# **APPENDICES**

### **APPENDIX A**

### MEDIUM RANGE FORECAST 2008–09 TO 2013–14

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#### SECTION I – FORECASTING ASSUMPTIONS AND BUDGETARY CRITERIA

1 A number of computer-based models are used to derive the Medium Range Forecast (MRF). These models use a wide range of assumptions about the factors affecting each of the components of Government's revenue and expenditure. Some are economic in nature (the general economic assumptions) while others deal with specific areas of Government's activities (the detailed assumptions). These are supported by studies of historical and projected trends.

#### **General Economic Assumptions**

Real Gross Domestic Product (real GDP)

2 GDP is forecast to decrease by between 2% to 3% in real terms in 2009. We have used the mid-point of this range forecast in deriving the MRF. For planning purposes, in the four-year period 2010 to 2013, the trend growth rate of the economy in real terms is assumed to be 3.5% per annum.

#### Price change

- 3 The GDP deflator, measuring overall price change in the economy, is forecast to increase by 0.5% in 2009. For the four-year period 2010 to 2013, the GDP deflator is assumed to increase at a trend rate of 1% per annum.
- 4 The Composite Consumer Price Index (CCPI), measuring inflation in the consumer domain, is forecast to increase by 1.6% in 2009. Eliminating the effects of various one-off measures introduced in the 2008-09 and 2009-10 Budgets, the underlying CCPI is forecast to increase by 1.5% in 2009. For the ensuing period 2010 to 2013, the trend rate of increase for the underlying CCPI is assumed to be 2% per annum.

Nominal Gross Domestic Product (nominal GDP)

5 Given the assumptions on the rates of change in the real GDP and the GDP deflator, the GDP in nominal terms is forecast to decrease by between 1.5% to 2.5% in 2009, and the trend growth rate in nominal terms for the period 2010 to 2013 is assumed to be 4.5% per annum.

#### **Detailed Assumptions**

- 6 The MRF incorporates a wide range of detailed assumptions on expenditure and revenue patterns over the forecast period, taking the following, amongst other factors, into account
  - estimated cash flow of capital projects,
  - forecast completion dates of these capital projects and their related recurrent consequences in terms of staffing and running costs,
  - estimated cash flow arising from new commitments and policy initiatives,
  - the expected pattern of demand for individual services,
  - the trend in yield from individual revenue sources, and
  - new revenue/expenditure measures in the 2009-10 Budget.

#### **Budgetary Criteria**

- 7 In addition to the above forecasting assumptions, there are a number of criteria against which the results of forecasts are tested for overall acceptability in terms of budgetary policy.
- **8** The following covers the more important budgetary criteria
  - Budget surplus/deficit

The Government aims to achieve balance in the consolidated and operating accounts. The Government needs, over time, to achieve an operating surplus to partially finance capital expenditure.

Expenditure policy

The general principle is that, over time, expenditure growth should not exceed the growth of the economy. The Government aims to keep public expenditure at or below 20% of GDP. Capital expenditure, by its nature, will fluctuate from year to year.

— Revenue policy

Account is taken of the need to maintain, over time, the real yield from revenue.

— Fiscal reserves

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

### **SECTION II – THE MRF FOR 2008–09 TO 2013–14**

**9** The current MRF (*Note a*) is summarised in the following table which indicates the forecast financial position of the Government –

Table 1

	Original Estimate	Revised Estimate	Estimate		Fore	ecast	
(\$ million)	2008–09	2008-09	2009–10	2010–11	2011–12	2012–13	2013–14
Operating Account							
Operating revenue (Note b & f)  Less: Operating expenditure (Note c)	212,269 255,700	240,387 259,991	206,703 244,000	215,155 249,400	235,366 258,100	254,347 267,100	274,689 276,400
Deficit before investment income Investment income ( <i>Note b</i> )	(43,431) 37,091	(19,604) 37,562	(37,297) 27,494	(34,245) 20,108	(22,734) 18,348	(12,753) 19,116	(1,711) 15,264
Operating surplus/(deficit) after investment income	(6,340)	17,958	(9,803)	(14,137)	(4,386)	6,363	13,553
Capital Financing Statement							
Capital revenue (Note d) Asset sales (Note d)	53,138 87	25,832 68	23,506 85	41,416 77	39,429 10,475	41,587 10,298	44,436 10,270
Less: Capital spending (Note e)	53,225 56,289	25,900 54,321	23,591 53,466	41,493 54,684	49,904 68,952	51,885 68,229	54,706 70,562
Deficit before investment income/interest expenses Investment income ( <i>Note d</i> )  Less: Interest expenses ( <i>Note e &amp; f</i> )	(3,064) 5,315 754	(28,421) 9,036 754	(29,875) 3,944 642	(13,191) 2,832 576	(19,048) 2,149 577	(16,344) 1,776 576	(15,856) 1,536 577
Surplus/(deficit) after investment income/interest expenses	1,497	(20,139)	(26,573)	(10,935)	(17,476)	(15,144)	(14,897)
Less: Repayment of bonds and notes (Note e & f)	2,700	2,700	3,500	-	-	-	-
Capital financing deficit after bond repayment	(1,203)	(22,839)	(30,073)	(10,935)	(17,476)	(15,144)	(14,897)
Consolidated Account							
Fiscal reserves at 1 April	484,939	492,914	488,033	448,157	423,085	401,223	392,442
Operating surplus/(deficit) Capital financing surplus/(deficit) before bond repayment	(6,340) 1,497	17,958 (20,139)	(9,803) (26,573)	(14,137) (10,935)	(4,386) (17,476)	6,363 (15,144)	13,553 (14,897)
Consolidated deficit  Less: Repayment of bonds and notes	( <b>4,843</b> ) 2,700	( <b>2,181</b> ) 2,700	( <b>36,376</b> ) 3,500	(25,072)	(21,862)	(8,781)	(1,344)
Consolidated deficit after bond repayment	(7,543)	(4,881)	(39,876)	(25,072)	(21,862)	(8,781)	(1,344)
Fiscal reserves at 31 March As number of months of government expenditure As a percentage of GDP	<b>477,396</b> 18 27.7%	<b>488,033</b> 19 29.1%	<b>448,157</b> 18 27.2%	<b>423,085</b> 17 24.6%	<b>401,223</b> 15 22.3%	392,442 14 20.9%	<b>391,098</b> 14 19.9%
Outstanding debts at 31 March Toll Revenue Bond Other government bonds and notes	2,098 14,750	1,932 14,750	11,250	11,250	11,250	11,250	11,250

#### Notes -

#### (a) Accounting policies

- (i) The MRF is prepared on a cash basis and reflects forecast receipts and payments, whether or not they relate to operating or capital transactions.
- (ii) The MRF includes the General Revenue Account and the 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).

#### (b) Operating revenue

(i) The operating revenue has taken into account the revenue-concession measures proposed in the 2009-10 Budget, and is made up of –

	2008–09 Revised Estimate	2009–10 Estimate	2010–11 Forecast	2011–12 Forecast	2012–13 Forecast	2013–14 Forecast
(\$ million) Operating revenue before investment income	240,387	206,703	215,155	235,366	254,347	274,689
Investment income	37,562	27,494	20,108	18,348	19,116	15,264
Total	277,949	234,197	235,263	253,714	273,463	289,953

(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 for 2009 is 6.8% and for 2010 to 2013 is assumed to be in the range of 4.3% to 5.3% a year.

#### (c) Operating expenditure

This represents expenditure charged to the Operating Account of the General Revenue Account. The levels of operating expenditure in 2009-10 to 2013-14 represent the expenditure guideline for these years.

#### (d) Capital revenue

(i) The breakdown of capital revenue is –

	2008-09					
	Revised	2009–10	2010–11	2011–12	2012–13	2013–14
	Estimate	Estimate	Forecast	Forecast	Forecast	Forecast
(\$ million)						
General Revenue Account	4,001	2,870	3,927	684	528	528
Capital Works Reserve Fund	17,047	16,634	33,366	34,539	36,639	39,240
Capital Investment Fund	1,811	872	812	770	802	821
Disaster Relief Fund	2	-	-	-	-	-
Innovation and Technology Fund	18	-	-	-	-	-
Loan Fund	1,992	2,131	2,259	2,324	2,444	2,606
Lotteries Fund	961	999	1,052	1,112	1,174	1,241
Capital revenue before asset sales and investment income	25,832	23,506	41,416	39,429	41,587	44,436
Asset sales	68	85	77	10,475	10,298	10,270
Investment income	9,036	3,944	2,832	2,149	1,776	1,536
Total	34,936	27,535	44,325	52,053	53,661	56,242

- (ii) For the purpose of the MRF, the annual land premium included under the Capital Works Reserve Fund is assumed to be around 1% of GDP in 2009-10 and 2% from 2010-11 onwards.
- (iii) Investment income under the Capital Financing Statement includes investment income of the Funds except Land Fund (i.e. Capital Investment Fund, Capital Works Reserve Fund, Civil Service Pension Reserve Fund, Disaster Relief Fund, Innovation and Technology Fund, Loan Fund and Lotteries Fund).

#### (e) Capital spending

The breakdown of capital spending is -

	2008-09					
	Revised	2009-10	2010-11	2011-12	2012-13	2013-14
	Estimate	Estimate	Forecast	Forecast	Forecast	Forecast
(\$ million)						
General Revenue Account	2,508	3,523	3,970	3,970	3,970	3,970
Capital Works Reserve Fund	47,166	43,884	44,558	59,525	58,885	61,651
Capital Investment Fund	209	380	535	250	250	250
Disaster Relief Fund	345	-	-	-	-	-
Innovation and Technology Fund	659	1,278	1,465	993	1,018	1,044
Loan Fund	2,492	2,592	2,935	3,044	3,592	3,250
Lotteries Fund	942	1,809	1,221	1,170	514	397
Capital spending before interest on and repayment of government bonds and notes	54,321	53,466	54,684	68,952	68,229	70,562
Interest expenses	754	642	576	577	576	577
Repayment of bonds and notes	2,700	3,500	-	-	-	-
Total	57,775	57,608	55,260	69,529	68,805	71,139

#### (f) Government bonds and notes

Interest expenses and repayment of bonds and notes are only in respect of the global bond issue and not the Toll Revenue Bond. The interest expenses and repayment of the Toll Revenue Bond are charged directly against the net toll revenue of the concerned tunnels and bridges. The toll revenue thus forgone has been taken into account in forecasting government operating revenue.

### SECTION III – RELATIONSHIP BETWEEN GOVERNMENT EXPENDITURE/PUBLIC EXPENDITURE AND GDP IN THE MRF

10 For monitoring purposes, expenditure of the Trading Funds and the Housing Authority (collectively referred to as "other public bodies") is added to Government's own expenditure in order to compare total public expenditure with GDP.

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

Table 2

	Original Estimate	Revised Estimate	Estimate	Forecast			
(\$ million)	2008–09	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14
Operating expenditure	255,700	259,991	244,000	249,400	258,100	267,100	276,400
Capital expenditure	56,694	54,866	53,728	54,725	69,279	68,555	70,889
Total government expenditure	312,394	314,857	297,728	304,125	327,379	335,655	347,289
Other public bodies expenditure	19,688	19,745	21,631	22,656	22,642	23,092	23,610
Total public expenditure (Note a)	332,082	334,602	319,359	326,781	350,021	358,747	370,899
Gross Domestic Product (calendar year)	1,725,625	1,678,514	1,644,734	1,718,747	1,796,692	1,878,172	1,963,347
Growth in GDP (Note b)							
Nominal terms		3.9%	-2.0%	4.5%	4.5%	4.5%	4.5%
Real terms		2.5%	-2.5%	3.5%	3.5%	3.5%	3.5%
<b>Growth in government expenditure</b> (Note c)							
Nominal terms		34.1%	-5.4%	2.1%	7.6%	2.5%	3.5%
Real terms		28.5%	-6.0%	-0.7%	6.7%	0.5%	0.9%
Growth in public expenditure (Note c)							
Nominal terms		32.6%	-4.6%	2.3%	7.1%	2.5%	3.4%
Real terms		27.0%	-5.2%	-0.4%	6.2%	0.5%	0.8%
Public expenditure as a percentage of GDP	19.2%	19.9%	19.4%	19.0%	19.5%	19.1%	18.9%

#### Notes -

- (a) Public expenditure comprises government expenditure (i.e. all expenditure charged to the General Revenue Account and financed by the Government's statutory funds excluding Capital Investment Fund), and expenditure by the Trading Funds and the Housing Authority. 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. Similarly, advances and equity investments from the Capital Investment Fund as well as repayment of government bonds and notes are excluded as they do not reflect the actual consumption of resources by the Government.
- (b) For 2009-10, the GDP growth in nominal terms of -2% represents the mid-point of the range forecast of nominal GDP growth at -1.5% to -2.5% for the calendar year 2009. Similarly, the growth in real terms of -2.5% represents the mid-point of the range forecast of real GDP growth at -2% to -3% for 2009.
- (c) The growth rates refer to year-on-year change. For example, the rates for 2008–09 refer to the change between revised estimate for 2008–09 and actual expenditure in 2007–08. The rates for 2009–10 refer to the change between the 2009–10 estimate and the 2008–09 revised estimate, and so forth.

11 Table 3 shows the relationship amongst the sum to be appropriated in the 2009-10 Budget, government expenditure and public expenditure. It also shows the effect of the Budget revenue measures on the overall fiscal position for 2009–10.

# Relationship between Government Expenditure and Public Expenditure in 2009–10

(\$ million) Table 3

Components of expenditure and revenue	227,603 16,397
General Revenue Account Operating Recurrent Non-recurrent  Operating 16,397  16,397  Operating 16,397  16,397  Operating 16,397	
Recurrent         227,603         227,603         -         227,603           Non-recurrent         16,397         16,397         -         16,397	
	10,397
Plant, equipment and works 2,023 - 2,023 2,023 Subventions 1,500 - 1,500 1,500	2,023 1,500
Transfer to Funds     247,523     244,000     3,523     247,523       Transfer to Funds     15,409     -     -     -       Capital Works Reserve Fund     -     -     44,526     44,526       Innovation and Technology Fund     -     -     1,278     1,278       Loan Fund     -     -     2,592     2,592       Lotteries Fund     -     -     1,809     1,809       Trading Funds     -     -     -     -       Housing Authority     -     -     -     -	247,523 44,526 1,278 2,592 1,809 3,837 17,794
262,932 244,000 53,728 297,728	319,359
Revenue (before Budget revenue measures)         188,947         80         189,027           Taxation         41,683         2,790         44,473	
230,630 2,870 233,500 Land Fund 11,196 - 11,196	
Capital Works Reserve Fund       -       18,361       18,361         Capital Investment Fund       -       928       928         Civil Service Pension Reserve Fund       -       1,377       1,377         Disaster Relief Fund       -       3       3         Innovation and Technology Fund       -       251       251         Loan Fund       -       2,302       2,302         Lotteries Fund       -       1,443       1,443	
241,826 27,535 269,361	
Deficit before Budget revenue measures(2,174)(26,193)(28,367)Less: Effect of Budget revenue measures(7,629)-(7,629)	
Deficit after Budget revenue measures (9,803) (26,193) (35,996)  Less: Advances and equity investments from the Capital Investment Fund Repayment of bonds and notes (9,803) (26,193) (35,996)  - 380 380  - 3,500 3,500	
<b>Consolidated deficit</b> (9,803) (30,073) (39,876)	

### SECTION IV – ESTIMATES OF CONTINGENT LIABILITIES

12 The Government's contingent liabilities as at 31 March 2008, and estimates of these should they remain unsettled as at 31 March 2009 or 31 March 2010, are provided below as supplementary information to the MRF –

	2008	At 31 March 2009	2010
(\$ million) Guarantee to the Hong Kong Export Credit Insurance Corporation for liabilities under contracts of insurance	12,787	15,163	17,962
Guarantee provided under the Special Loan Guarantee Scheme	-	58,350	100,000
Guarantees provided under loan guarantee schemes for small and medium enterprises	4,089	4,118	4,118
Possible capital subscriptions to the Asian Development Bank	2,295	2,295	2,295
Guarantee provided for commercial loan of the Ocean Park Corporation	-	786	1,388
Litigation	42	44	44
Total	19,213	80,756	125,807