

Asia Viewpoint

A deep dive into Hong Kong's finances

Hong Kong may be approaching a fiscal turning point

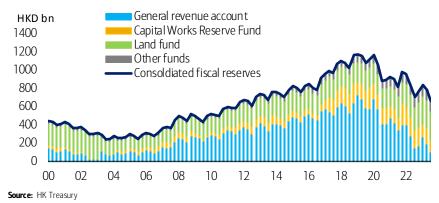
Historically, the fiscal position of the HKSAR government was little in doubt, as tax revenues were supported by substantial land sales. After the Asian Financial Crisis, the HKSAR government ran fiscal surpluses that resulted in large, accumulated savings deposited at the HKMA. However, in the past three years, the record fiscal deficit notably eroded the government's fiscal position.

Although fiscal reserves remain large at HK\$662bn, its breakdown shows that most of this amount is earmarked in funds that cannot be used for recurrent expenditures (**Exhibit 1**). The HKSAR government's main expenditures are conducted through the General Revenue Account (GRA), and by 3Q23, liquid cash flows stood at HK\$112bn. In previous years, the GRA got transfers from the Capital Works Reserve Fund (CWRF). However, with the land premium very weak in 2023, such transfers may be reduced or not possible, given the expanding commitments of the CWRF.

While Moody's downgraded HK's outlook to negative due to its tight credit linkage with China, we think the evolving fiscal dynamics warrant more attention. This note provides a deep dive into the financing operations of the HKSAR government. We examine the long-term trajectory of revenue and expenditure in Hong Kong, and highlight the risk that Hong Kong would likely need to increase debt issuance to help tie over expenditure, similar to much of the developed world. We also discuss how rising debt issuance by the HKSAR government can grow the HKD debt market and help correct the structural imbalance between the supply and demand for HKD debt.

Exhibit 1: Decomposition of Hong Kong's fiscal reserves

Cash levels in the general revenue account is approaching its lowest point since 3Q-2006



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HKSAR: Hong Kong Special Administrative Region

HKMA: Hong Kong Monetary

Authority

GRA: General revenue account

CWRF: Capital Works Reserve Fund

HKGB: Hong Kong Government Bond

LegCo: Legislative Council

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Executive Summary: From structural surplus to rising deficits

Hong Kong historically has had a strong track record of fiscal discipline. Hong Kong's Basic Law stipulates that the government should strive to achieve a fiscal balance and avoid running fiscal deficits. Since the return to sovereignty in 1997, of the 26 full budgets, the HKSAR government has run 18 years of surplus and 8 years of deficit.

Hong Kong engages in deficit spending during economically difficult periods. In the late 90s and the early 2000s, the HKSAR government saw the deficit rise to about 3% of GDP due to the fallout of the Asian Financial Crisis. However, the deficits of that era pale in comparison to the post-COVID era. In FY20/21, the fiscal deficit (after bond issuances) reached over 8%. The budget returned to a surplus of 1% in FY21/22 before deteriorating again to a 4.5% deficit in FY22/23 (Exhibit 2).

Hong Kong's fiscal becomes more difficult as land premium declines. The return of fiscal deficit and the weak revenue from land premium get us looking into the financing model for the HKSAR government. In the past, the market paid little attention to the HKSAR government as it typically recorded years of fiscal surplus. The fiscal surplus is placed with the HKMA to invest in foreign assets.

Long-term demographic trends are also negative. However, with an aging population and an uncertain future of revenue generated from land premiums, we think examining the cash flows of the HKSAR government would increasingly be important and be a topic that fixed-income investors should be acquainted with.

Hong Kong's fiscal resources and buffer remain considerable. Frankly, the policy buffer of the HKSAR government remains massive. Although reduced, the fiscal reserves stand at HK\$661bn (Exhibit 3), or around 25% of GDP, which alone can cover close to 10 months of expenditures. Meanwhile, the government's official sector debt stands at less than 15% of GDP (green bonds, retail and institutional bonds combined). With an average sovereign rating of AA and a very large locally-denominated banking system, there would be no shortage of buyers of HKSAR government debt.

HKGB issuances will likely increase going forward. The government still commands an impressive position of surplus and enormous fiscal policy space, such as broadening the tax revenue base, to address future challenges. However, policy buffers will likely erode over time, and debt financing will likely play an increasing role in addressing future fiscal challenges.

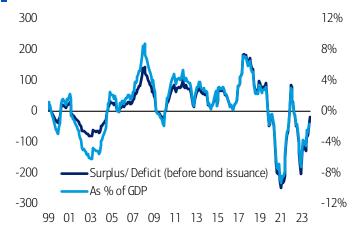
This note provides a **deep dive into the topic of the Hong Kong government's finances**. We will structure the pieces on some basic questions around HK's fiscal setup:

- The different funds the Hong Kong government controls.
- How the funds are interconnected with revenue and spending.
- What are the historical trend and composition of revenue and expenditure?
- Why is there a growing mismatch between revenue and expenditures?



Exhibit 2: Fiscal surplus/ deficits of the HKSAR government (HK\$ Bn)

As of September 2023, Hong Kong's 12-month trailing deficit-to-GDP stands at close to 5% of GDP.

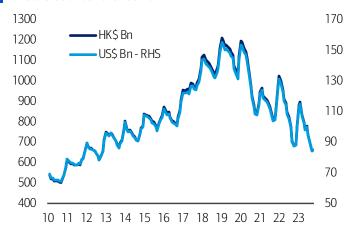


Source: CEIC

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Exhibit 3: Hong Kong SARs fiscal reserves (HK\$ Bn)

By September 2023, the HKMA's fiscal reserves has fallen to HK\$660bn, the lowest levels since November 2012.



Source: CEIC

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Hong Kong's Financial Accounting Basics

The accounting of the Hong Kong SAR government. To understand the Hong Kong's finance, we must first understand the accounting of the HKSAR government. The government consolidates its monthly statement of revenue and expenditure on a cash basis. Revenues, proceeds from bond issuances and financing are calculated as positive cash flows, while expenditures are considered a negative cash flow. The sum positive and negative cash flows result in the surplus/deficit after issuance of green bonds. The net sum would need be added (surplus) or subtracted (deficit) from the fiscal reserves.

The HKSAR government invests most of its fiscal reserves with the HKMA. The HKSAR government conducts fiscal activities through Hong Kong's banking system but most of the fiscal activity ends up on the balance of sheet of the HKMA (**Exhibit 4**). When the HKSAR government runs a fiscal surplus, almost the entirety of the surplus would be placed with the HKMA. Likewise, during periods of fiscal deficits, the HKSAR government would drawdown its fiscal reserves from the HKMA. From the government's perspective, the accumulated surplus is an asset known as fiscal reserves but from the HKMA's perspective, the accumulated fiscal surplus is a liability item known as fiscal placement.

Green bonds versus other Hong Kong government bonds. The mismatch between the monthly changes in fiscal surplus/deficit and the HKMA's fiscal placement are during months of green bond issuances that brings additional revenue from fiscal revenue channels (**Exhibit 5**). Green bonds are different than bonds issued under the institutional and retail program as the revenue from the green bond are considered revenue and hence contributes to fiscal reserves (See section below for more on this topic).

Exhibit 4: Monthly changes in the fiscal positions and the HKMA's fiscal placement (HK\$ Bn)

Monthly change in the HKMA's fiscal placement is almost entirely driven by the government's pattern of revenue and expenditure

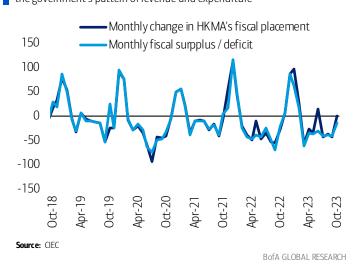
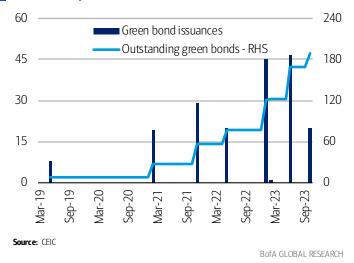


Exhibit 5: Green bond issuances and total volumes (HK\$ Bn)As of FY21/22, the ceiling of the green bond program was set at HK\$2

As of FY21/22, the ceiling of the green bond program was set at HK\$ 200bn and would likely be increased in the near future



The fiscal reserves are also known as the "Consolidated Account". The fiscal reserves are also called the "consolidated account" as it the total of nine different funds, ear-marked for different purposes. Monthly figures of revenue and deficit are available in the consolidated account, but this account's composition is only available on a



quarterly basis¹. The latest quarter filing is available for September 2023. At the time, fiscal reserves stood at HK\$689bn but the breakdown the nine funds are as the following (**Exhibit 6**):

Exhibit 6: Breakdown of the Consolidated Account

Among the funds of the government fiscal reserves, the largest is the Land Fund

	Current Assets (as of 3Q23, HK\$ Bn)	As %
Land Fund	307.54	45%
Capital Works Reserve Fund	138.78	20%
General Revenue Account	111.98	16%
Civil Service Pension Reserve Fund	53.86	8%
Innovation and Technology Fund	29.76	4%
Lottery Fund	22.91	3%
Capital Investment Fund	17.23	3%
Loan Fund	7.01	1%
<u>Disaster Relief Fund</u>	0.13	0%
Total	689.20	100%

Source: HK Treasury

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The amount of cash available for fiscal spending is less than the headline figure for fiscal reserves. The name of the different funds reveals their different purposes. From a fiscal perspective, spending can only be conducted through the General Revenue Account and the Capital Works Reserve Fund, as the rest of the funds are earmarked for specific purposes. If we consider the HKSAR government's consolidated account as a cash balance, the amount of immediate cash available for fiscal spending dropped from HK\$689bn in September 2023 to only HK\$251bn. From a cash perspective, Hong Kong's fiscal buffers are less robust than the headline figure that fiscal reserves suggest.

What is the Land Fund? The Land Fund is a legacy of Hong Kong's colonial period. Before the return to sovereignty, during the Sino-British negotiations over the fate of Hong Kong throughout the 1980s, the Chinese and British sides agreed that 50% of the land sale proceeds would be deposited into the Land Fund, separate from the accounts of the colonial government. At the time, there were concerns from the Chinese side that the colonial government would sell all of Hong Kong's publicly owned land and take the profits back to the UK.

The current status of the Land Fund. Starting in 2016, the Land Fund became the main investor of the Future Fund, which was invested in the HKMA's Investment Portfolio and their Long-Term Growth Portfolio. The returns of the Future Fund would be compounded and only withdrawn by Dec-2030, unless specified by the Financial Secretary. In the FY22/23 Budget, the Finance Secretary earmarked HK\$100bn to develop the Northern Metropolis project. In addition, the ambitious project of Kau Yi Chau project ("Lantau Tomorrow"), expected to commence in 2027, is estimated to cost HK\$580bn. This may require fiscal support, especially should land sales remain weak in the future. No specific amount has yet been earmarked for Lantau Tomorrow.

¹ For readers interested in details of Hong Kong's finances, the Gazette provides comprehensive data coverage and details on its finances. See: https://www.try.gov.hk/internet/ehpubl_acco_quaraccounts.html



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Historical patterns and outlook of fiscal revenue & spending

Chronical annual surplus with strong monthly seasonality

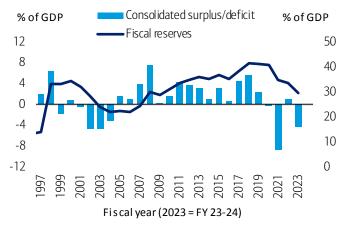
The principles underlying HK government's management of public finances are enshrined in the Basic Law, which stipulates that:

- The HKSAR shall have independent finances, and shall use its revenues exclusively for its own purposes
- HKSAR shall practice an independent taxation system, taking the low tax policy previously pursued in Hong Kong as reference
- HKSAR shall follow the principle of keeping the expenditure within the limits of revenues in drawing up its budget, and strive to achieve a fiscal balance, avoid deficits and keep the budget commensurate with the growth rate of the Gross Domestic Product

Indeed, the government has adhered to the principles throughout the years, absent any significant growth shocks. Since the return to sovereignty in 1997, of the 26 full budgets, the HKSAR government has run 18 years of surplus (**Exhibit 7**). The exceptional sustained deficits during 2001-04 were largely a result of multiple growth shocks, including the aftermath of the Asian Financial Crisis, a deep downturn in the real estate market, scarring effects from SARS, and an unfavorable external environment.

Exhibit 7: Fiscal balance and fiscal reserves

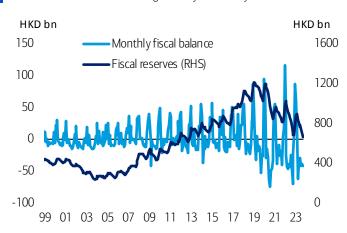
Absent significant growth shocks, HK usually runs a fiscal surplus



Source: The Treasury, CEIC, BofA Global Research

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Exhibit 8: Monthly fiscal surplus/deficit and fiscal reserves The fiscal account exhibits strong monthly seasonality



Source: The Treasury, CEIC, BofA Global Research

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On a monthly basis, the fiscal account in Hong Kong exhibits strong seasonality (Exhibit 8). Fiscal balance usually records a surplus between November and January, while a deficit is likely to occur in March and between May and September (**Exhibit 9**). This is because most of the direct tax—the major source of fiscal revenue—are collected between November and January. On the other hand, expenditures are more evenly distributed across a year. As such, the change in monthly fiscal surplus/deficit corresponds to the monthly change in fiscal reserves for most of the time.



Exhibit 9: Monthly fiscal surplus/deficit in HKD bn

 $Most of the tax \, revenues \, are \, collected \, during \, Nov-Jan \, while \, expenditures \, are \, more \, evenly \, distributed$

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2023	61	16	(62)	(35)	(37)	(30)	(42)	(39)	(41)	(15)	#N/A	#N/A
2022	47	(25)	(43)	(47)	(38)	(44)	(25)	(49)	(70)	(23)	5	87
2021	55	0	(39)	(11)	(10)	(10)	(27)	(19)	(40)	4	17	116
2020	75	(6)	(30)	(16)	(29)	(64)	(75)	(49)	(47)	(33)	(6)	50
2019	49	(8)	(32)	6	(18)	(10)	(11)	(15)	(53)	(24)	(26)	95
2018	55	7	(23)	(5)	(11)	(8)	(18)	(24)	(9)	29	18	87
2017	47	(1)	1	7	(11)	40	(3)	(16)	(5)	22	23	53
2016	47	(12)	(19)	3	(20)	(20)	(4)	(7)	(12)	38	37	50
2015	57	(5)	(5)	(2)	(13)	(11)	(5)	(18)	(18)	35	25	6
2014	38	(38)	(10)	5	(15)	(9)	(2)	(12)	(4)	34	26	13
2013	42	(6)	(11)	13	(8)	(17)	(16)	(17)	(16)	21	16	55
2012	43	(18)	(11)	0	(9)	(1)	(12)	(14)	(22)	22	25	52
2011	35	(10)	(9)	1	(8)	(3)	2	5	(4)	28	(1)	38
2010	49	(1)	(21)	(0)	(9)	(1)	1	(4)	(5)	14	22	42
2009	19	(7)	(42)	(3)	(10)	(11)	(11)	(15)	(14)	8	18	38

Source: The Treasury, CEIC, BofA Global Research

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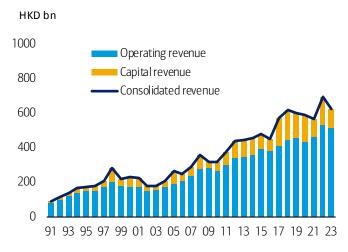
Deeper dive into the revenue and expenditure account

Revenue: Largely taxes, but land premium plays a crucial role

Fiscal revenue in Hong Kong consists of operating and capital revenues. Operating revenue is the major and steady source of income, accounting for 80% of total income (Exhibit 10). The operating account consists mostly of direct tax (around 50% of the total) and indirect taxes (around 30% of the total). Major items include profit tax, salary tax, stamp duties (on stock and property market transactions), rates and duties, among others (**Exhibit 11**).

Exhibit 10: Consolidated fiscal revenue

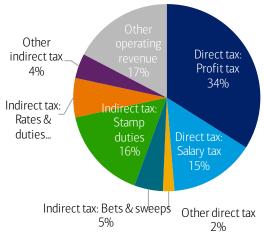
Operating (recurrent) revenue is the major source of government income



Source: The Treasury, CEIC, BofA Global Research

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Exhibit 11: Breakdown of operating revenueDirect tax and indirect tax are the major recurrent revenues



Share offiscal revenue (%), a verage of 2010-2019

Source: CEIC, BofA Global Research

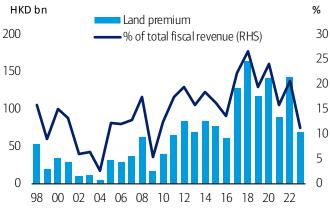
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On the other hand, capital revenue has been a more volatile source of revenue. Of which, land premium (mostly from land sales as well as lease modification) accounts for 80% of capital income. In other words, land supply has been one of the most valuable resources for the government to generate a stream of income. During 2010-19, when the property market was on a sustained uptrend, land premium accounted for around 20% of total fiscal revenue (**Exhibit 12**).



Exhibit 12: Revenue from Land premium

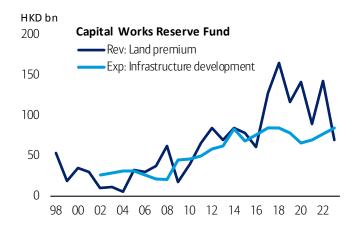
Land premium is an important source of revenue for the government...



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Exhibit 13: Major revenue and expenditure in CWRF

...and it is used to fund infrastructure development in HK



Source: The Treasury, CEIC, BofA Global Research

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The evolving uses of land premium

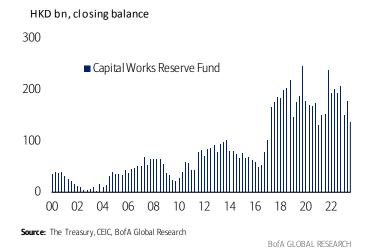
Source: The Treasury, CEIC, BofA Global Research

Unlike revenues from tax collection that are used to fund recurrent spending, the land premium was designated to fund infrastructure development in Hong Kong. By design, the land premium collected is credited to the Capital Works Reserve Fund (CWRF), while infrastructure spending, including public work programs (on ports, buildings, highways, new towns, etc.) and capital subventions, is debited from the same Fund (**Exhibit 13**). The excess of land premium over the infrastructure expenditure is then kept as surplus in the fund. Over the past 20 years, the aggregate land premium received by the government exceeds the total capital works expenditure by more than HK\$300bn.

Given the vast amount of surplus (**Exhibit 14**), the excess of land premium (over infrastructure spending) has been used to fund the other fiscal accounts as well. Starting from 2019, the government has allocated part of the surplus from CWRF to other funds, mostly to the General Revenue Account (**Exhibit 15**).

Exhibit 14: Capital Works Reserve Fund balance

The CWRF runs a chronical surplus, thanks to the excess of land premium over infrastructure expenditure...



Expenditure: on a structural uptrend

Compared to fiscal revenue, fiscal expenditure has been generally more stable (**Exhibit 16**), before the massive relief and stimulus measures during the pandemic. Similar to that in revenue account, operating expenditure accounts for 80% of total expenditure.

Exhibit 15: Net transfer between fiscal funds (HKD bn)

...and part of the surplus has been transferred to the other funds

	2019	2020	2021	2022	2023
General Revenue Account	57.40	47.93	58.52	23.64	95.23
Capital Works Reserve Fund	-80	-55	-84	-35	-100
Capital Investment Fund	-	6.00	20.14	-	-
Civil Service Pension Reserve Fund	1.53	0.00	1.84	3.02	-
Disaster Relief Fund	0.07	0.07	0.06	0.07	0.02
Innovation and Technology Fund	20.00	0.00	2.00	5.18	4.75
Land Fund	-	-	-	-	-
Loan Fund	1.00	1.00	1.44	2.00	-
Lotteries Fund	-	-	-	1.10	-

Source: The Treasury, BofA Global Research

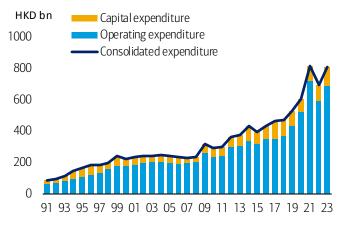
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Most operating expenditure are recurring and livelihood-related, including healthcare, social welfare, and education, taking up around 60% of total recurrent spending.

Infrastructure spending is the largest capital spending, with a size comparable to the major livelihood-related spending (**Exhibit 17**). Among these four pillars, infrastructure spending has grown at the quickest rate (14% CAGR), followed by social welfare (9%), health (9%) and education (5%).

Exhibit 16: Consolidated fiscal expenditure

Expenditure surged during the pandemic

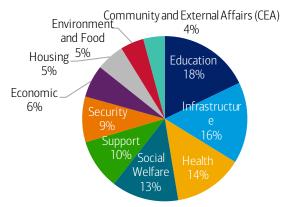


Source: The Treasury, CEIC, BofA Global Research

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Exhibit 17: Breakdown of total expenditure

Education, infrastructure, health and social welfare are they four major items



Share offiscal spending (%), a verage of 2010-2019

Source: CEIC, BofA Global Research

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Expect a higher fiscal deficit in FY23/24...

In the Budget announced in Feb 2023, Financial Secretary Paul Chan expected a deficit of HK\$54.4bn for FY23/24, equivalent to **1.4% of GDP** by our estimates. The assumptions made at the time were:

- A 6% drop in total expenditure to \$761bn, consists of a 3.3% drop in recurrent expenditure and a 53% drop non-recurrent expenditure
- A 3% rise in total revenue to \$642bn, including \$263bn earnings/profit tax, \$85bn revenue from land premium and \$85bn stamp duties
- The \$65bn proceeds from government bond issuance
- A backdrop of 3.5-5.5% real GDP growth (or 6.5-8.5% nominal growth) in 2023

The actual deficit would likely come higher than initial official estimates, in our view. We expect the fiscal deficit to reach **HK\$1,330bn**, or **3.5% of GDP** in FY23/24, more than double the original official estimates. While the government is tapering the pandemic relief measures and cutting expenditure relative to last year, the large deficit is mostly due to the weaker-than-expected revenues from:

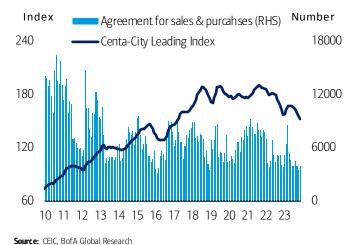
- 1) Land premium: fiscal-year-to-date, revenues from land premium only amounted to 12.1bn, or 14% of the original target. The chances are tiny that land premium could hit the target with the current lackluster demand from property developers amid high property vacancy and tougher financing conditions.
- 2) Stamp duty: The tepid transaction volume in property market as well as equity market implies sluggish revenue from stamp duties (Exhibit 18 and Exhibit 19). Transaction volume in property market dropped 3% yoy YTD compared to 2022, or 40% compared to 2021. The equity index also lagged most of the peers in global financial markets with shrinking turnover volume.



Tax collection: we expect the economy to expand 3.4% this year, lower than the original official target range. This should imply a weaker-than-expected revenue from direct tax collection.

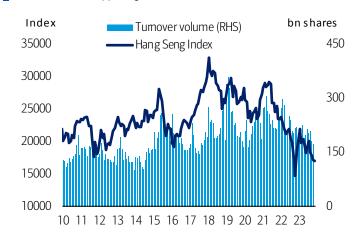
Exhibit 18: Property price and transaction

Property transaction has been tepid amid price correction



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Exhibit 19: Equity index and turnover volume (daily avg)Similar has been happening in the shock market



Source: CEIC, BofA Global Research

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...while medium-term outlook warrants more attention

A fiscal deficit is nothing surprising when the real economy decelerates. It is safe to say that fiscal policy in HK is still very buffered by the massive fiscal reserves.

Instead, we think it is the medium-term fiscal outlook in HK that warrants more attention. Outlined in the FY23/24 Budget in Feb 2023, Financial Secretary expected the fiscal account to gradually return to surplus through FY27/28, largely helped by the revenue recovery and net proceeds from bond issuance. Correspondingly, fiscal reserves will gradually rise to HKD980bn. In our view, several downside risks are worth noted.

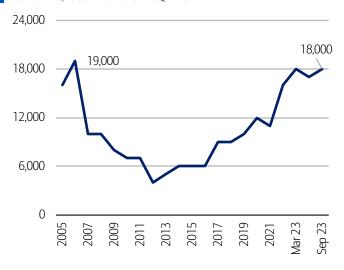
First, land premium may be much less of a revenue engine in the medium term.

Despite the recent Fed pivot (our US economists expect 4 cuts in 2024), the high residential inventory would remain a drag to land bidding activities in the coming years (Exhibit 20). As of 3Q23, there were 18,000 completed but unsold units, just slightly lower than the peak in 2006. At the same time, household formation growth is likely to be moderate, as the latest official "Hong Kong Domestic Household Projections" forecasts 0.8% CAGR during 2021-26 and 0.7% CAGR during 2026-31 in the number of households. Accounting for the demand and supply factors, developers are unlikely to be euthanistic in bidding for new lands, unlike what we saw during mid-2010s.



Exhibit 20: Completed but unsold units

Reached 18,000 units as of end-3Q2023



Source: Transport and Housing Bureau, BofA Global Research

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On the other hand, **population aging could lead to a worse operating fiscal position overall.** Admittedly, an aging population is a universal issue for developed economies, but it seems to be more pressing in HK than in its Asian peers. Between 2020-22, there was an acceleration in the decline of the working-age population (especially prime age), and the rebound in 2023 less than offset the accumulated decline. Long term, the dependency ratio is also forecasted (by the UN) to be the highest in HK among industrialized EM Asia (**Exhibit 21**). This implies a narrower tax base on one hand, and higher spending on healthcare and social welfare on the other hand.

Arguably, the deficit in the operating account since FY20/21 has been cyclical in nature as the government has provided massive stimulus to bring growth on track. Should the aging trend persist, operating expenditure could structurally exceed operating revenue one day (**Exhibit 22**), calling for a new funding source in addition to drawing up fiscal reserves.

Exhibit 21: Dependency ratio in industrialized Asia

Population aging in Hong Kong seems to be most pressing in Asia

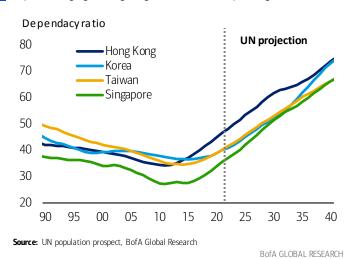
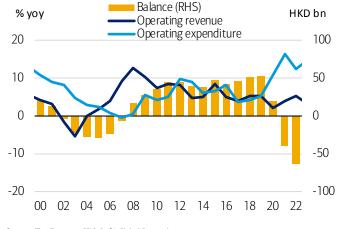


Exhibit 22: 5-year trailing operating fiscal accountsOperating fiscal deficit could turn into a structural problem



Source: The Treasury, CEIC, BofA Global Research

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In addition, capital spending is likely to surge notably on the two upcoming mega infrastructure projects, i.e., the Kau Yi Chau Project and the North Metropolis Project. The construction cost of the Kau Yi Chau project was estimated to be \$580bn in



2022², whereas, for Northern Metropolis, it would probably be even higher, given the much larger land area involved. There are likely more upside risks to the overall cost as the projects kickstart, similar to previous infrastructure projects in HK.

The choice of financing plan for these mega projects will, therefore, be crucial for the medium- and long-term fiscal outlook. Further development in the Infrastructure Bond Scheme, as announced in the Budget, thus warrants more attention.

 $^{^2\} https://www.centralwaters.hk/en/possible-financial-options/$

Bond market: challenges & opportunities

Hong Kong's bond market remains small and retains potential for growth. Adhering to the principles of fiscal discipline, the HKSAR government has historically shied away from issuing debt. Hence, relative to the size of Hong Kong's economy and the size of the domestic banking system, Hong Kong's bond market remains underdeveloped with low liquidity and low issuances. This lack of duration supply denominated in the Hong Kong Dollar has resulted in Hong Kong banks typically buying foreign currency bonds and asset-swapping back into HKD. This results in a long-term negative cross-currency basis in Hong Kong.

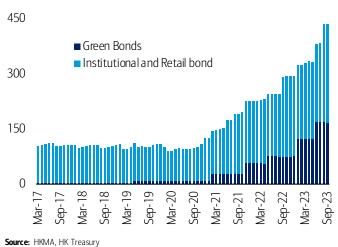
HKGBs almost always trade at a premium to UST. We get a glimpse of the imbalanced supply vs demand dynamics for the HKD-denominated duration. **Exhibit 23** compares the benchmark 10-year yield of US Treasuries vs HKGB. Over the past 10 years, outside very brief periods of market dislocation, HKGBs have almost always traded below USTs. This situation is even more strange as the HKD is pegged to the USD and any problems in the US may have an FX element, which would directly impact HKD as well. Thus, the large premium HKGBs have commanded over USTs historically is a reflection that supply is small compared to its outsized demand.

Most green bond issuances are denominated in foreign currency. The total supply of HKGBs (for both issuances under Green Bonds and Institutional and Retail bonds) stood at HK\$434bn in September 2023. Green bonds are typically issued in USD, EUR and RMB and cross-currency swapped back into Hong Kong, thereby impacting cross-currency basis as opposed to the HKD IRS directly. However, a minority of green bond issuances are also conducted in HKD.

Exhibit 23: Comparison of 10-year benchmark yield: US vs Hong Kong Almost in all periods, HKGBs traded a premium to USTs



Exhibit 24: Outstanding Hong Kong government bonds (HK\$ Bn)HKGB have been fast growing since 2021 due to the rising issuance of Green Bonds



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Current issuances of green bonds are close to the LegCo-approved ceiling of HK\$200bn. When green bonds were first announced in 2018, the ceiling was set at HK\$100bn and this ceiling was subsequently increased to HK\$200bn in 2021. With the current total outstanding volume close to HK\$190bn, additional issuances will not be possible unless the Legislative Council approves additional increases to the ceiling.

Issuances conducted under the institutional and retail program is in HKD. The funds raised through the Institutional and Retail bond is then invested into the Bond Fund, managed by the HKMA as the HKSAR government does not want to use bond issuance to finance any government spending. In a sense, the idea behind the bond issuances under this program is similar to the HKMA's issuance of its exchange fund bills program. The issuances are fully backed by real assets and are conducted because there is a demand for HKD-denominated debt.



HK banks hold large positions in HKD bills, but not HKD coupons. The lack of local duration supply and the search for yielding assets is evident when we look at the aggregate banking sector balance sheet in Hong Kong (**Exhibit 25**). Although the HK banks' holding of HKD government bills, notes and bonds amount to HK\$1.4tn, the vast majority of these are in exchange fund bills (total outstanding at HK\$1.2tn) and do not help increase asset duration for Hong Kong banks.

HKD funding is seeking a home – it is currently in FX bonds and bills. In the 12-month leading up to September 2023, in aggregate, Hong Kong banks saw HKD and FX deposit funding rise by HK\$206bn and HK\$299bn, respectively. With the local economy weak, loan generation in HKD is relatively flat and FX loans are in steep contraction. This has resulted in excess cash among Hong Kong banks to search for yield, resulting in an aggressive expansion of holding of foreign government bills, notes and bonds. In the 12-month leading to September 2023, Hong Kong banks increased their holdings of foreign bonds by HK\$522bn and it is the only asset category seeing strong growth. As such, rising debt issuance by the HKSAR government can grow the HKD debt market and help correct the structural imbalance between the supply and demand for HKD debt.

Exhibit 25: Hong Kong's aggregate banking system balance sheet (September 2023)

In the past 12-month to September 2023, Hong Kong banks aggressively bought foreign bonds due to the lack of domestic supply

	Total (H	K\$ Mn)	12-month change (HK\$ Mn)			
Asset	HKD	FX	Total	HKD	FX	
Notes and Coins	29,331	14,631	43,962	6,121	4,273	
Amt Due from Authorized Inst	252,845	544,364	797,209	2,642	(10,341)	
Amount Due from Banks Abroad	331,141	4,532,126	4,863,266	(1,877)	(35,999)	
Loans and Advances to Customers	6,546,102	3,746,042	10,292,144	38,952	(431,016)	
NCD Held	150,441	387,628	538,069	(97,874)	54,671	
NDI: Acceptances & Bills of Exchange	2,097	145,734	147,830	19,094	(76,023)	
NDI: Floating Rate Notes & Com Papers	14,941	357,613	372,554	532	(19,376)	
NDI: Government Bills, Notes & Bonds	1,412,185	1,874,140	3,286,326	(571)	522,150	
NDI: Other Debt Instrument	263,832	1,944,213	2,208,045	11,607	21,525	
Investments in Shareholdings	164,501	383,435	547,936	80,849	69,544	
Interest in Land and Buildings	196,060	24	196,084	25,995	(4)	
Other Assets	956,387	3,122,755	4,079,142	(2,587)	(281,144)	
Total	10,319,861	17,052,705	27,372,566	82,883	(181,738)	
Funding						
Amount Due to Authorized Inst	402,264	571,909	974,172	(8,581)	(42,451)	
Amount Due to Banks Abroad	348,343	2,981,764	3,330,107	(41,647)	(684,888)	
Deposits from Customers	7,585,800	8,201,808	15,787,608	206,352	298,553	
NCD Outstanding	116,173	525,331	641,504	(60,510)	(26,835)	
Other Debt Instruments Outstanding	58,124	432,983	491,108	(4,091)	(43,745)	
Capital, Reserves and Other Liabilities	2,514,523	3,633,544	6,148,067	81,150	151,074	
Total	11,025,228	16,347,338	27,372,566	172,674	(348,291)	

Source: CEIC, HKMA

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