

APPENDICES

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Note: Expenditure figures for 2015-16 and before have been adjusted to align with the definitions and policy area group classifications adopted in the 2016-17 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 covering the five-year period including the budget year, i.e. from 2016-17 to 2020-21.

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 is forecast to increase by 1% to 2% in real terms in 2016. We have used the mid-point of this range forecast in deriving the MRF. For planning purposes, in the four-year period 2017 to 2020, the trend growth rate of the economy in real terms is assumed to be 3% per annum.

Price change

4 The GDP deflator, measuring overall price change in the economy, is forecast to increase by 1.5% in 2016. For the four-year period 2017 to 2020, the GDP deflator is assumed to increase at a trend rate of 1.5% per annum.

5 The Composite Consumer Price Index (CCPI), measuring inflation in the consumer domain, is forecast to increase by 2.3% in 2016. Netting out the effects of various one-off relief measures, the underlying CCPI is forecast to increase by 2% in 2016. For the ensuing period 2017 to 2020, 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 2.5% to 3.5% in 2016, and the trend growth rate in nominal terms for the period 2017 to 2020 is assumed to be 4.5% per annum.

Other Assumptions

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

- The operating expenditure for 2017-18 and beyond represents the expenditure guideline only, assuming operating expenditure would grow in line with nominal GDP.
- The capital expenditure for 2016-17 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 2017-18 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 a balance in the consolidated and operating accounts. The Government aims, over time, to achieve an operating surplus to partially finance capital expenditure.

Expenditure policy

The general principle is that, over time, the growth rate of expenditure should not exceed the growth rate of the economy. The Government aims to keep public expenditure at or below 20% of GDP.

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)	2015-16 Revised Estimate	2016-17 Estimate	2017-18 Forecast	2018-19 Forecast	2019-20 Forecast	2020-21 Forecast
Operating Account						
Operating revenue (<i>Note (b)</i>)	387,567	398,178	426,581	435,896	451,434	472,065
Less: Operating expenditure (<i>Note (c)</i>)	339,263	376,800	384,100	430,900	428,500	426,900
Operating surplus	48,304	21,378	42,481	4,996	22,934	45,165
Capital Account						
Capital revenue (<i>Note (d)</i>)	69,898	100,073	79,515	83,775	87,359	90,564
Less: Capital expenditure (<i>Note (e)</i>)	87,718	110,071	108,157	117,793	131,298	132,983
Capital deficit	(17,820)	(9,998)	(28,642)	(34,018)	(43,939)	(42,419)
Consolidated Account						
Government revenue	457,465	498,251	506,096	519,671	538,793	562,629
Less: Government expenditure	426,981	486,871	492,257	548,693	559,798	559,883
Consolidated surplus / (deficit) before repayment of bonds and notes	30,484	11,380	13,839	(29,022)	(21,005)	2,746
Less: Repayment of bonds and notes (<i>Note (f)</i>)	-	-	-	-	1,500	-
Consolidated surplus / (deficit) after repayment of bonds and notes	30,484	11,380	13,839	(29,022)	(22,505)	2,746
Fiscal reserves at 31 March	858,998	870,378	884,217	855,195	832,690	835,436
In terms of number of months of government expenditure	24	21	22	19	18	18
In terms of percentage of GDP	35.8%	35.2%	34.2%	31.6%	29.4%	28.3%

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. A portion of the consolidated surplus every year from the Operating and Capital Reserves will be transferred to the Future Fund as periodic top-up.

Distribution of fiscal reserves at 31 March 2017				
(\$ million)		Future Fund	Operating and Capital Reserves	Total
General Revenue Account	518,598	10,161*	508,437	518,598
Funds with designated use				
Capital Works Reserve Fund	69,872	-	69,872	69,872
Capital Investment Fund	1,825	-	1,825	1,825
Civil Service Pension Reserve Fund	31,918	-	31,918	31,918
Disaster Relief Fund	80	-	80	80
Innovation and Technology Fund	3,891	-	3,891	3,891
Loan Fund	2,435	-	2,435	2,435
Lotteries Fund	22,029	-	22,029	22,029
Land Fund	219,730	219,730	-	219,730
	<u>870,378</u>	<u>229,891</u>	<u>640,487</u>	<u>870,378</u>
In terms of number of months of government expenditure	21	6	15	21

* Being one-third of 2015-16 revised estimate consolidated surplus.

13 For the purpose of preparing the MRF, it is assumed that one-third of the annual surplus for the consolidated account of the previous financial year would be set aside as top-up for the Future Fund. In practice, the top-up arrangement would be subject to an annual review by the Financial Secretary.

Future Fund					
(\$ million)	2016-17 Estimate	2017-18 Forecast	2018-19 Forecast	2019-20 Forecast	2020-21 Forecast
Notionally held against –					
Land Fund	<u>219,730</u>	<u>219,730</u>	<u>219,730</u>	<u>219,730</u>	<u>219,730</u>
General Revenue Account					
Opening balance	-	10,161	13,954	18,567	18,567
Top-up from Operating and Capital Reserves	10,161	3,793	4,613	-	-
Closing balance	<u>10,161</u>	<u>13,954</u>	<u>18,567</u>	<u>18,567</u>	<u>18,567</u>
Total	<u>229,891</u>	<u>233,684</u>	<u>238,297</u>	<u>238,297</u>	<u>238,297</u>

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 2016-17 Budget, and is made up of –

(\$ million)	2015-16 Revised Estimate	2016-17 Estimate	2017-18 Forecast	2018-19 Forecast	2019-20 Forecast	2020-21 Forecast
Operating revenue before investment income	387,375	381,641	411,292	417,557	436,812	458,534
Investment income	192	16,537	15,289	18,339	14,622	13,531
Total	<u>387,567</u>	<u>398,178</u>	<u>426,581</u>	<u>435,896</u>	<u>451,434</u>	<u>472,065</u>

- (ii) Investment income under the Operating Account includes investment income of the General Revenue Account (other than the portion notionally held for the Future Fund) which is credited to revenue head Properties and Investments, and investment income of the Land Fund prior to the establishment of the Future Fund. The rate of investment return is 3.3% for 2016 (vs 5.5% for 2015) and is assumed to be in the range of 2.6% to 3.5% a year for 2017 to 2020.
- (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. It will be retained by the Exchange Fund for reinvestment and will not be paid to Government until the end of the ten-year placement (i.e. 31 December 2025) or a date as directed by the Financial Secretary.
- (iv) The investment income for 2015-16 includes investment income from cash balances but excludes investment income from placements with the Exchange Fund for 2015. The latter, which stood at \$38,235,116,000, along with the investment income under the Capital Account, has been set aside and retained within the Exchange Fund for the Housing Reserve (Note d(iv) is also relevant).

(c) Operating expenditure

- (i) This represents expenditure charged to the Operating Account of the General Revenue Account. The operating expenditure for 2017-18 to 2020-21 assumes a 4.5% growth per annum, in line with the latest GDP forecast in nominal terms. This would be the expenditure guideline for the purpose of containing Government's expenditure growth. The figures for 2017-18 and beyond do not represent the spending needs of departments; unless otherwise flagged up, they do not reflect the impact of population ageing, policy changes or service enhancements.
- (ii) Over and above the expenditure guideline, the provisions for 2016-17 and 2018-19 include \$10 billion and \$20 billion respectively for supporting healthcare reform. A total of \$50 billion has also been earmarked for better retirement protection for the elderly in need, with \$10 billion provided in 2017-18 and \$20 billion provided in each of 2018-19 and 2019-20.

(d) Capital revenue

(i) The breakdown of capital revenue is –

(\$ million)	2015-16 Revised Estimate	2016-17 Estimate	2017-18 Forecast	2018-19 Forecast	2019-20 Forecast	2020-21 Forecast
General Revenue Account	2,695	23,835	615	2,035	3,476	3,475
Capital Investment Fund	1,407	1,324	1,284	1,278	1,399	1,365
Capital Works Reserve Fund	61,983	67,067	69,866	73,041	76,361	79,831
Disaster Relief Fund	1	-	-	-	-	-
Innovation and Technology Fund	53	9	-	-	-	-
Loan Fund	2,326	2,212	2,523	2,529	2,535	2,595
Lotteries Fund	1,219	1,270	1,321	1,374	1,430	1,487
Capital revenue before asset sales and investment income	69,684	95,717	75,609	80,257	85,201	88,753
Asset sales	209	225	225	225	225	225
Investment income	5	4,131	3,681	3,293	1,933	1,586
Total	69,898	100,073	79,515	83,775	87,359	90,564

(ii) Land premium included under the Capital Works Reserve Fund for 2016-17 is assumed to be \$67 billion. For 2017-18 onwards, it is assumed to be 2.7% of GDP, being the 30-year historical average.

(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.

(iv) The investment income for 2015-16 includes investment income from cash balances but excludes investment income from placements with the Exchange Fund for 2015. The latter, which stood at \$6,920,064,000, along with the investment income under the Operating Account, has been set aside and retained within the Exchange Fund for the Housing Reserve (Note b(iv) above is also relevant).

(e) Capital expenditure

The breakdown of capital expenditure is –

(\$ million)	2015-16 Revised Estimate	2016-17 Estimate	2017-18 Forecast	2018-19 Forecast	2019-20 Forecast	2020-21 Forecast
General Revenue Account	3,893	4,533	4,699	4,846	4,993	5,140
Capital Investment Fund	275	11,156	376	268	1,918	250
Capital Works Reserve Fund	78,131	84,546	94,483	104,587	117,977	121,878
Disaster Relief Fund	82	-	-	-	-	-
Innovation and Technology Fund	1,015	1,258	1,287	1,342	1,397	1,460
Loan Fund	3,412	6,690	4,133	3,345	2,630	2,627
Lotteries Fund	910	1,888	3,179	3,405	2,383	1,628
Total	87,718	110,071	108,157	117,793	131,298	132,983

(f) Repayment of bonds and notes

Repayment of bonds and notes is only in respect of the global bond issue in 2004. The outstanding principal of \$1,500 million would be fully repaid in 2019-20.

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 2

(\$ million)	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
	Revised Estimate					
Operating expenditure	339,263	376,800	384,100	430,900	428,500	426,900
Capital expenditure	87,718	110,071	108,157	117,793	131,298	132,983
Government expenditure	426,981	486,871	492,257	548,693	559,798	559,883
Expenditure by other public bodies	35,169	38,510	41,848	42,080	43,714	45,552
Public expenditure (Note (a))	462,150	525,381	534,105	590,773	603,512	605,435
Gross Domestic Product (calendar year)	2,402,506	2,475,100	2,587,600	2,705,200	2,828,200	2,956,700
Nominal growth in GDP (Note (b))	6.4%	3.0%	4.5%	4.5%	4.5%	4.5%
Growth in government expenditure (Note (c))	7.8%	14.0%	1.1%	11.5%	2.0%	0.0%
Growth in public expenditure (Note (c))	9.0%	13.7%	1.7%	10.6%	2.2%	0.3%
Public expenditure in terms of percentage of GDP	19.2%	21.2%	20.6%	21.8%	21.3%	20.5%

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 2016-17, the nominal GDP growth of 3.0% represents the mid-point of the range forecast of 2.5% to 3.5% for the calendar year 2016.
- (c) The growth rates refer to year-on-year change. For example, the rates for 2015-16 refer to the change between revised estimate for 2015-16 and actual expenditure in 2014-15. The rates for 2016-17 refer to the change between the 2016-17 estimate and the 2015-16 revised estimate, and so forth.

15 Table 3 shows the relationship amongst the sum to be appropriated in the 2016-17 Budget, government expenditure and public expenditure.

**Relationship between Government Expenditure
and Public Expenditure in 2016-17**

Table 3

(\$ million)	Appropriation	Government expenditure and revenue			Public expenditure
		Operating	Capital	Total	
Expenditure					
	General Revenue Account				
	Operating				
	Recurrent	347,461	-	347,461	347,461
	Non-recurrent	29,339	-	29,339	29,339
	Capital				
	Plant, equipment and works	2,740	2,740	2,740	2,740
	Subventions	1,793	1,793	1,793	1,793
		381,333	4,533	381,333	381,333
	Transfer to Funds	44,864	-	-	-
	Capital Investment Fund	-	11,156	11,156	11,156
	Capital Works Reserve Fund	-	84,546	84,546	84,546
	Innovation and Technology Fund	-	1,258	1,258	1,258
	Loan Fund	-	6,690	6,690	6,690
	Lotteries Fund	-	1,888	1,888	1,888
	Trading Funds	-	-	-	4,574
	Housing Authority	-	-	-	33,936
		426,197	110,071	486,871	525,381
Revenue					
	General Revenue Account				
	Taxation	335,898	23	335,921	
	Other revenue	62,280	23,812	86,092	
		398,178	23,835	422,013	
	Capital Investment Fund	-	1,406	1,406	
	Capital Works Reserve Fund	-	69,202	69,202	
	Civil Service Pension Reserve Fund	-	989	989	
	Disaster Relief Fund	-	2	2	
	Innovation and Technology Fund	-	121	121	
	Loan Fund	-	2,530	2,530	
	Lotteries Fund	-	1,988	1,988	
		398,178	100,073	498,251	
	Surplus/(Deficit)	21,378	(9,998)	11,380	

SECTION IV CONTINGENT AND MAJOR UNFUNDED LIABILITIES

16 The Government's contingent liabilities as at 31 March 2015, 31 March 2016 and 31 March 2017, are provided below as supplementary information to the MRF –

(\$ million)	2015	At 31 March 2016	2017
Guarantee to the Hong Kong Export Credit Insurance Corporation for liabilities under contracts of insurance	31,614	34,371	37,332
Guarantees provided under the SME Financing Guarantee Scheme – Special Concessionary Measures	27,022	24,111	21,072
Legal claims, disputes and proceedings	12,773	8,736	8,808
Possible capital subscriptions to the Asian Development Bank	5,892	5,899	5,899
Guarantees provided under the SME Loan Guarantee Scheme	6,406	5,606	5,451
Guarantees provided under a commercial loan of the Hong Kong Science and Technology Parks Corporation	2,048	2,002	1,957
Guarantees provided under the Special Loan Guarantee Scheme	20,442	4,489	1,172
Guarantees provided under a commercial loan of the Ocean Park Corporation	1,388	-	-
Total	<u>107,585</u>	<u>85,214</u>	<u>81,691</u>

17 The Government's major unfunded liabilities as at 31 March 2015 were as follows –

(\$ million)	
Present value of statutory pension obligations	815,832
Untaken leave (<i>Note</i>)	26,451
Government bonds and notes issued in 2004	1,500

Note –

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 2015 and 31 March 2016 are \$296,074 million and \$296,697 million respectively. Part of these are contractual commitments.

