

# APPENDICES

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*Note:* Expenditure figures for 2022-23 and before have been adjusted to align with the definitions and policy area group classifications adopted in the 2023-24 estimate.



# **APPENDIX A**

## **MEDIUM RANGE FORECAST**



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## SECTION I FORECASTING ASSUMPTIONS AND BUDGETARY CRITERIA

**1** The Medium Range Forecast (MRF) is a fiscal planning tool. It sets out the high-level forecast of government expenditure and revenue as well as the financial position covering the five-year period including the budget year, i.e. from 2023-24 to 2027-28.

**2** A wide range of assumptions underlying the factors affecting Government's revenue and expenditure are used to derive the MRF. Some assumptions are economic in nature (the general economic assumptions) while others deal with specific areas of Government's activities (other assumptions).

### General Economic Assumptions

#### *Real Gross Domestic Product (real GDP)*

**3** GDP growth is forecast to range from 3.5% to 5.5% in real terms in 2023. We have used the mid-point of this range forecast in deriving the MRF. For planning purposes, in the four-year period 2024 to 2027, the trend growth rate of the economy in real terms is assumed to be 3.7% per annum.

#### *Price change*

**4** The GDP deflator, measuring overall price change in the economy, is forecast to increase by 3% in 2023. For the four-year period 2024 to 2027, the GDP deflator is assumed to increase at a trend rate of 2.3% per annum.

**5** The Composite Consumer Price Index (CCPI), measuring inflation in the consumer domain, is forecast to increase by 2.9% in 2023. Netting out the effects of various one-off relief measures, the underlying CCPI is forecast to increase by 2.5% in 2023. For the ensuing period 2024 to 2027, the trend rate of increase for the underlying CCPI is assumed to be 2.5% per annum.

#### *Nominal Gross Domestic Product (nominal GDP)*

**6** Given the assumptions on the rates of change in the real GDP and the GDP deflator, the GDP in nominal terms is forecast to increase by 6.5% to 8.5% in 2023, and the trend growth rate in nominal terms for the period 2024 to 2027 is assumed to be 6% per annum.

### Other Assumptions

**7** Other assumptions on expenditure and revenue patterns over the forecast period are as follows –

- The operating expenditure for 2024-25 and beyond represents the forecast expenditure requirements for Government.
- The capital expenditure for 2023-24 and beyond reflects the estimated cash flow requirements for capital projects including approved capital works projects and those at an advanced stage of planning.
- The revenue projections for 2024-25 and beyond basically reflect the relevant trend yields.

### Budgetary Criteria

**8** Article 107 of the Basic Law stipulates that “*The Hong Kong Special Administrative Region shall follow the principle of keeping 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 its gross domestic product.*”

**9** Article 108 of the Basic Law stipulates that “*... The Hong Kong Special Administrative Region shall, taking the low tax policy previously pursued in Hong Kong as reference, enact laws on its own concerning types of taxes, tax rates, tax reductions, allowances and exemptions, and other matters of taxation.*”

**10** For the purpose of preparing the MRF, the following criteria are also relevant –

#### *Budget surplus/deficit*

The Government aims to achieve, over time, a balance in the consolidated account.

#### *Expenditure policy*

The general principle is that, over time, the growth rate of expenditure should be commensurate with the growth rate of the economy.

#### *Revenue policy*

The Government aims to maintain, over time, the real yield from revenue.

#### *Fiscal reserves*

The Government aims to maintain adequate reserves in the long run.

**SECTION II MEDIUM RANGE FORECAST**

**11** The financial position of the Government for the current MRF period (*Note (a)*) is summarised below –

Table 1

(\$ million)	2022-23 Revised Estimate	2023-24 Estimate	2024-25 Forecast	2025-26 Forecast	2026-27 Forecast	2027-28 Forecast
<b>Operating Account</b>						
Operating revenue ( <i>Note (b)</i> )	493,396	536,822	607,140	656,445	683,724	732,165
Less: Operating expenditure ( <i>Note (c)</i> )	689,512	629,484	612,200	629,700	656,600	686,900
<b>Operating surplus / (deficit)</b>	<b>(196,116)</b>	<b>(92,662)</b>	<b>(5,060)</b>	<b>26,745</b>	<b>27,124</b>	<b>45,265</b>
<b>Capital Account</b>						
Capital revenue ( <i>Note (d)</i> )	110,408	105,590	125,337	139,833	157,867	165,586
Less: Capital expenditure ( <i>Note (e)</i> )	120,079	131,495	152,563	160,485	164,295	162,258
<b>Capital surplus / (deficit)</b>	<b>(9,671)</b>	<b>(25,905)</b>	<b>(27,226)</b>	<b>(20,652)</b>	<b>(6,428)</b>	<b>3,328</b>
<b>Consolidated Account</b>						
Government revenue	603,804	642,412	732,477	796,278	841,591	897,751
Less: Government expenditure	809,591	760,979	764,763	790,185	820,895	849,158
<b>Consolidated surplus / (deficit) before issuance and repayment of bonds</b>	<b>(205,787)</b>	<b>(118,567)</b>	<b>(32,286)</b>	<b>6,093</b>	<b>20,696</b>	<b>48,593</b>
Add: Proceeds from issuance of government bonds ( <i>Note (ff)</i> )	65,992	65,000	65,000	65,000	65,000	65,000
Less: Repayment of government bonds ( <i>Note (ff)</i> )	-	800	23,127	31,775	13,747	13,708
<b>Consolidated surplus / (deficit) after issuance and repayment of bonds</b>	<b>(139,795)</b>	<b>(54,367)</b>	<b>9,587</b>	<b>39,318</b>	<b>71,949</b>	<b>99,885</b>
<b>Fiscal reserves at 31 March</b>	<b>817,333</b>	<b>762,966</b>	<b>772,553</b>	<b>811,871</b>	<b>883,820</b>	<b>983,705</b>
In terms of number of months of government expenditure	12	12	12	12	13	14
In terms of percentage of GDP	28.9%	25.1%	24.0%	23.8%	24.4%	25.6%

**Fiscal Reserves**

**12** Part of the fiscal reserves has, since 1 January 2016, been held in a notional savings account called the Future Fund, which is placed with the Exchange Fund with a view to securing higher investment returns over a ten-year investment period. The initial endowment of the Future Fund was \$219,730 million, being the balance of the Land Fund on 1 January 2016. \$4.8 billion of the consolidated surplus from the Operating and Capital Reserves was transferred to the Future Fund as top-up in 2016-17. The arrangement thereafter is subject to an annual review by the Financial Secretary.

Table 2

<b>Distribution of fiscal reserves at 31 March</b>					
	2022-23 Revised Estimate	2023-24 Estimate			
(\$ million)			Future Fund	Operating and Capital Reserves	Total
General Revenue Account	229,921	<b>134,943</b>	4,800*	130,143	134,943
Funds with designated use	281,685	<b>273,365</b>		273,365	273,365
Capital Works Reserve Fund	151,142	<b>150,389</b>		150,389	150,389
Capital Investment Fund	18,037	<b>16,784</b>		16,784	16,784
Civil Service Pension Reserve Fund	53,864	<b>55,857</b>		55,857	55,857
Disaster Relief Fund	44	<b>100</b>		100	100
Innovation and Technology Fund	27,755	<b>22,295</b>		22,295	22,295
Loan Fund	7,715	<b>6,535</b>		6,535	6,535
Lotteries Fund	23,128	<b>21,405</b>		21,405	21,405
Land Fund	305,727	<b>354,658</b>	354,658	-	354,658
	<u>817,333</u>	<u><b>762,966</b></u>	<u>359,458</u>	<u>403,508</u>	<u>762,966</u>
In terms of number of months of government expenditure	12	12	6	6	12

\* Being one-third of 2015-16 consolidated surplus.

**13** The fiscal reserves would be drawn on to fund contingent and other liabilities. As detailed in Section IV, these include over \$613 billion for capital works projects underway and about \$544 billion as statutory pension obligations in the coming ten years.



## Notes –

## (a) Accounting policies

- (i) The MRF is prepared on a cash basis and reflects forecast receipts and payments, whether they relate to operating or capital transactions.
- (ii) The MRF includes the General Revenue Account and eight Funds (Capital Investment Fund, Capital Works Reserve Fund, Civil Service Pension Reserve Fund, Disaster Relief Fund, Innovation and Technology Fund, Land Fund, Loan Fund and Lotteries Fund). It does not include the Bond Fund which is managed separately and the balance of which does not form part of the fiscal reserves.

## (b) Operating revenue

- (i) The operating revenue takes into account the revenue measures proposed in the 2023-24 Budget, and is made up of –

(\$ million)	2022-23 Revised Estimate	2023-24 Estimate	2024-25 Forecast	2025-26 Forecast	2026-27 Forecast	2027-28 Forecast
Operating revenue before investment income	429,607	482,036	562,436	610,262	643,236	691,528
Investment income ( <i>Note (g)</i> )	63,789	54,786	44,704	46,183	40,488	40,637
Total	493,396	536,822	607,140	656,445	683,724	732,165

- (ii) Investment income under the Operating Account includes investment income of the General Revenue Account (which is credited to revenue head Properties and Investments) and investment income of the Land Fund. The rate of investment return is 3.7% for 2023 (vs 5.6% for 2022) and is assumed to be in the range of 3.7% to 5.1% a year for 2024 to 2027.
- (iii) Investment income of the Future Fund includes investment income of the relevant portion of the General Revenue Account and investment income of the Land Fund, compounded on an annual basis. As directed by the Financial Secretary, the investment income is reflected in the Government's accounts on a progressive basis starting from 2021-22.

## (c) Operating expenditure

This represents expenditure charged to the Operating Account of the General Revenue Account and Land Fund. The figures for 2024-25 and beyond set out the forecast operating expenditure requirements for Government.

*(d) Capital revenue*

(i) The breakdown of capital revenue is –

(\$ million)	2022-23 Revised Estimate	2023-24 Estimate	2024-25 Forecast	2025-26 Forecast	2026-27 Forecast	2027-28 Forecast
General Revenue Account	2,505	6,136	3,914	2,163	4,698	4,698
Capital Investment Fund	423	643	865	1,327	1,615	2,554
Capital Works Reserve Fund	71,163	85,008	108,465	119,345	135,505	141,958
Disaster Relief Fund	1	-	-	-	-	-
Innovation and Technology Fund	105	-	-	-	-	-
Loan Fund	5,719	1,201	1,688	3,632	4,071	4,097
Lotteries Fund	1,014	1,039	1,005	1,010	1,012	1,014
Capital revenue before investment income	80,930	94,027	115,937	127,477	146,901	154,321
Investment income ( <i>Note (g)</i> )	29,478	11,563	9,400	12,356	10,966	11,265
Total	110,408	105,590	125,337	139,833	157,867	165,586

(ii) Land premium included under the Capital Works Reserve Fund for 2023-24 is estimated to be \$85 billion. For 2024-25 onwards, it is assumed to be 3.7% of GDP, being the 15-year historical average, with possible adjustment with reference to the land sale programme.

(iii) Investment income under the Capital Account includes investment income of the Capital Investment Fund, Capital Works Reserve Fund, Civil Service Pension Reserve Fund, Disaster Relief Fund, Innovation and Technology Fund, Loan Fund and Lotteries Fund. The rate of investment return is 3.7% for 2023 (vs 5.6% for 2022) and is assumed to be in the range of 3.7% to 5.1% a year for 2024 to 2027.

*(e) Capital expenditure*

The breakdown of capital expenditure is –

(\$ million)	2022-23 Revised Estimate	2023-24 Estimate	2024-25 Forecast	2025-26 Forecast	2026-27 Forecast	2027-28 Forecast
General Revenue Account	7,924	9,468	9,957	10,316	9,279	8,756
Capital Investment Fund	5,044	2,549	7,988	8,290	6,272	2,387
Capital Works Reserve Fund	97,923	106,822	120,016	125,885	134,776	136,358
Disaster Relief Fund	56	-	-	-	-	-
Innovation and Technology Fund	4,570	6,417	6,493	6,656	4,956	5,077
Loan Fund	2,208	2,650	2,718	2,706	2,754	2,825
Lotteries Fund	2,354	3,589	5,391	6,632	6,258	6,855
Total	120,079	131,495	152,563	160,485	164,295	162,258

*(f) Government bonds*

The Government issued green bonds under the Government Green Bond Programme (the Programme) from 2019-20 to 2022-23, and plans to continue to issue bonds from 2023-24 to 2027-28. The actual size and timing of issuance will be determined having regard to market conditions. The proceeds of the Programme are credited to the Capital Works Reserve Fund to finance projects with environmental benefits.

*(g) Housing Reserve*

The Housing Reserve was established in 2014 to support public housing development projects. As announced in the 2019-20 Budget Speech, the Housing Reserve would be brought back to the Government's accounts over four years from 2019-20 to 2022-23 as investment income, and would earn the same rate of investment return as stipulated in *Note (b)(ii)* or *Note (d)(iii)* above. At the same time, \$82.4 billion (the balance of the Housing Reserve at 31 December 2018) was earmarked for public housing development. \$21.2 billion, \$22.0 billion, \$23.1 billion and \$24.4 billion (the last tranche) have been brought back from the Housing Reserve in 2019-20, 2020-21, 2021-22 and 2022-23 respectively.

### SECTION III RELATIONSHIP BETWEEN GOVERNMENT EXPENDITURE/PUBLIC EXPENDITURE AND GDP IN THE MEDIUM RANGE FORECAST

**14** For monitoring purposes, expenditure of the Trading Funds and the Housing Authority (collectively referred to as “other public bodies” in this Appendix) is added to government expenditure in order to compare public expenditure with GDP.

#### Government Expenditure and Public Expenditure in the Context of the Economy

Table 3

(\$ million)	2022-23 Revised Estimate	2023-24 Estimate	2024-25 Forecast	2025-26 Forecast	2026-27 Forecast	2027-28 Forecast
Operating expenditure	689,512	629,484	612,200	629,700	656,600	686,900
Capital expenditure	120,079	131,495	152,563	160,485	164,295	162,258
<b>Government expenditure</b>	<b>809,591</b>	<b>760,979</b>	<b>764,763</b>	<b>790,185</b>	<b>820,895</b>	<b>849,158</b>
Expenditure by other public bodies	38,181	49,561	50,965	57,527	66,466	69,524
<b>Public expenditure (Note (a))</b>	<b>847,772</b>	<b>810,540</b>	<b>815,728</b>	<b>847,712</b>	<b>887,361</b>	<b>918,682</b>
<b>Gross Domestic Product (calendar year)</b>	<b>2,827,009</b>	<b>3,039,000</b>	<b>3,221,400</b>	<b>3,414,700</b>	<b>3,619,500</b>	<b>3,836,700</b>
Nominal growth in GDP (Note (b))	-1.4%	7.5%	6.0%	6.0%	6.0%	6.0%
Growth in recurrent government expenditure (Note (c))	10.0%	3.3%	4.1%	3.7%	5.0%	4.7%
Growth in government expenditure (Note (c))	16.8%	-6.0%	0.5%	3.3%	3.9%	3.4%
Growth in public expenditure (Note (c))	16.0%	-4.4%	0.6%	3.9%	4.7%	3.5%
<b>Public expenditure in terms of percentage of GDP</b>	<b>30.0%</b>	<b>26.7%</b>	<b>25.3%</b>	<b>24.8%</b>	<b>24.5%</b>	<b>23.9%</b>

Notes –

- (a) Public expenditure comprises government expenditure and expenditure by other public bodies. It does not include expenditure by those organisations, including statutory organisations in which the Government has only an equity position, such as the Airport Authority and the MTR Corporation Limited.
- (b) For 2023-24, the nominal GDP growth of 7.5% represents the mid-point of the range forecast of 6.5% to 8.5% for the calendar year 2023.
- (c) The growth rates for 2022-23 to 2027-28 refer to year-on-year change. For example, the rates for 2022-23 refer to the change between the revised estimate for 2022-23 and the actual expenditure in 2021-22. The rates for 2023-24 refer to the change between the 2023-24 estimate and the 2022-23 revised estimate, and so forth.

**15** Table 4 shows the relationship amongst the sum to be appropriated in the 2023-24 Budget, government expenditure and public expenditure.

**Relationship between Government Expenditure  
and Public Expenditure in 2023-24**

Table 4

(\$ million)	Appropriation	Government expenditure and revenue			Public expenditure
		Operating	Capital	Total	
<b>Expenditure</b>					
General Revenue Account					
Operating					
Recurrent	560,143	560,143	-	560,143	560,143
Non-recurrent	69,272	69,272	-	69,272	69,272
Capital					
Plant, equipment and works	5,991	-	5,991	5,991	5,991
Subventions	3,477	-	3,477	3,477	3,477
	638,883	629,415	9,468	638,883	638,883
Transfer to Funds	53	-	-	-	-
Capital Investment Fund	-	-	2,549	2,549	2,549
Capital Works Reserve Fund	-	-	106,822	106,822	106,822
Innovation and Technology Fund	-	-	6,417	6,417	6,417
Land Fund	-	69	-	69	69
Loan Fund	-	-	2,650	2,650	2,650
Lotteries Fund	-	-	3,589	3,589	3,589
Trading Funds	-	-	-	-	6,113
Housing Authority	-	-	-	-	43,448
	638,936	629,484	131,495	760,979	810,540
<b>Revenue</b>					
General Revenue Account					
Taxation		437,109	8	437,117	
Other revenue		50,713	6,128	56,841	
		487,822	6,136	493,958	
Capital Investment Fund		-	1,296	1,296	
Capital Works Reserve Fund		-	91,869	91,869	
Civil Service Pension Reserve Fund		-	1,993	1,993	
Disaster Relief Fund		-	3	3	
Innovation and Technology Fund		-	957	957	
Land Fund		49,000	-	49,000	
Loan Fund		-	1,470	1,470	
Lotteries Fund		-	1,866	1,866	
		536,822	105,590	642,412	
<b>Deficit</b>		(92,662)	(25,905)	(118,567)	

**SECTION IV CONTINGENT AND MAJOR UNFUNDED LIABILITIES**

**16** The Government's contingent liabilities as at 31 March 2022, 31 March 2023 and 31 March 2024, are provided below as supplementary information to the MRF –

Table 5

(\$ million)	2022	At 31 March 2023	2024
Guarantee to the Hong Kong Export Credit Insurance Corporation for liabilities under contracts of insurance	40,316	41,174	42,693
Guarantees provided under the SME Financing Guarantee Scheme	116,180	143,776	139,350
Legal claims, disputes and proceedings	15,301	18,127	15,306
Subscription to callable shares in the Asian Development Bank	5,946	5,708	5,708
Subscription to callable shares in the Asian Infrastructure Investment Bank	4,800	4,780	4,780
Guarantees provided under the SME Loan Guarantee Scheme	2,399	1,650	1,068
Guarantees provided under a commercial loan of the Hong Kong Science and Technology Parks Corporation	920	893	866
Guarantees provided under the Special Loan Guarantee Scheme	214	86	83
Total	186,076	216,194	209,854

**17** The Government's major unfunded liabilities as at 31 March 2022 were as follows –

(\$ million)

Present value of statutory pension obligations ( <i>Note (a)</i> )	1,047,790
Untaken leave ( <i>Note (b)</i> )	29,012
Green bonds	56,680

*Notes –*

- (a) The statutory pension obligations for the coming ten years are estimated to be about \$544 billion in money of the day.
- (b) The estimate for “untaken leave” gives an indication of the overall value of leave earned but not yet taken by serving public officers.

**18** The estimated outstanding commitments of capital works projects as at 31 March 2022 and 31 March 2023 are \$610,268 million and \$613,946 million respectively. Some of these are contractual commitments.

