrying amount of HK\$191.7 billion at 31 December 2022 (HK\$190.1 billion at 31 December 2021).

Including placements by the Future Fund of HK\$255.2 billion at 31 December 2022 (HK\$217.7 billion at 31 December 2021).



INVESTMENT RETURN OF THE EXCHANGE FUND (1994-2022)¹



- ¹ Investment return calculation excludes the holdings in the Strategic Portfolio.
- The return includes the performance of LTGP up to the end of September 2022. The audited full year return will be disclosed in the 2022 annual report.
- Composite CPI is calculated based on the 2019/2020-based series.



INVESTMENT DIVERSIFICATION

• Investment in alternative assets under the Long-Term Growth Portfolio (LTGP) has commenced since 2009. Despite the LTGP recorded a loss in the first three quarters of 2022, however, due to its long-term investment nature, its performance is commonly analysed based on returns over a longer period. LTGP's annualised internal rate of return since inception till end-September 2022 has been good at 13.0%. The market value of the major asset classes are shown in the table below.

As of end-September 2022 (unaudited)

| Asset Classes | Market Value HK\$ billion | | | | |
|----------------|------------------------------|--|--|--|--|
| Private Equity | 364.2 | | | | |
| Real Estate | 116.6 | | | | |
| Total | 480.8 | | | | |

Note: Outstanding investment commitments amounted to HK\$277.1 billion.

OUTLOOK FOR 2023

- Monetary policies of major central banks continue to dominate investment outlook
 - Market attention on peak policy rates set by major central banks; path of inflation is key to the developments
 - Room for further rate hikes despite signs of moderating inflation pressure
- Headwinds on global economic growth
 - Recession fears for major economies
 - Unresolved geopolitical tensions potentially destructive
- Mainland economy may rebound strongly
- Risk and return profiles of bonds improving gradually
- HKMA will continue to manage the Exchange Fund in a prudent manner
 - Retaining flexibility, implementing defensive measures as appropriate, maintaining high liquidity
 - Diversifying investments



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