

# **On Long-Term Fiscal Planning**

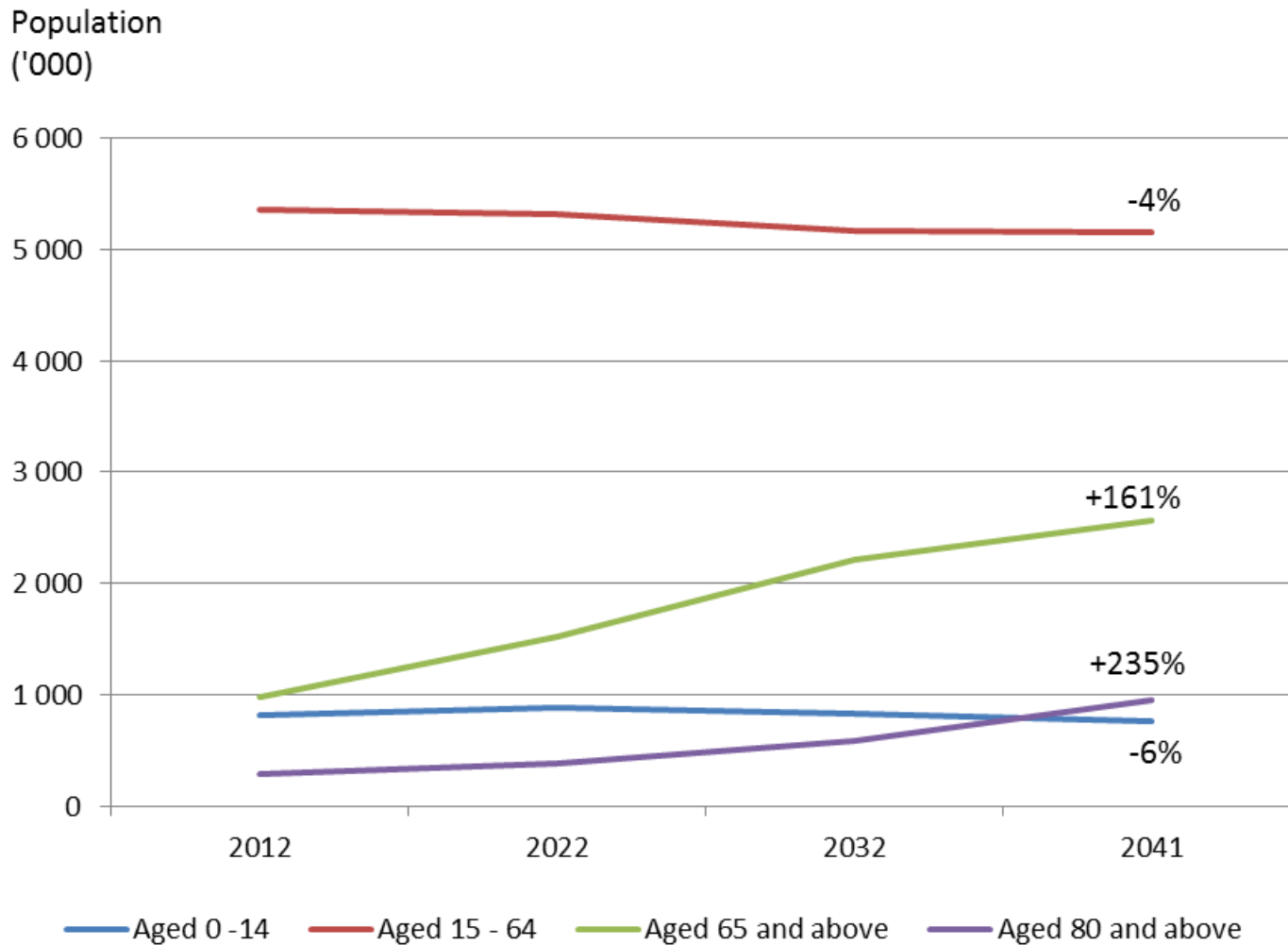
**25 March 2014**

# Our Tasks

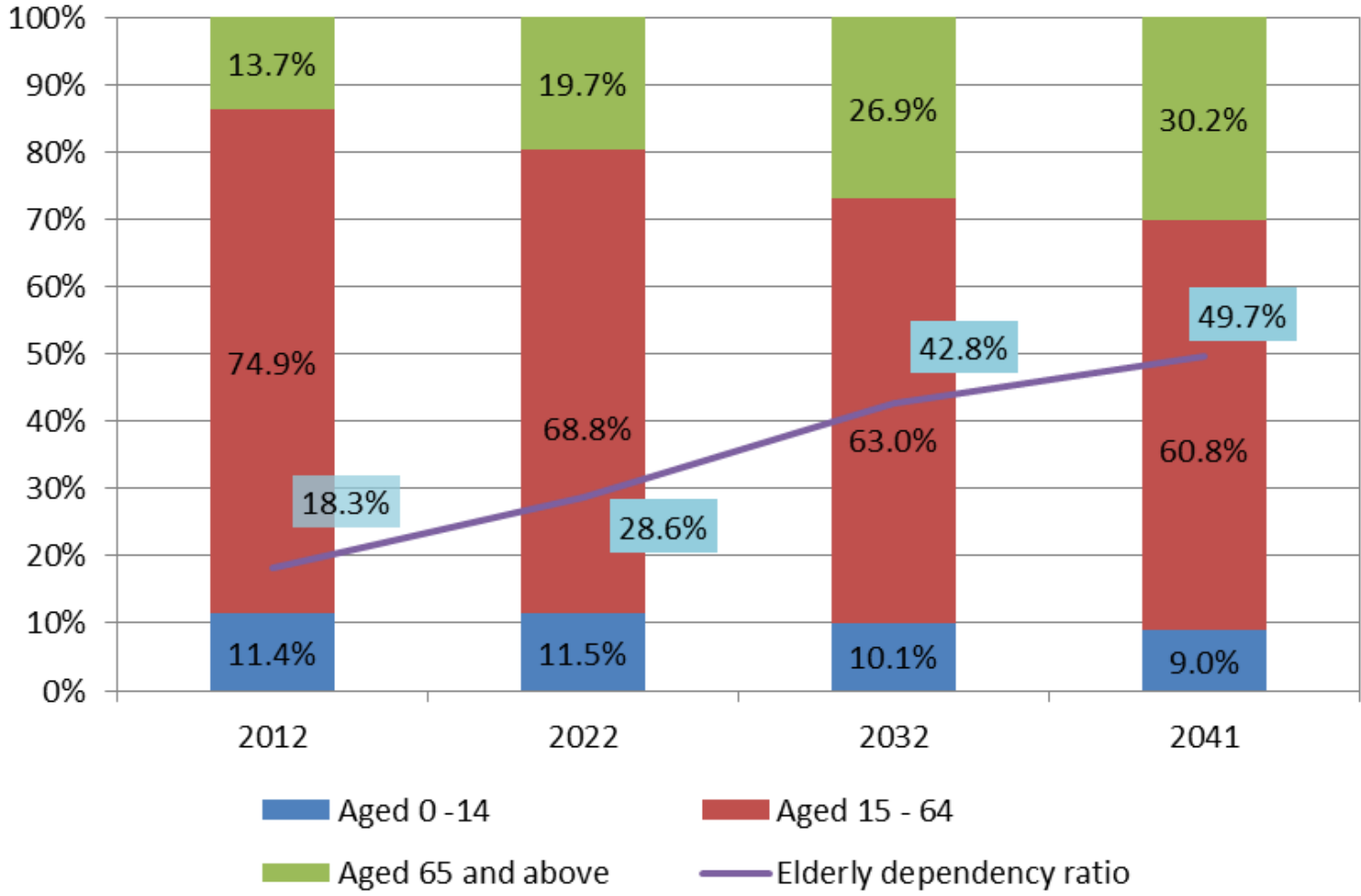
- Projections up to 2041
  - Economic growth
  - Government revenue
  - Government expenditure
- Overseas reference
- Fiscal measures

# Population Ageing

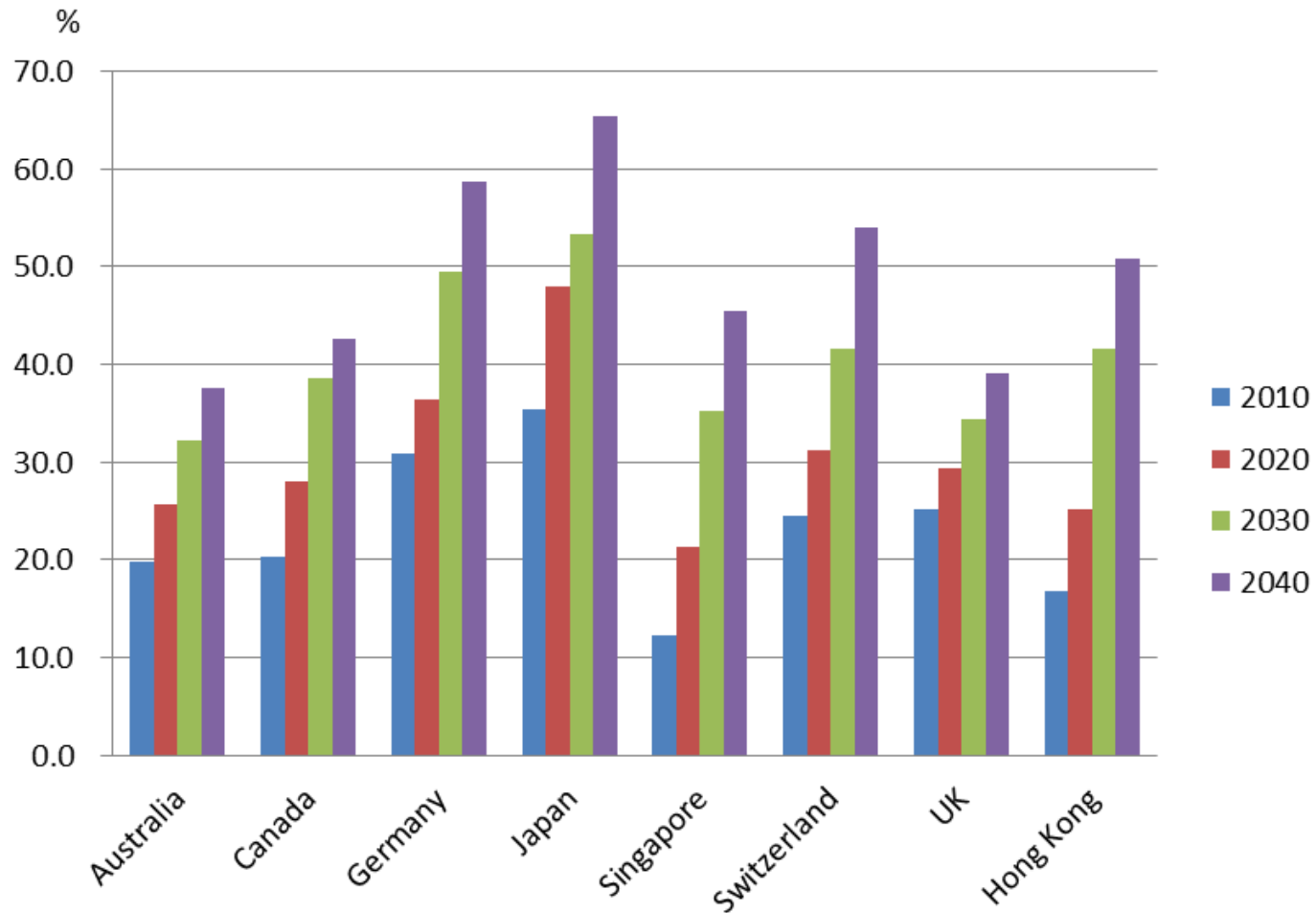
# Population Changes by Age Groups



# Proportion of Different Age Groups to Total Population and Elderly Dependency Ratio



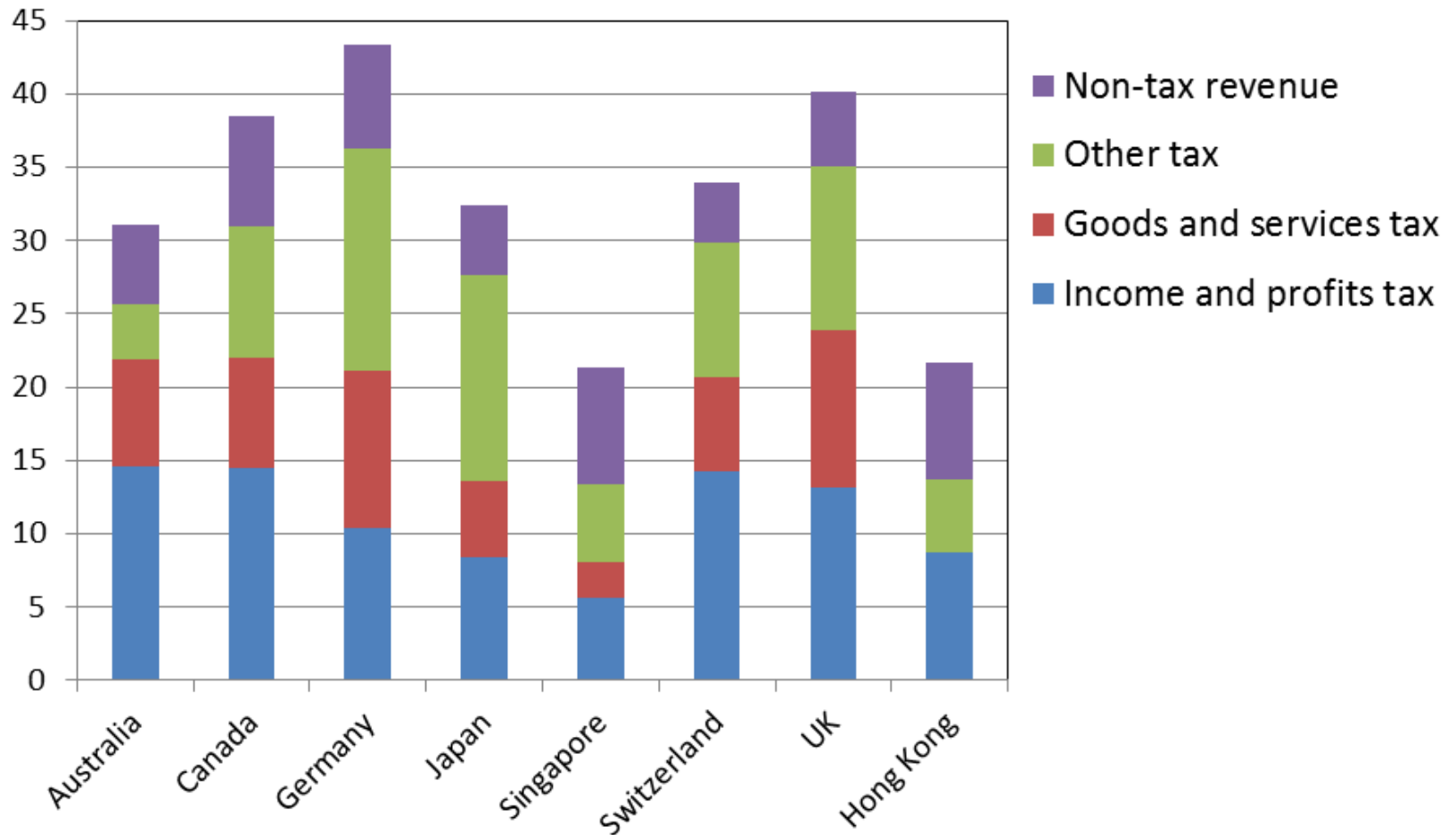
# Elderly Dependency Ratio



Source: Other economies - United Nations Probabilistic Population Projections  
Singapore - Department of Statistics, Singapore Government

# Revenue of selected economies

% of nominal GDP



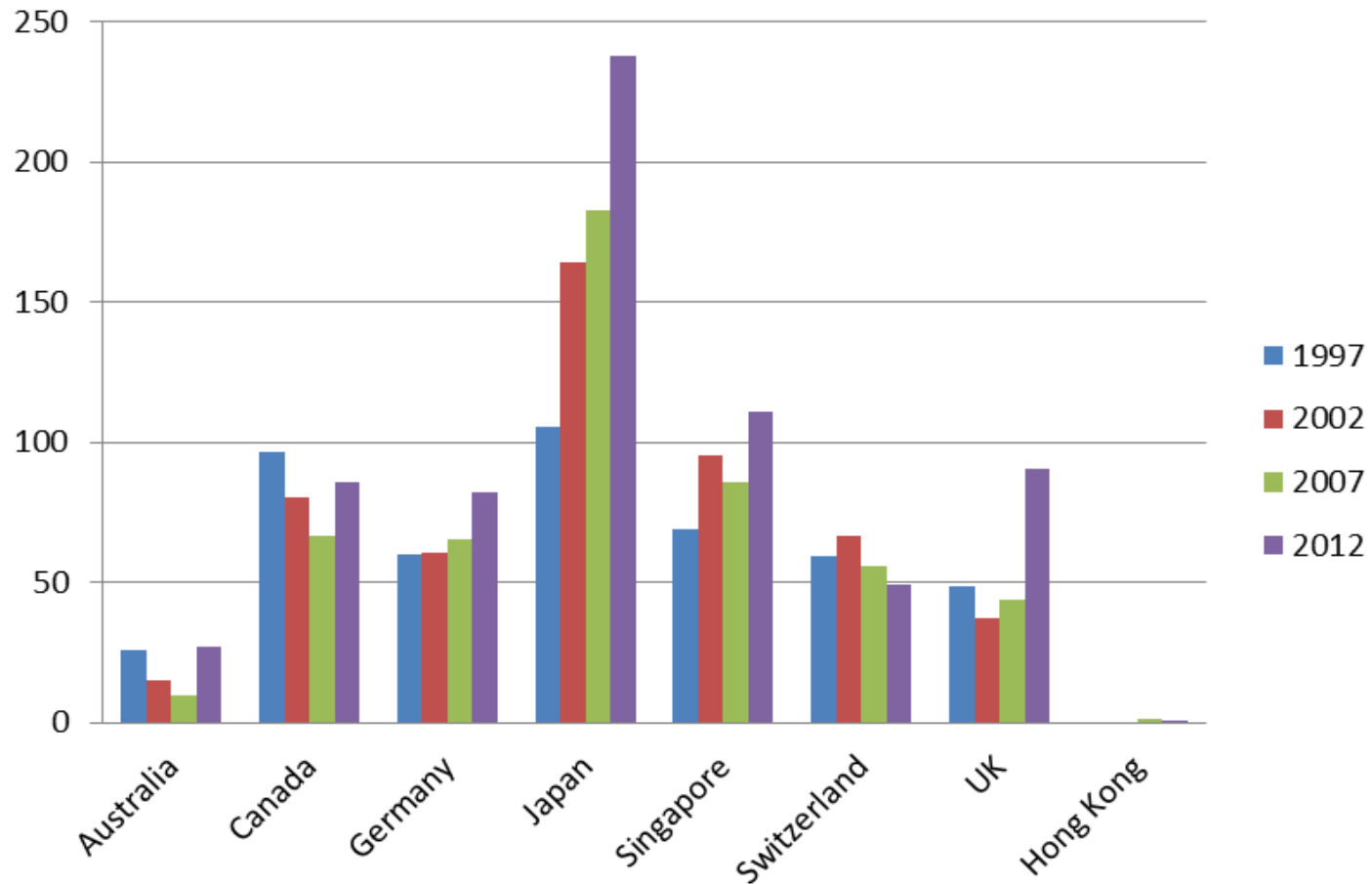
Sources: Other countries - OECD (for 2010)

Singapore - Singapore 2013 Budget

Hong Kong - Government's figures for 2012-13

# Debt level of selected economies

% of Nominal GDP



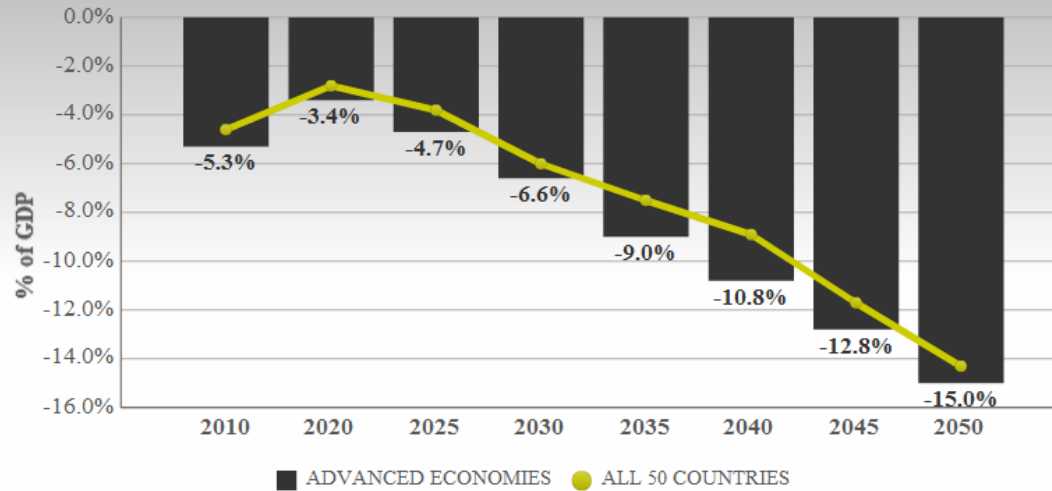
Source: IMF WEO Database



In the absence of appropriate budgetary adjustment and reform, population aging will lead to profound changes in economic growth prospects for countries around the world, with the future fiscal burden increasing significantly across the board.

**ADVANCED ECONOMIES** data, assuming **NO POLICY CHANGES** compared with **ALL 50 COUNTRIES**

General Government Balance



Net General Government Debt

General Government Balance

Hypothetical Longterm Rating

**PICK A SCENARIO**

- No Policy Change
- No Additional Age-Related Spending
- Balanced Budget in 2016
- Lower Real Interest Rates
- Higher Growth Rate

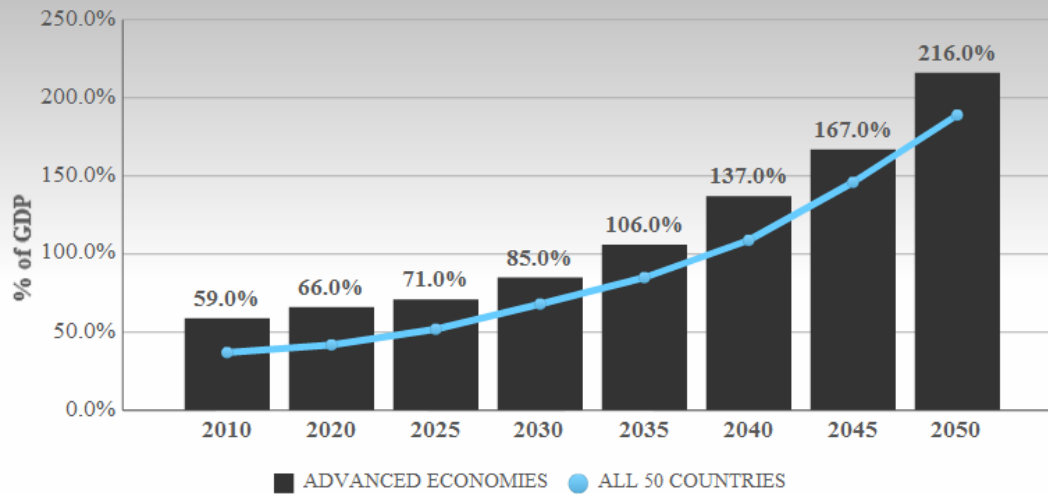
**COMPARE TO A GROUP**

- All 50 countries
- Advanced economies
- Emerging economies
- BRIC countries
- Eurozone
- Asia
- Latin America
- G20 countries
- AAA rated countries
- AA rated countries
- A/BBB rated countries

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# No Policy Change Scenario

	General government balance (% GDP)		
	2010	2040f	2050f
<b>Australia</b>	(5.3)	(8.1)	(12.5)
<b>Canada</b>	(5.4)	(7.6)	(10.5)
<b>China</b>	(1.7)	(12.1)	(18.7)
<b>France</b>	(7.1)	(11.2)	(14.8)
<b>Germany</b>	(4.1)	(8.7)	(12.9)
<b>Greece</b>	(10.7)	(12.1)	(16.4)
<b>India</b>	(8.3)	(8.9)	(11.2)
<b>Indonesia</b>	(0.7)	(5.5)	(7.9)
<b>Japan</b>	(8.5)	(24.3)	(30.8)
<b>Korea</b>	1.0	(17.0)	(31.3)
<b>Netherlands</b>	(5.1)	(19.7)	(27.1)
<b>Russia</b>	(3.5)	(24.1)	(37.8)
<b>Spain</b>	(9.7)	(11.1)	(17.0)
<b>U.K.</b>	(10.2)	(15.5)	(19.6)
<b>U.S.</b>	(9.7)	(21.2)	(27.8)
<b>Advanced economies</b>	(5.3)	(10.8)	(15.0)

Source: Standard & Poor's Ratings Services

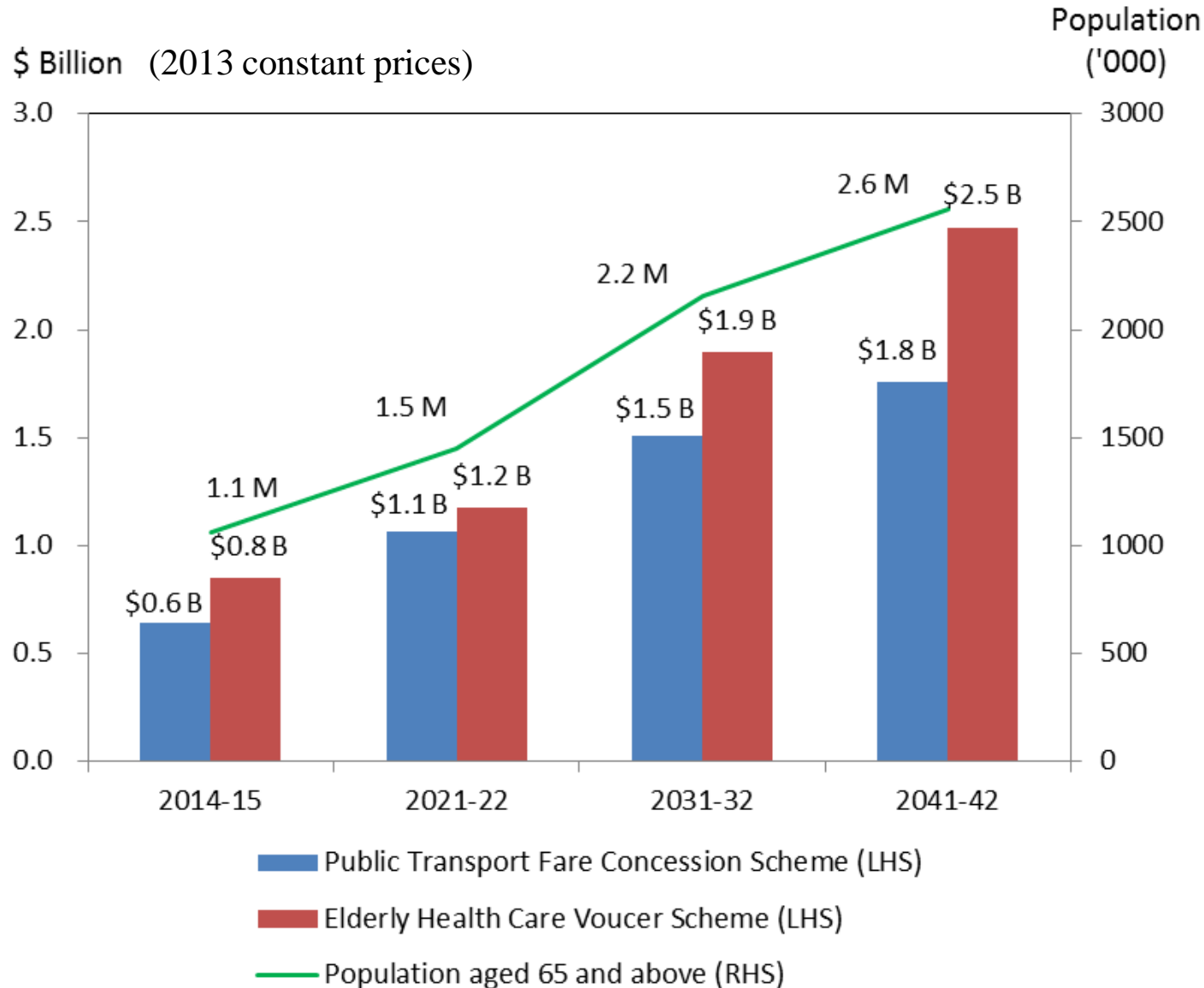
# No Policy Change Scenario

## Net general government debt (% GDP)

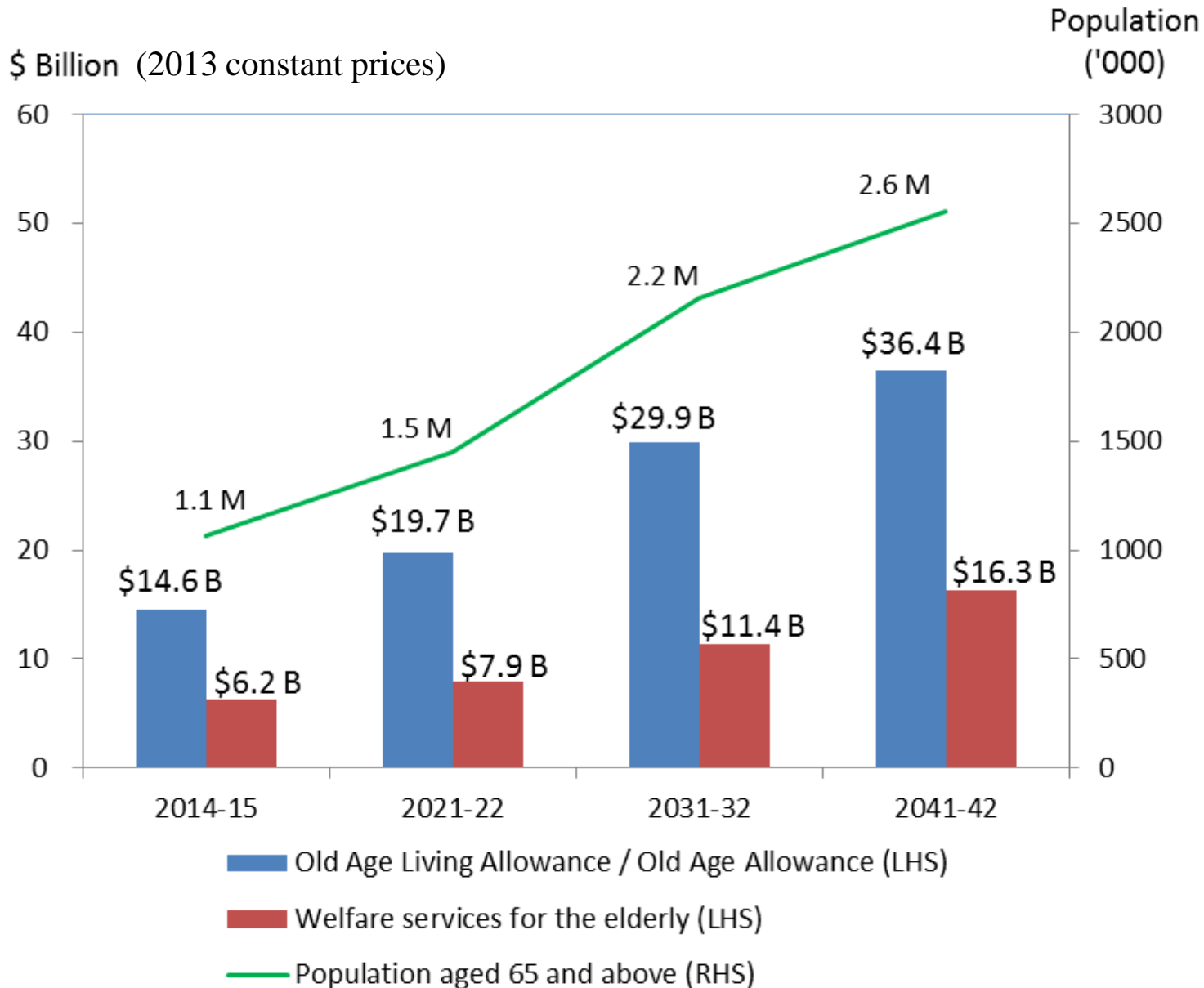
	<b>2010</b>	<b>2040f</b>	<b>2050f</b>
<b>Australia</b>	16.0	78.0	139.0
<b>Canada</b>	48.0	101.0	147.0
<b>China</b>	14.0	108.0	199.0
<b>France</b>	77.0	163.0	228.0
<b>Germany</b>	80.0	130.0	195.0
<b>Greece</b>	143.0	239.0	303.0
<b>India</b>	75.0	109.0	145.0
<b>Indonesia</b>	24.0	55.0	87.0
<b>Japan</b>	105.0	375.0	494.0
<b>Korea</b>	20.0	136.0	313.0
<b>Netherlands</b>	59.0	243.0	380.0
<b>Russia</b>	1.0	215.0	444.0
<b>Spain</b>	51.0	164.0	247.0
<b>U.K.</b>	76.0	223.0	302.0
<b>U.S.</b>	71.0	258.0	366.0
<b>Advanced economies</b>	59.0	137.0	216.0

Source: Standard & Poor's Ratings Services

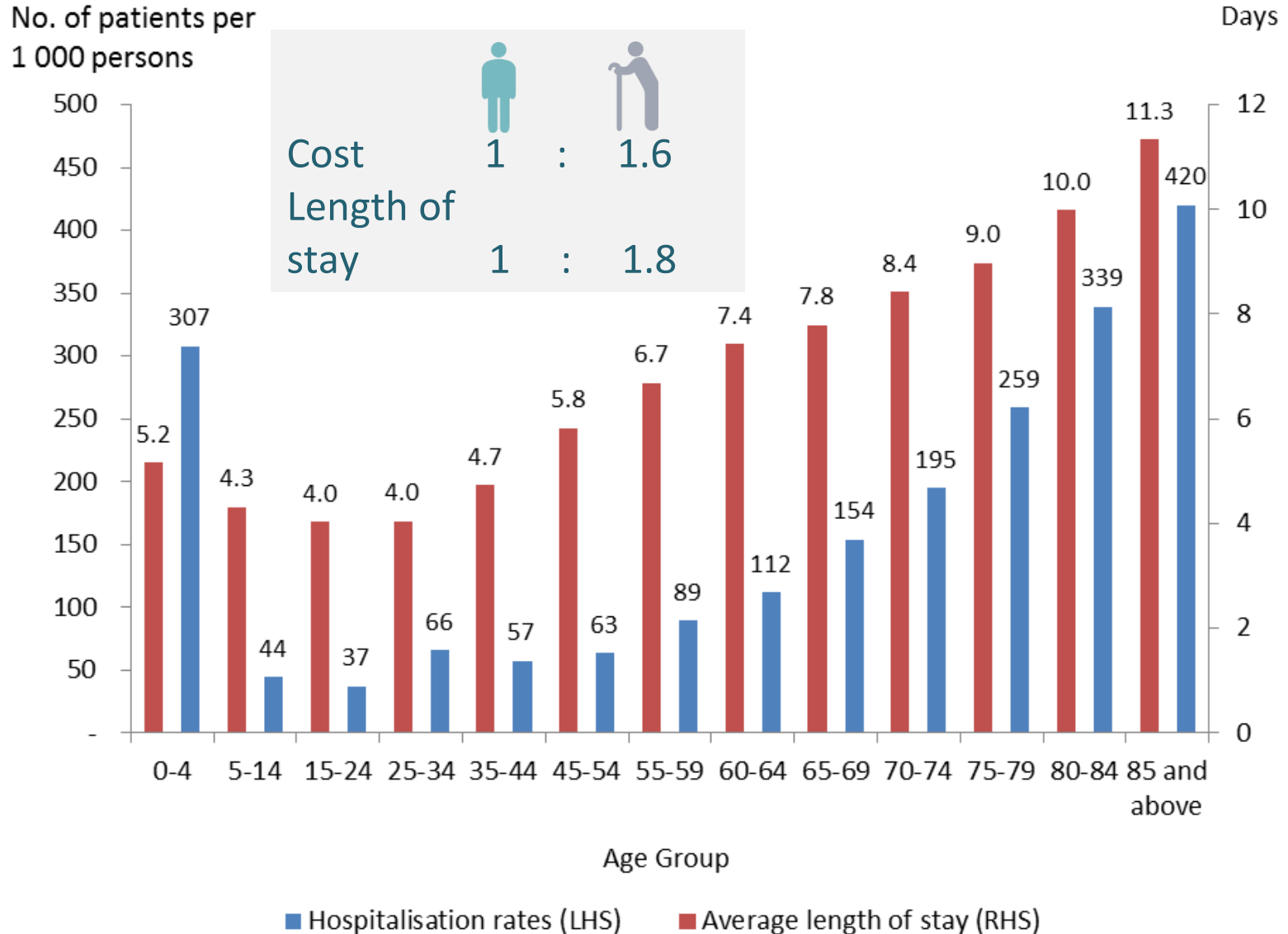
# Population ageing drives up expenditure



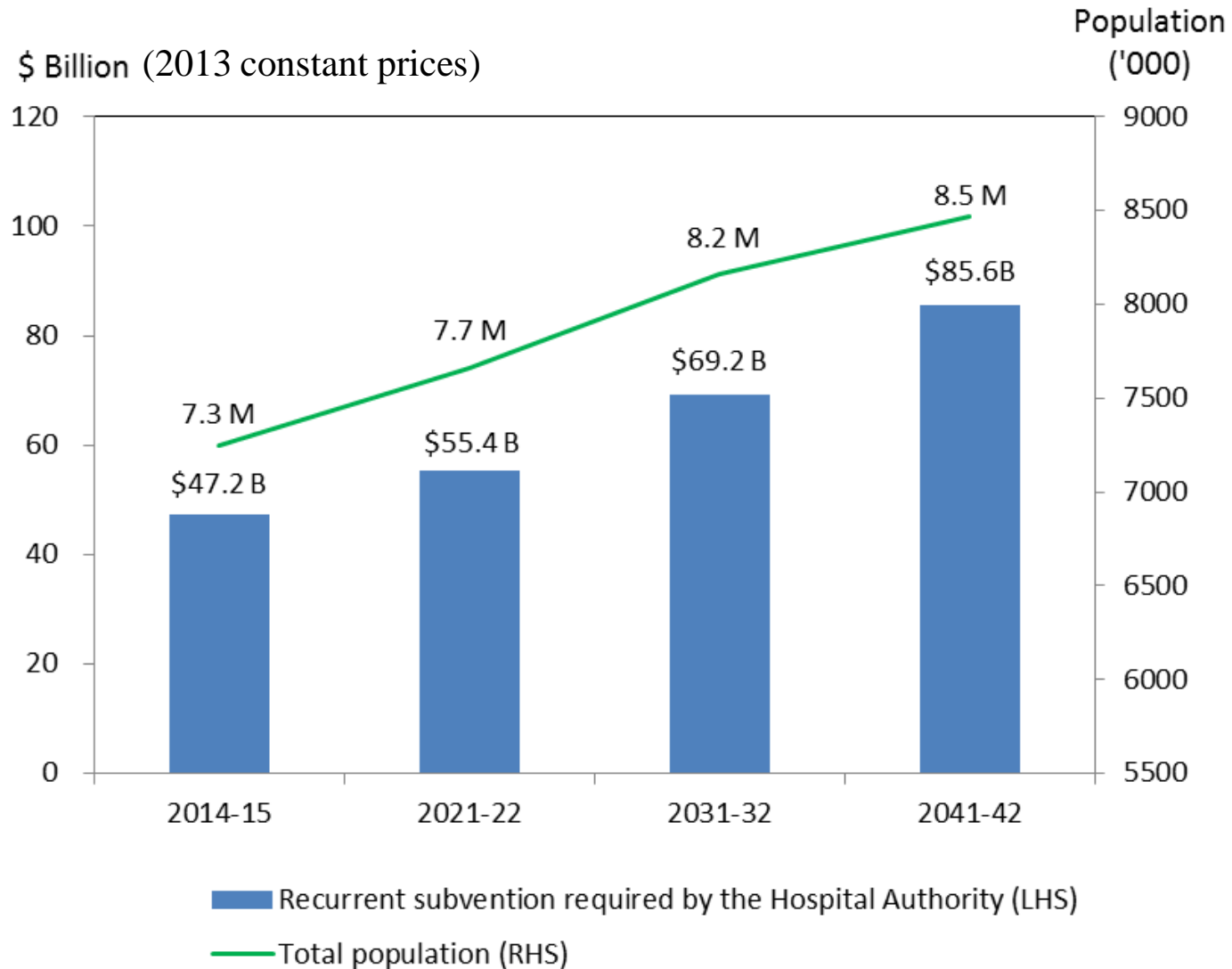
# Population ageing drives up expenditure



# Hospitalisation Rates and Average Length of Stay



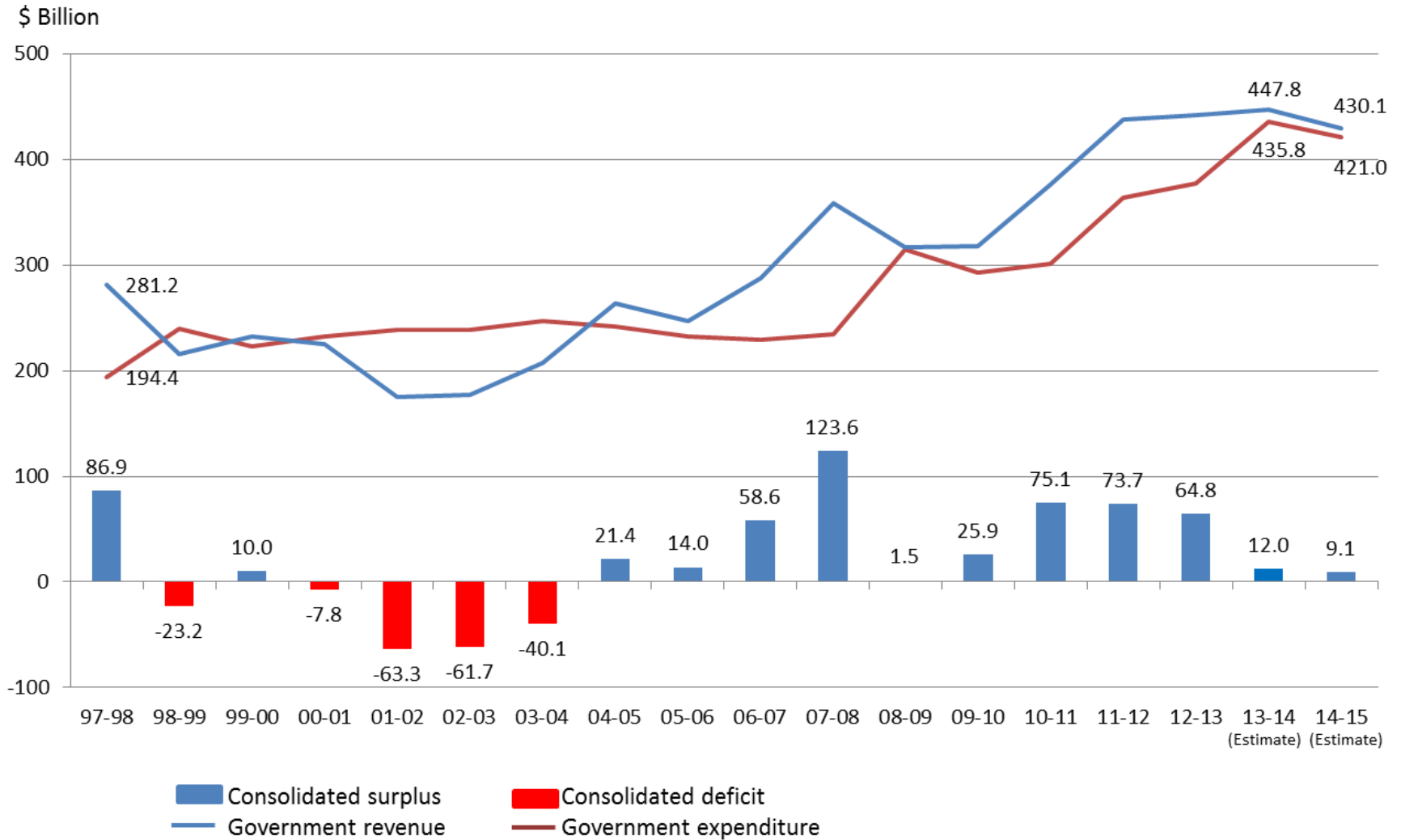
# Recurrent Subvention to Hospital Authority





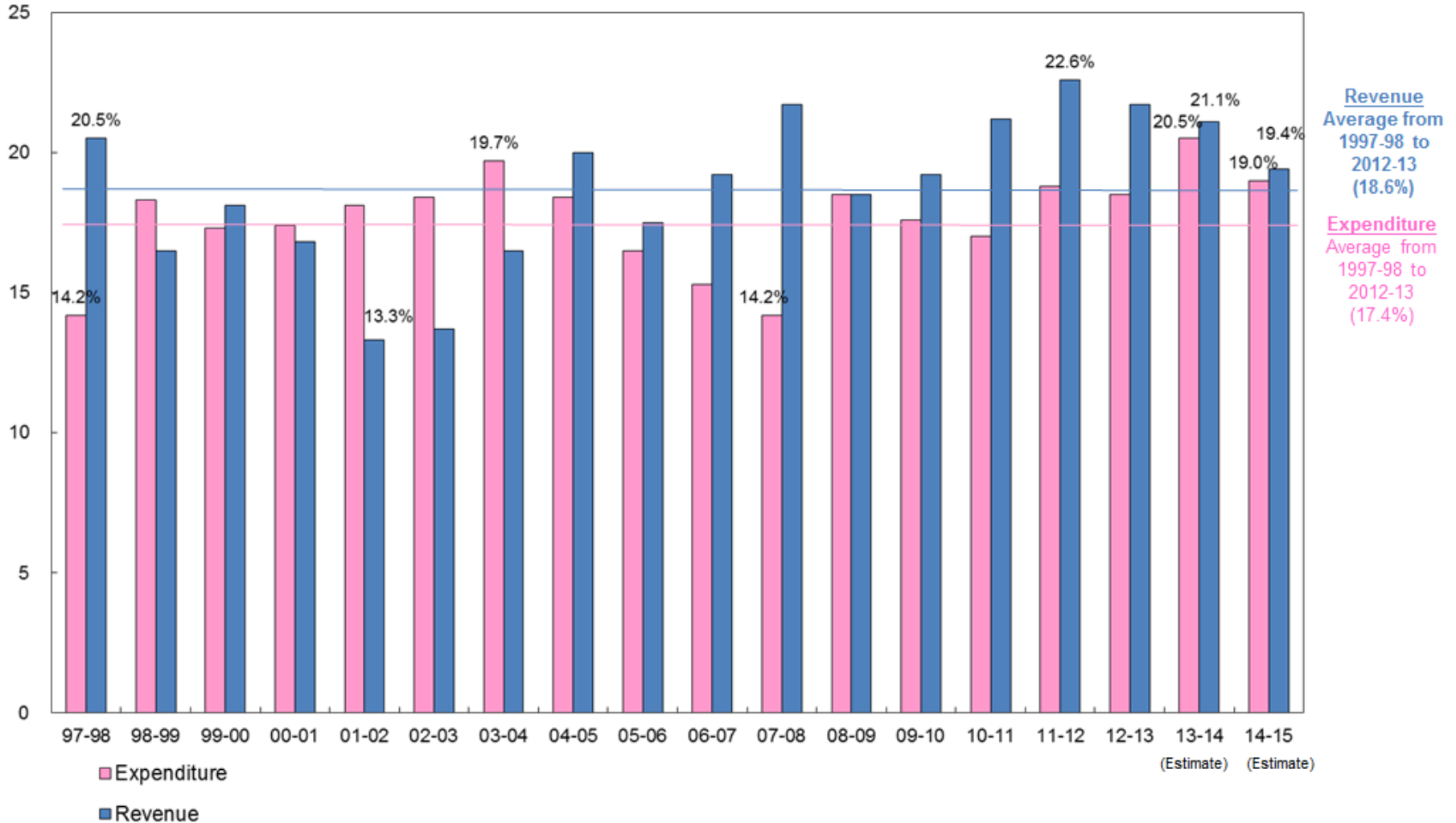
# **Fiscal Health Check**

# Fiscal Performance



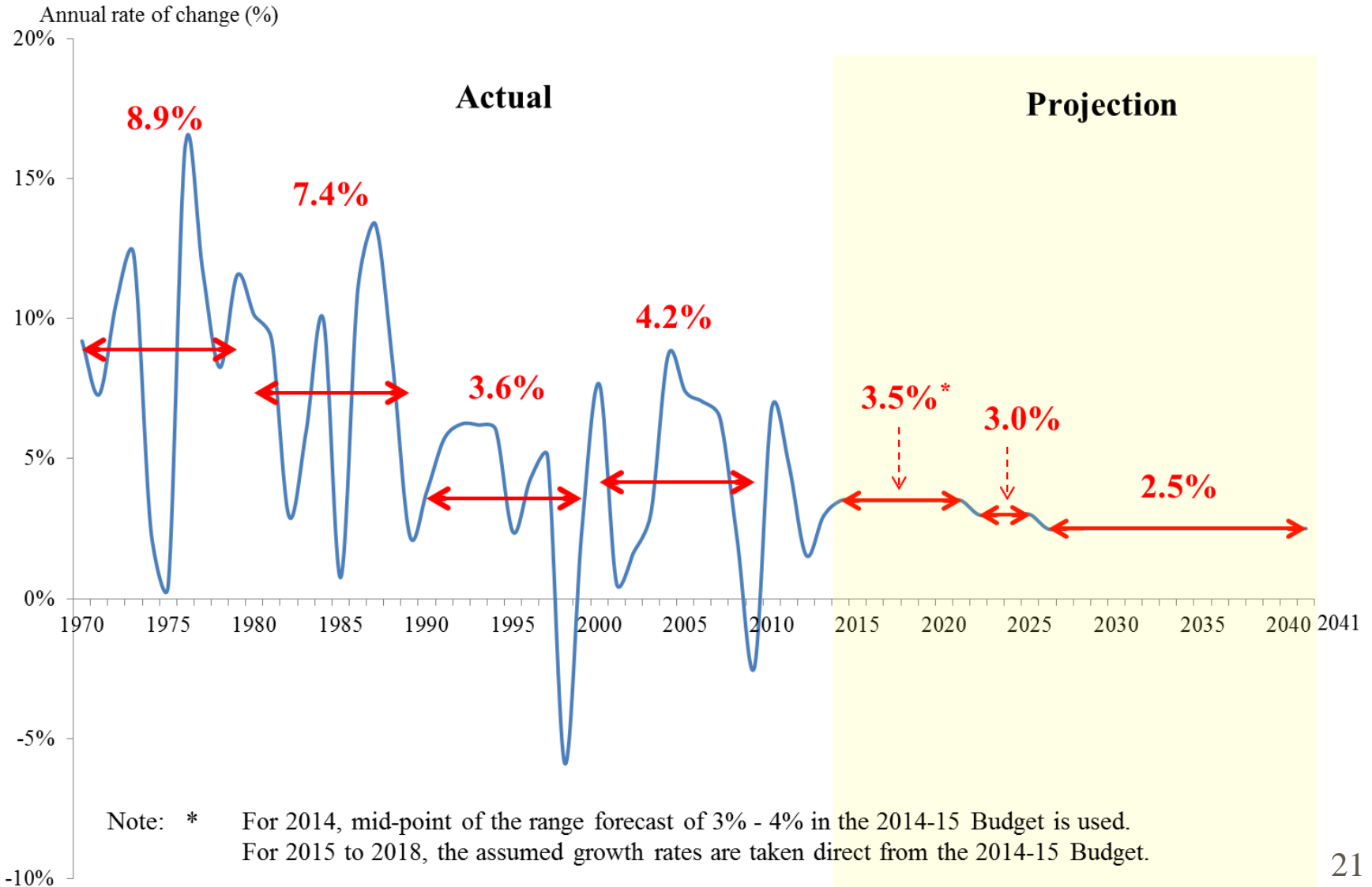
# Government Revenue and Expenditure

% of Nominal GDP

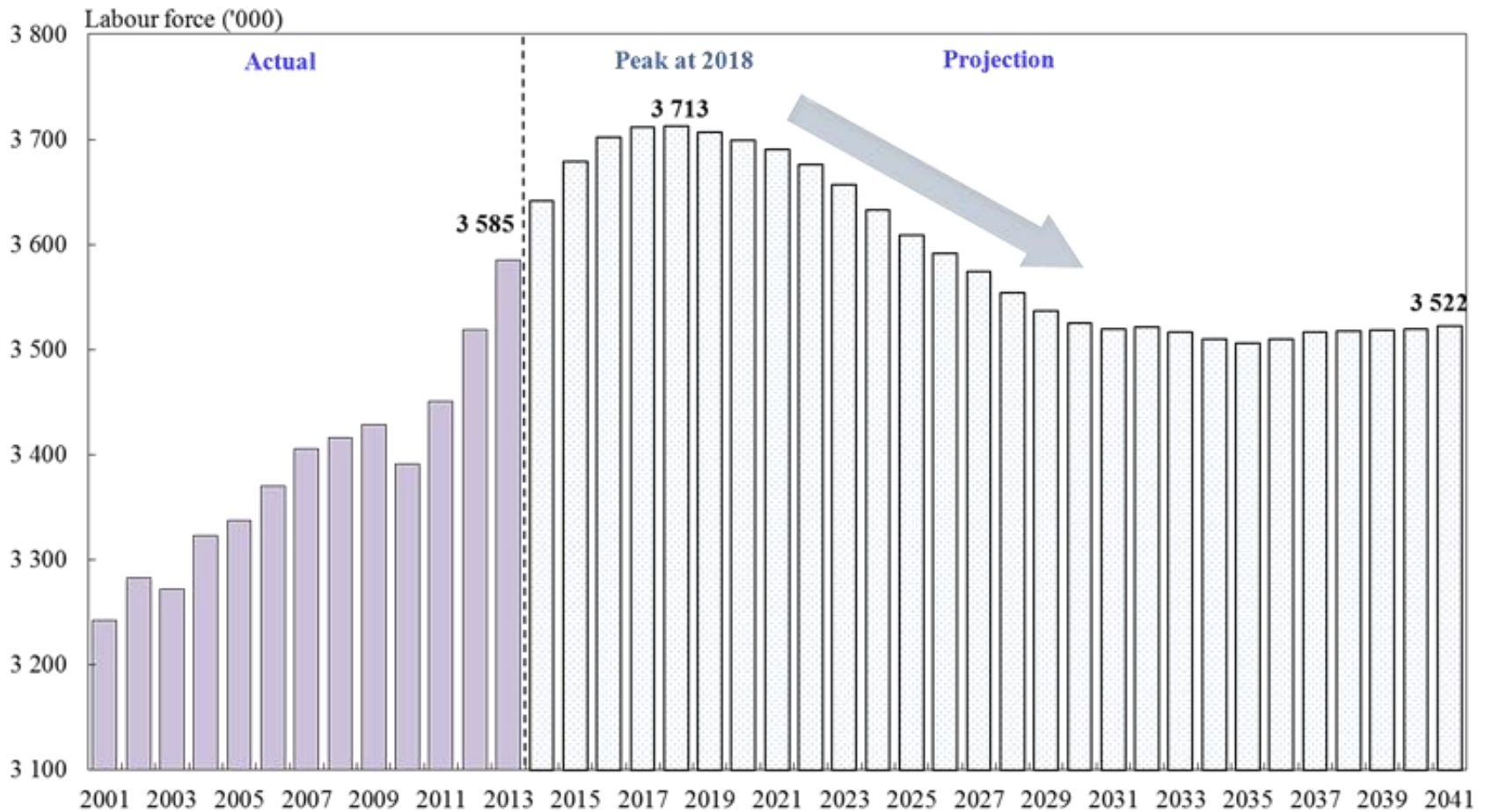


# Macroeconomic Assumptions

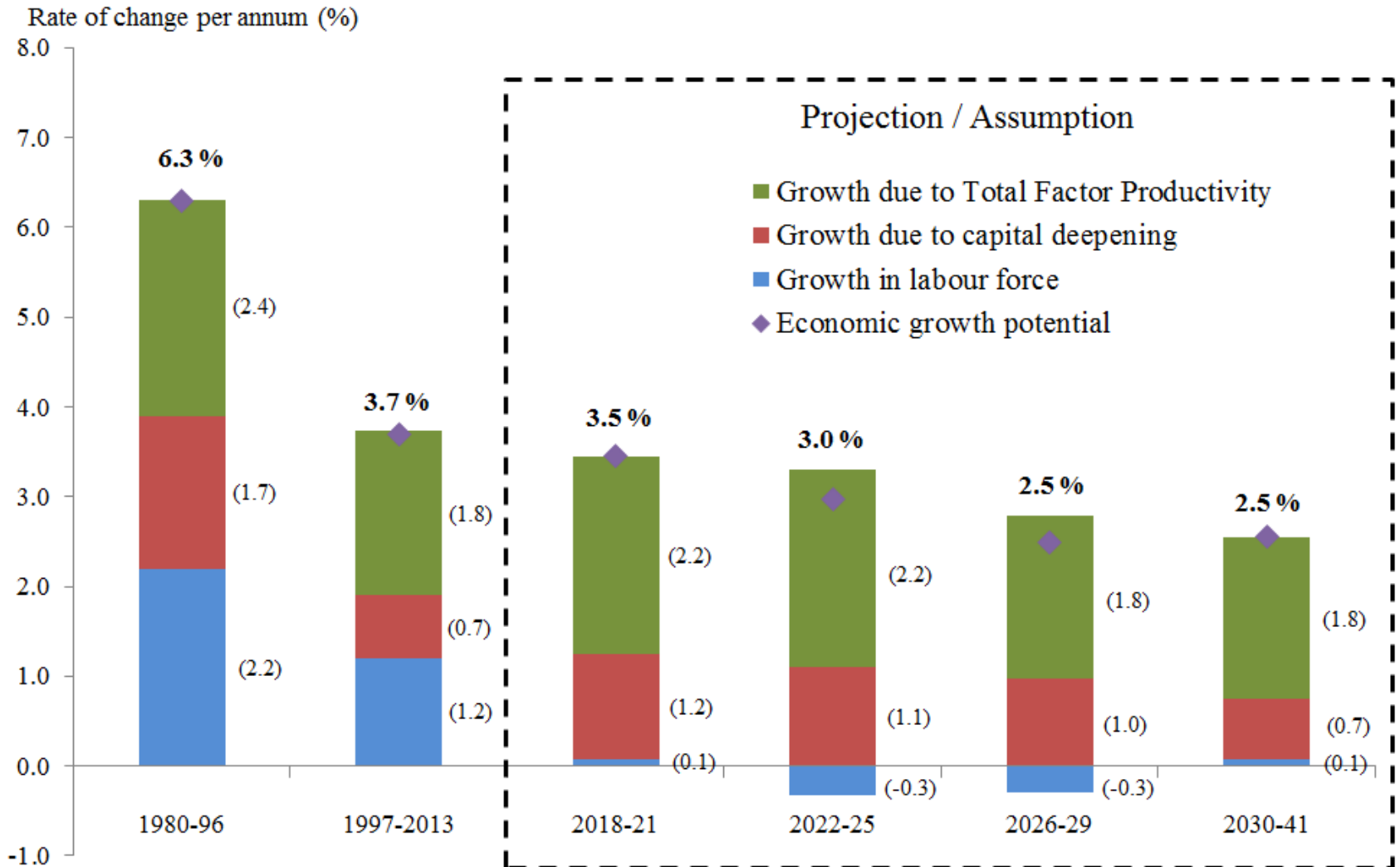
# Economic growth is expected to settle at a slower pace



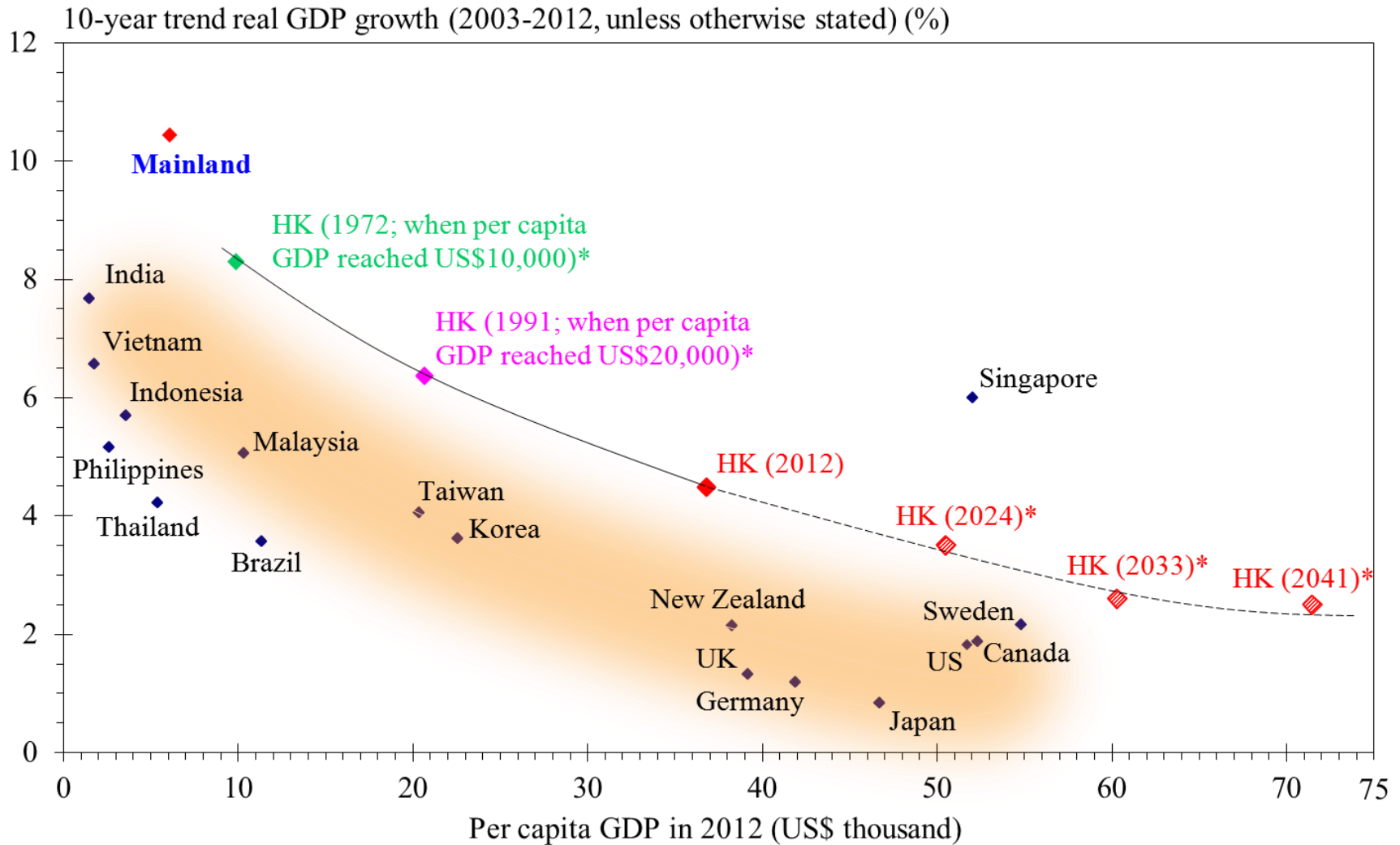
# Labour force is expected to decline after 2018, only to stabilise in the 2030s



# Economic growth potential looks set to decelerate over the long term as labour force starts to stagnate



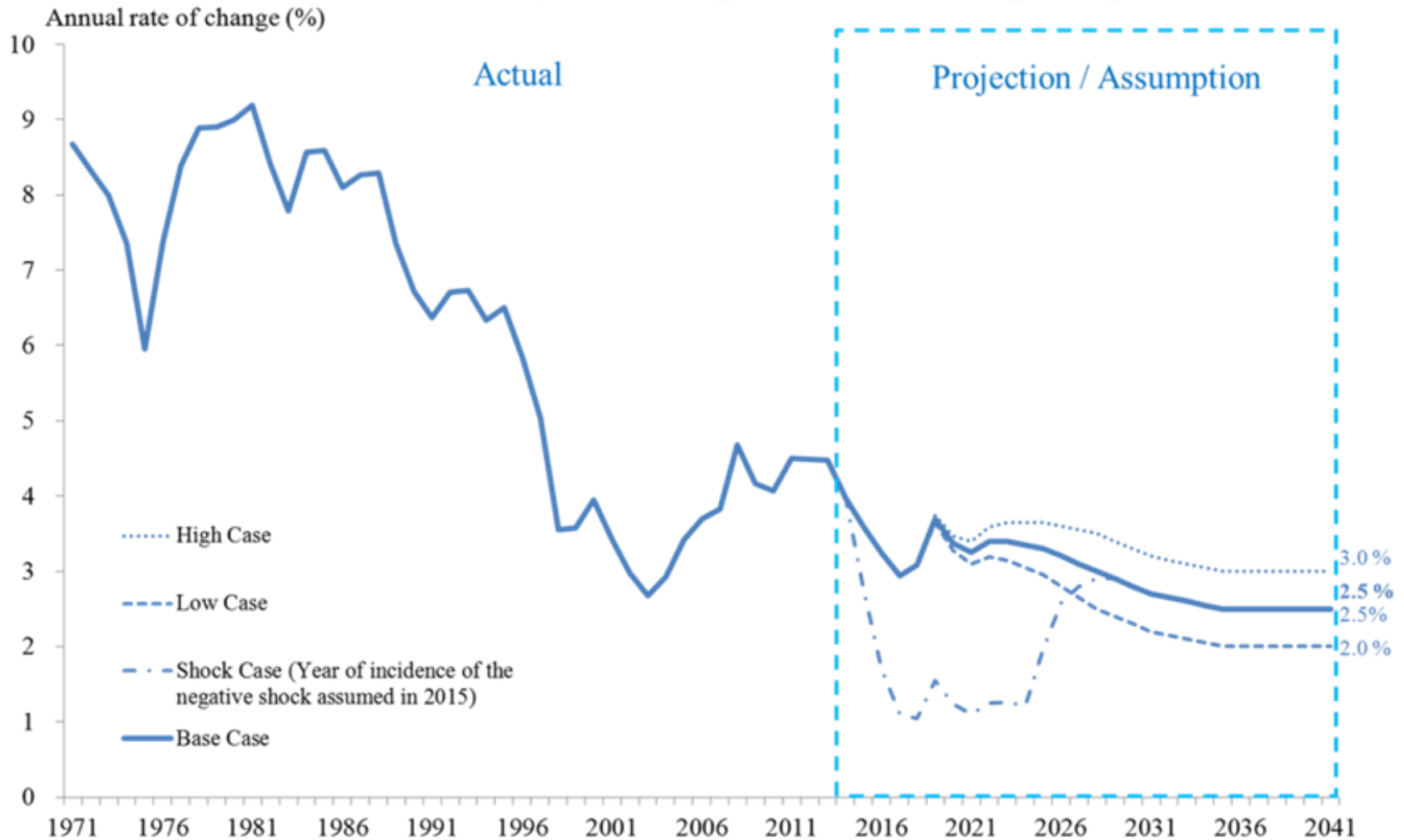
# Economic growth bound to go lower as the economy becomes more mature



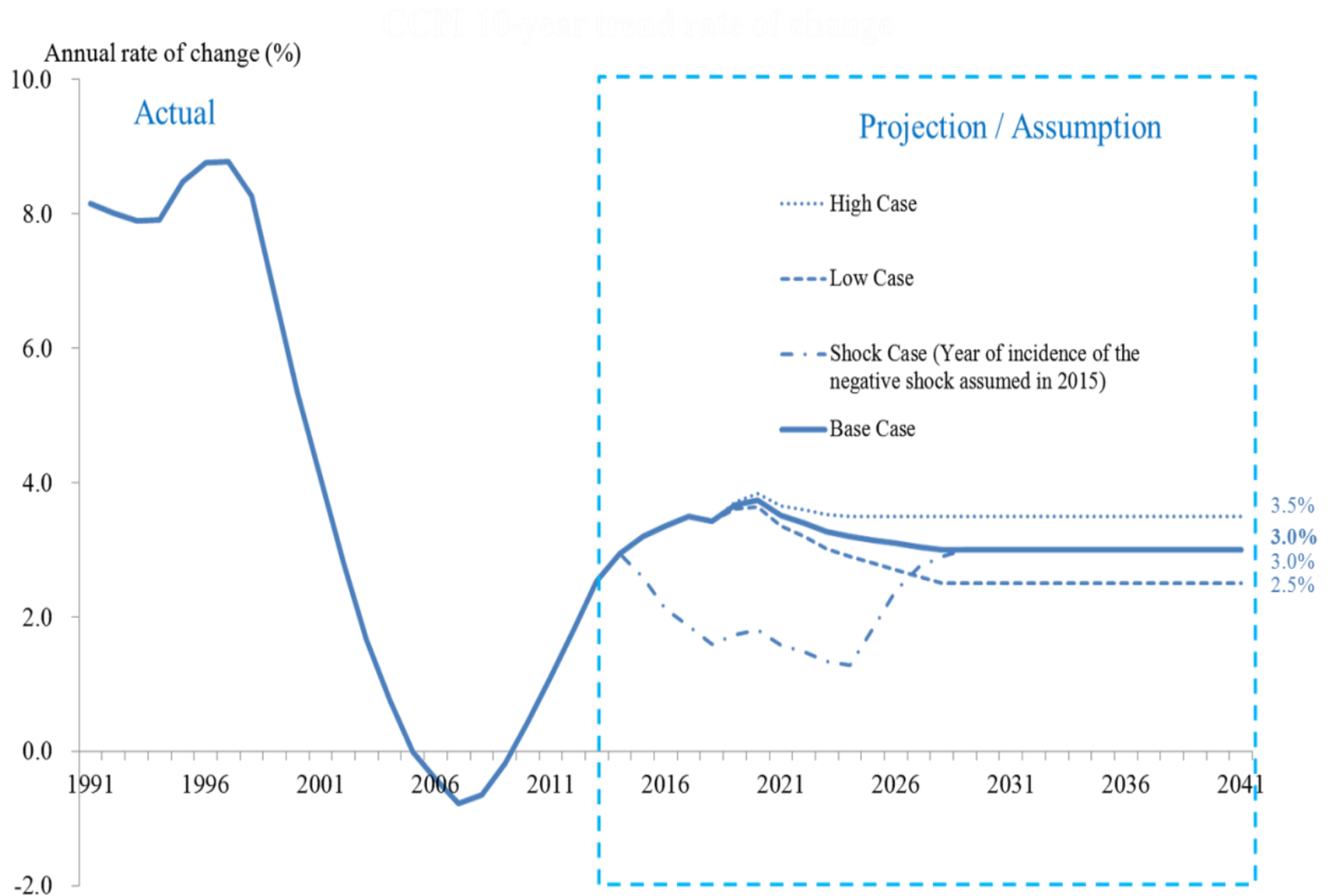


# Real GDP 10-year trend growth rates

Real GDP 10-year trend growth of the Hong Kong

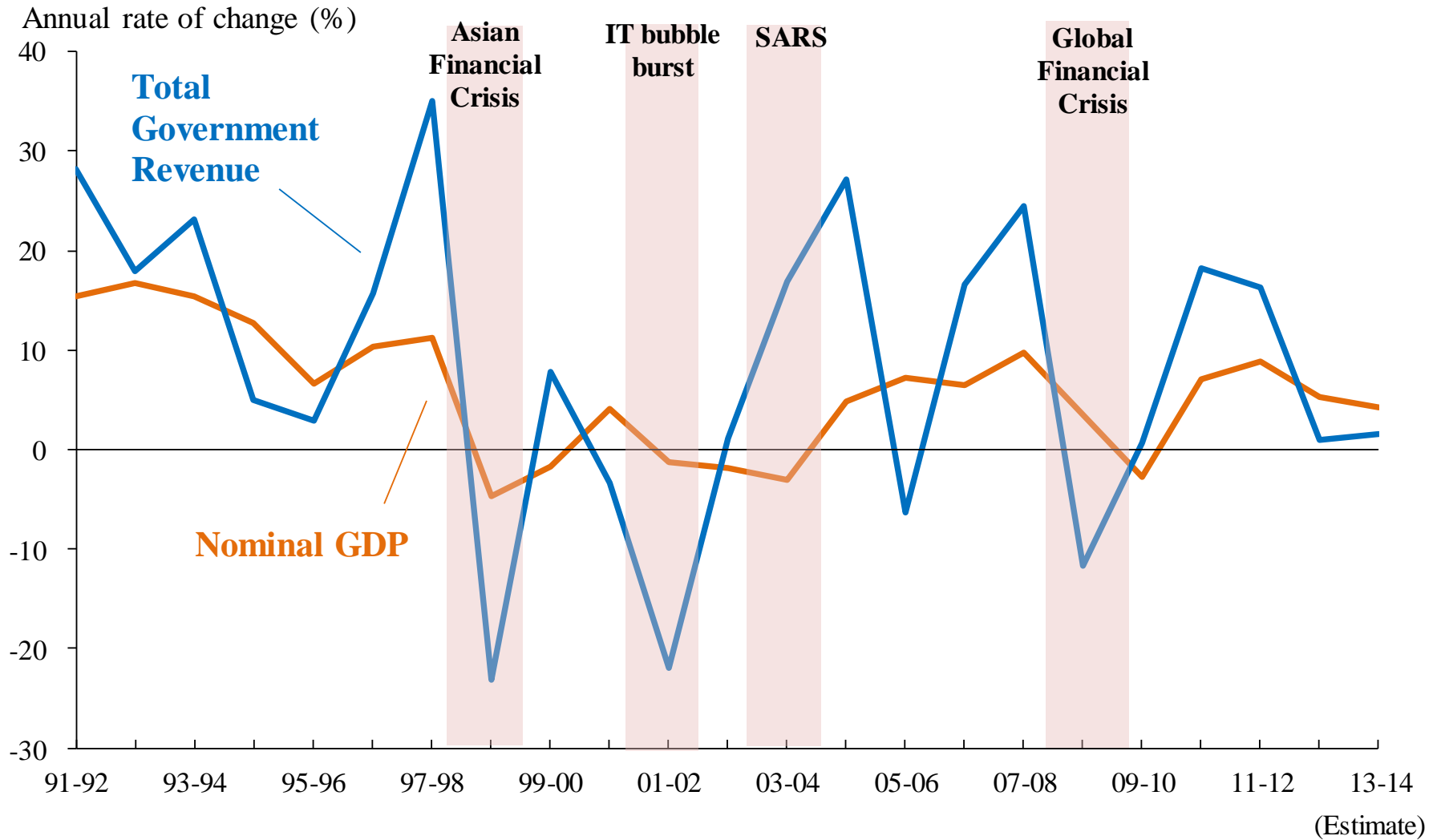


# Consumer price inflation 10-year trend rates of change

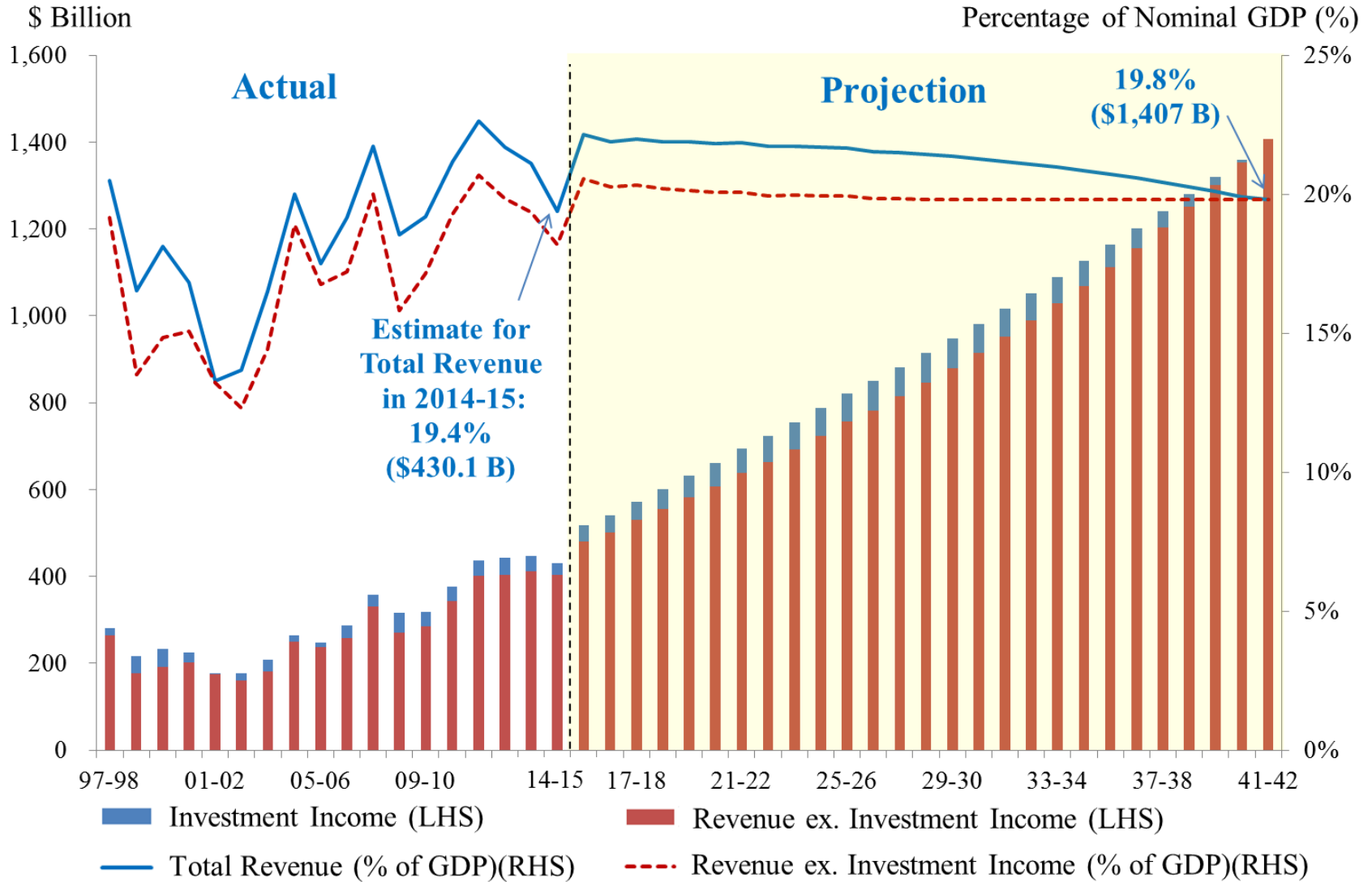


# Revenue Projections

# Government Revenue



# Revenue Projection



(Base Case, No Service Enhancement)

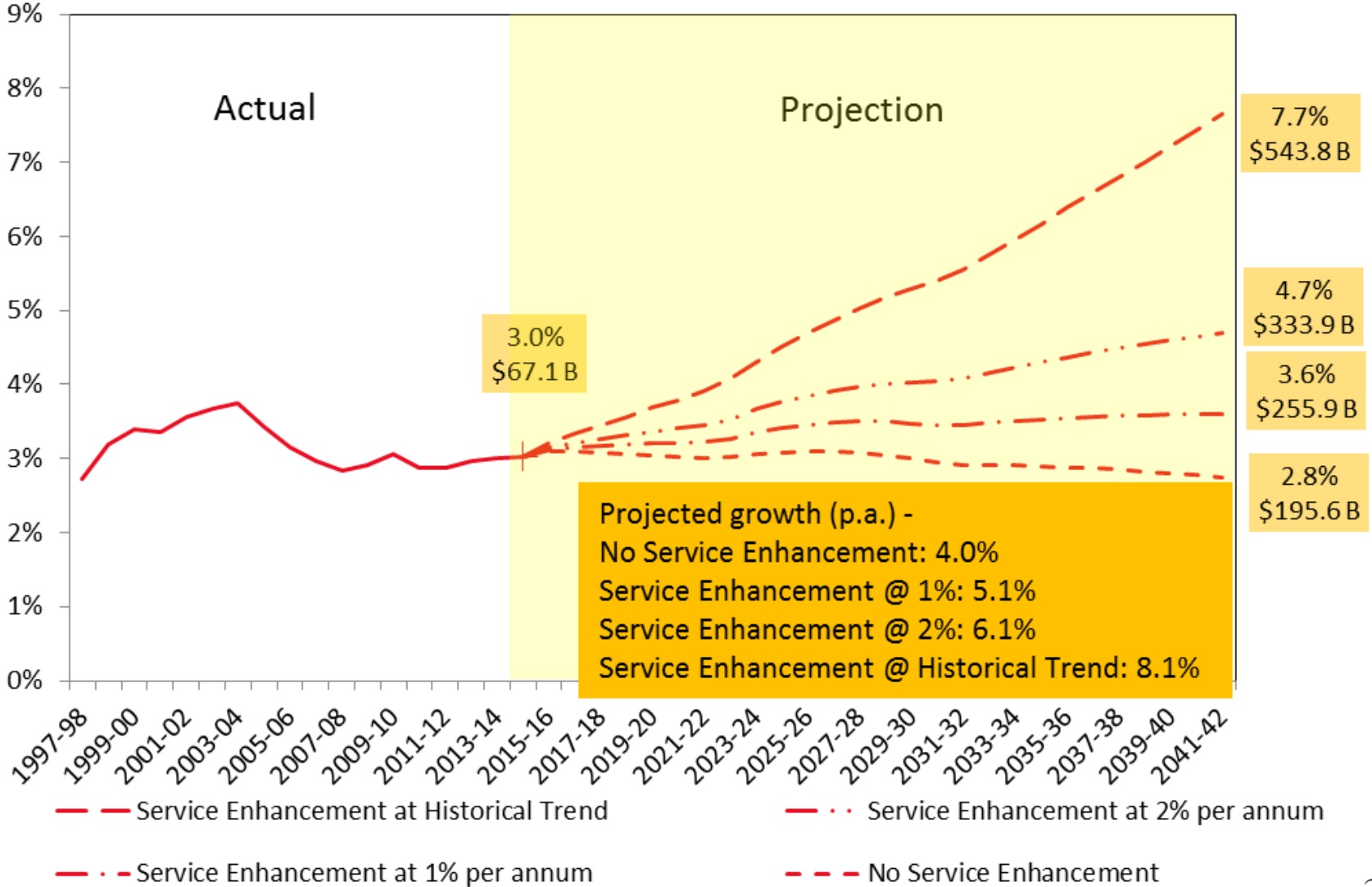
# **Expenditure Projections**

# Projection for recurrent expenditure on Education, Social Welfare and Health

- No Service Enhancement
- Service Enhancement at
  - 1%
  - 2%
  - Historical Trend
    - Education – 3.86%
    - Social Welfare – 2.8%
    - Health – 2.63%
    - on average – 3%

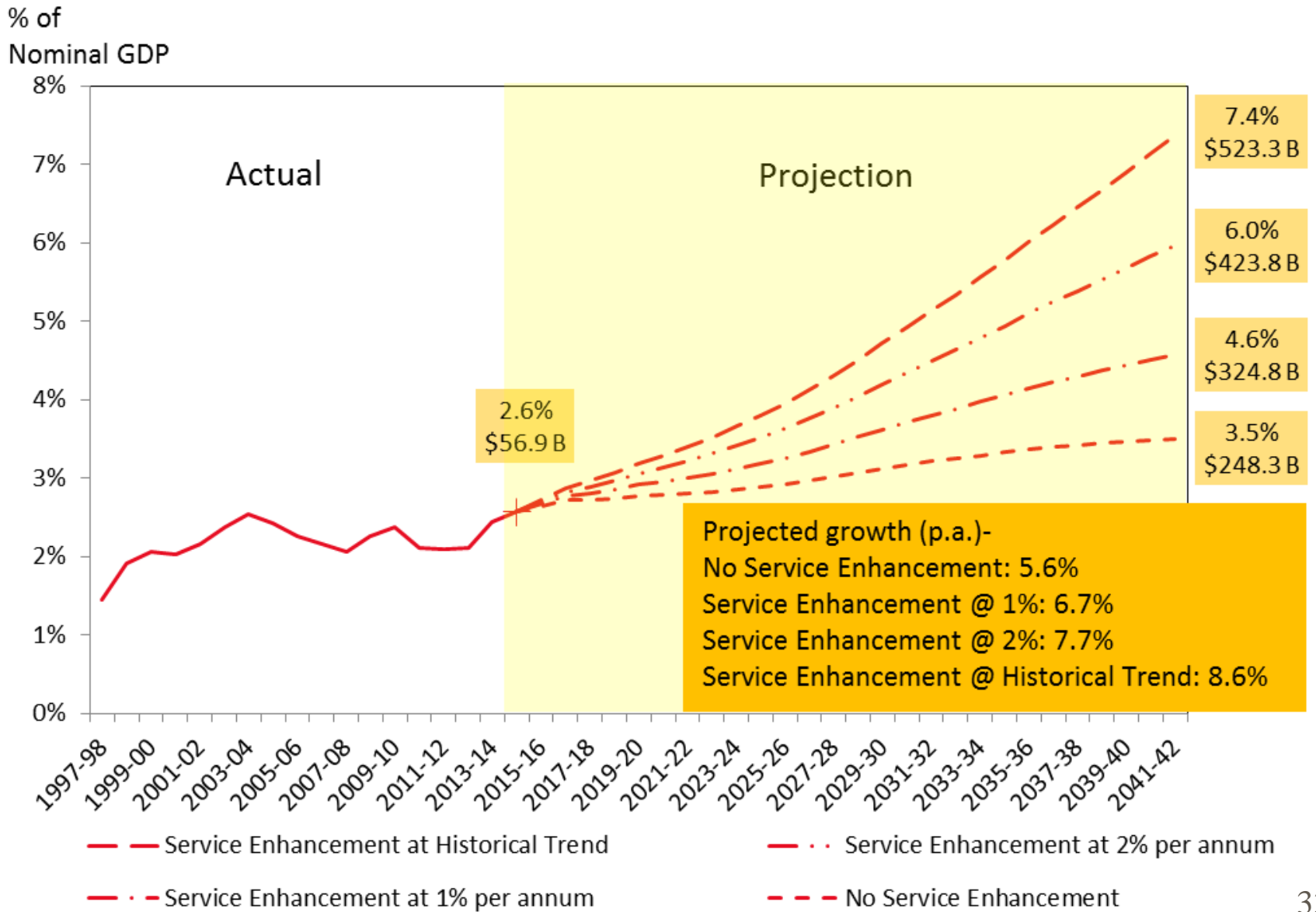
# Education

% of  
Nominal GDP



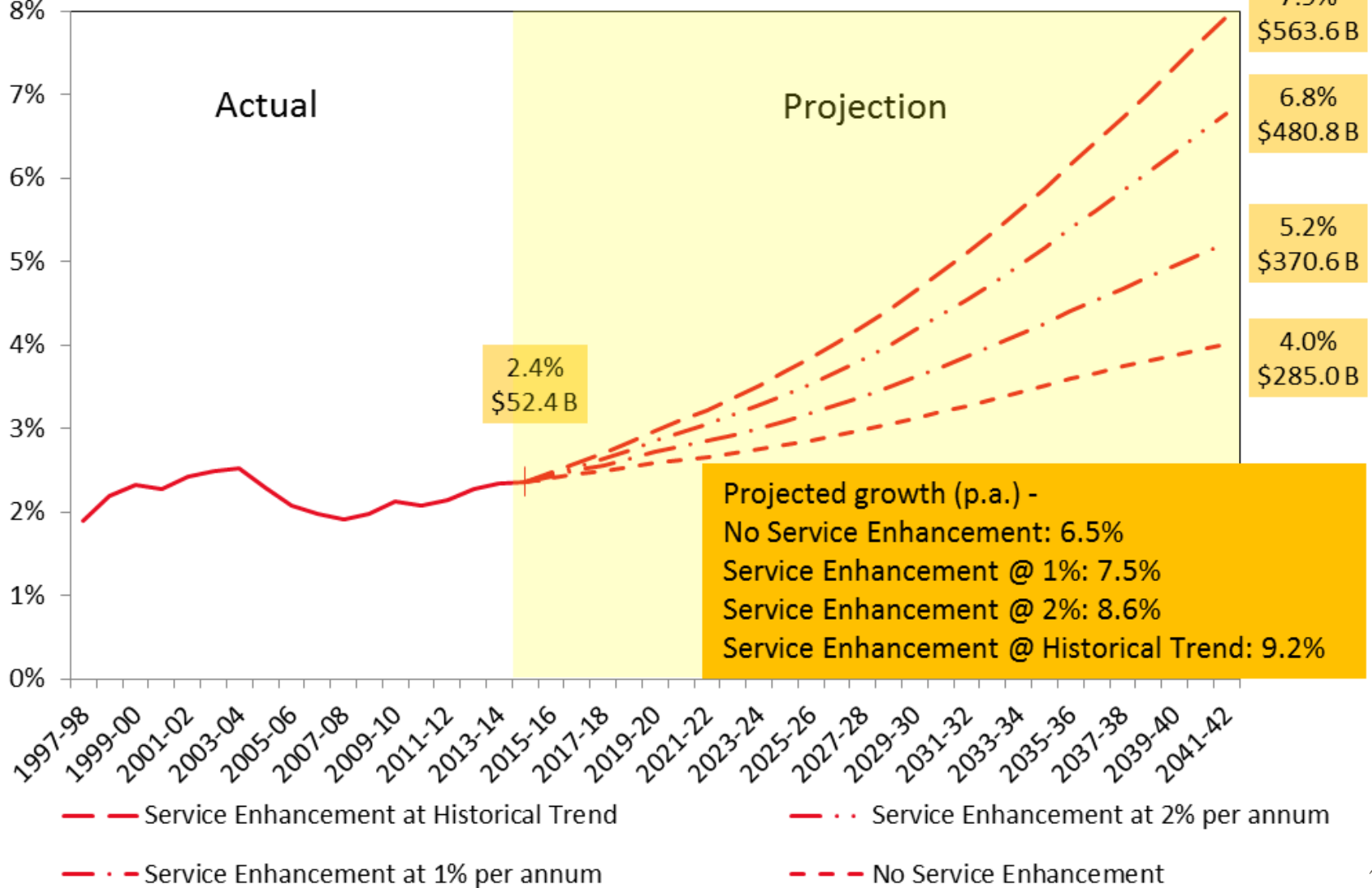


# Social Welfare

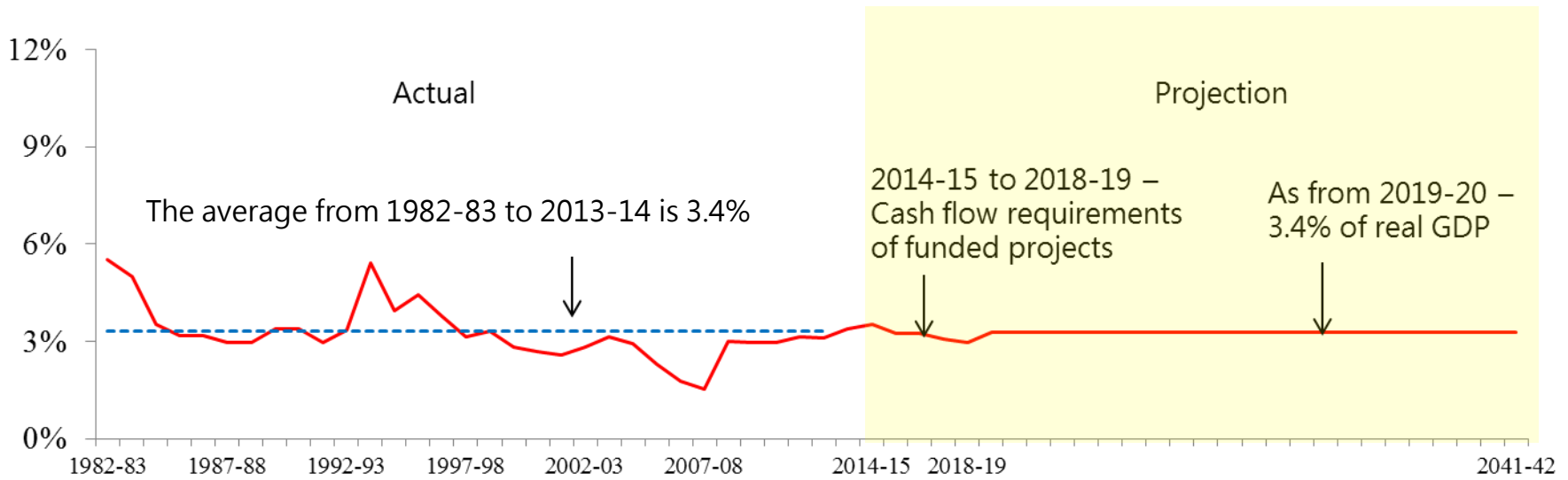
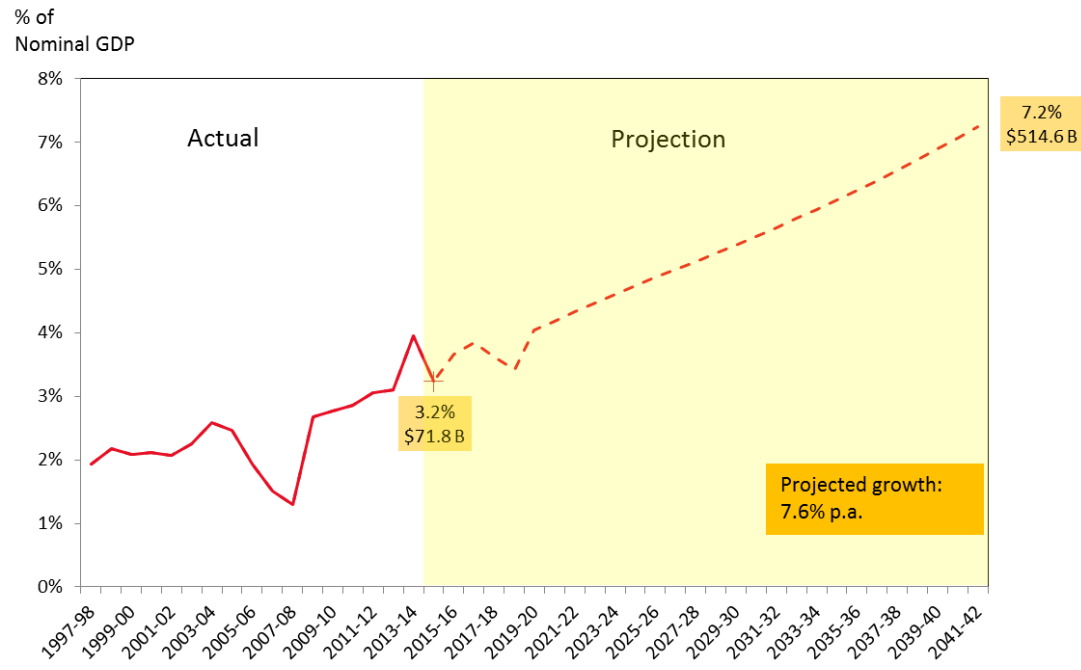


# Health

% of  
Nominal GDP



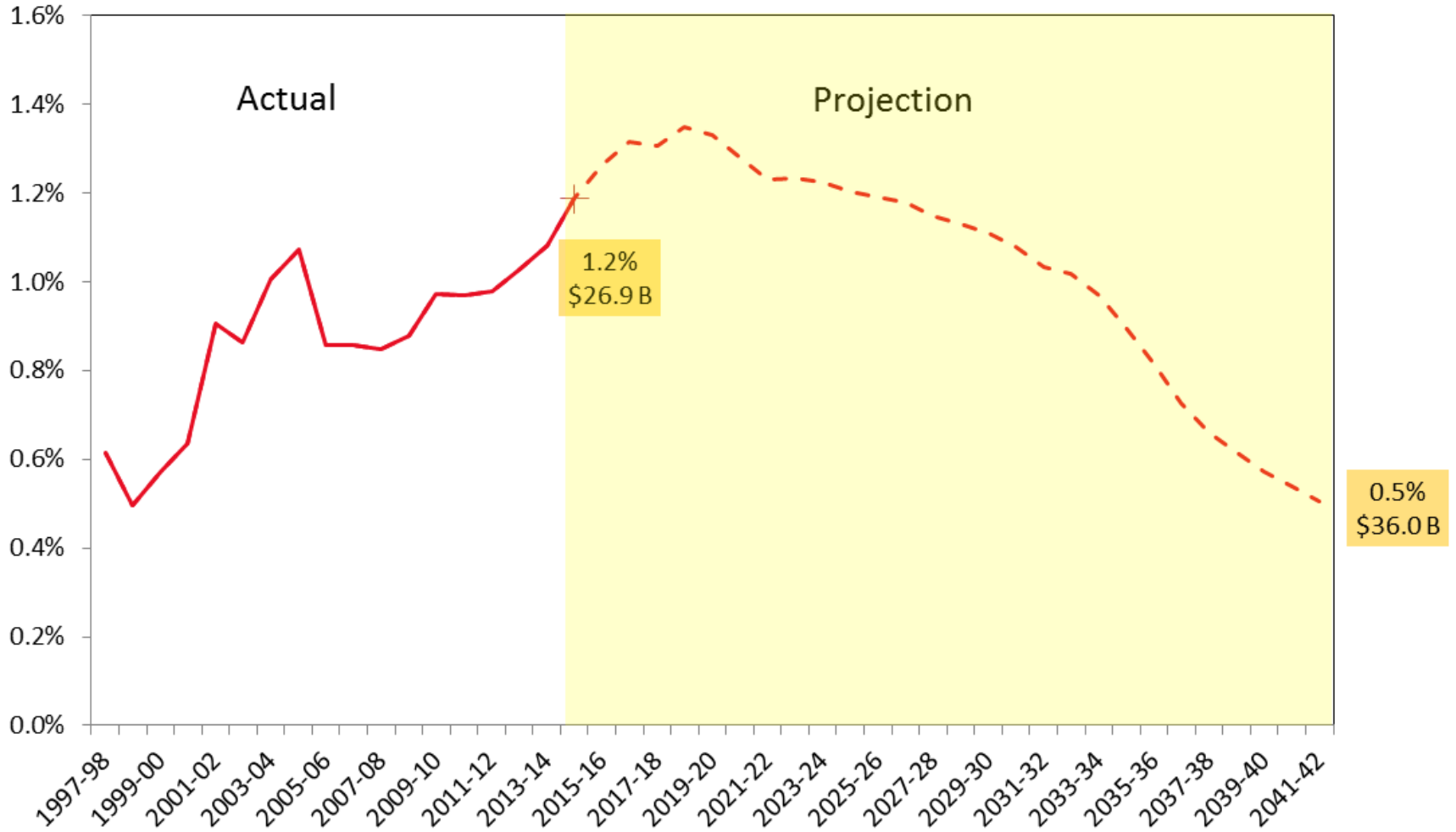
# Capital Works



— Capital works expenditure as a % of real GDP

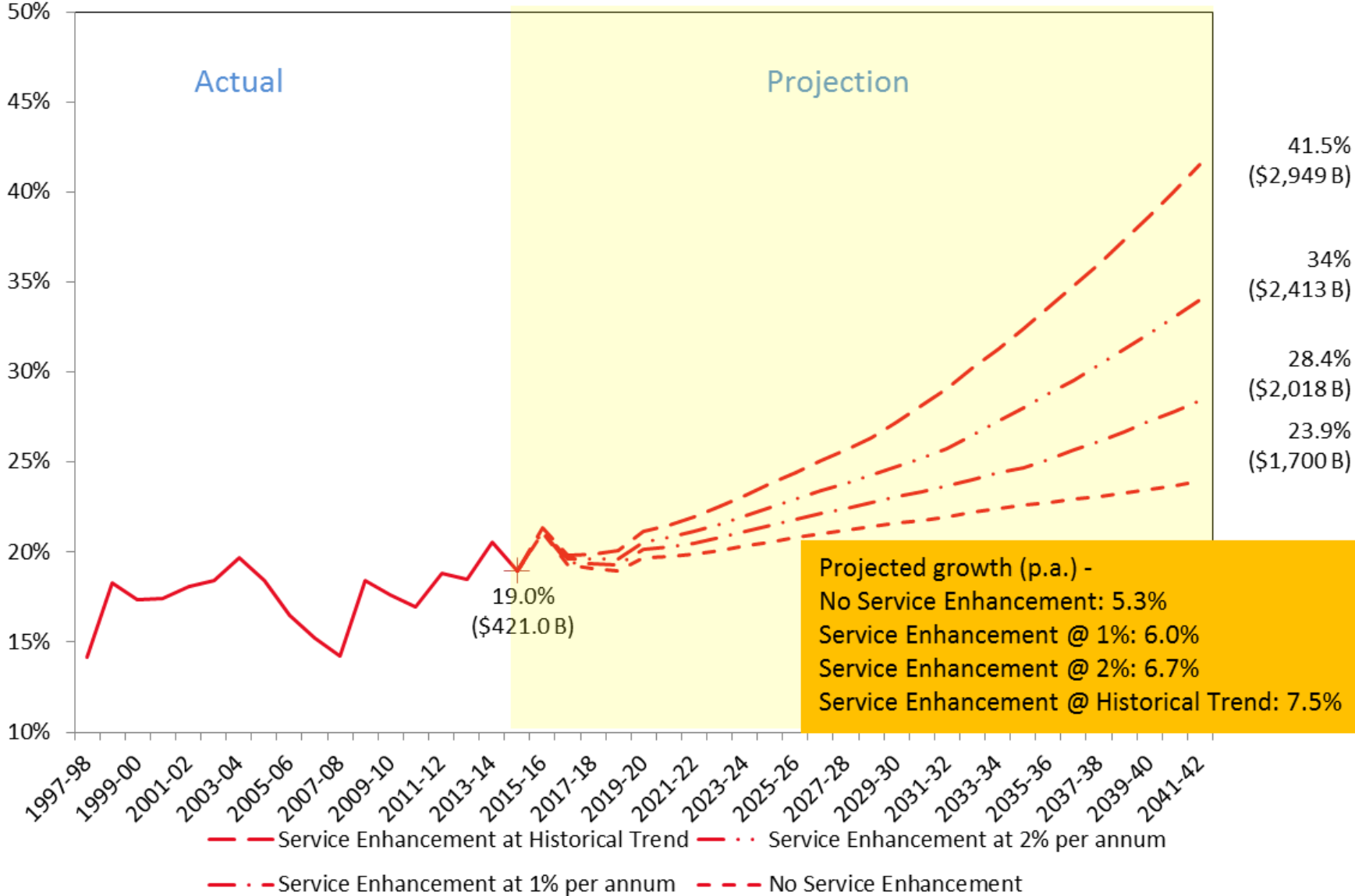
# Pensions

% of  
Nominal GDP



# Total Government Expenditure

% of Nominal GDP



# Trend Growth

(Annual rate of change)	<b>Projected Trend Growth (Base Case, No Service Enhancement)</b>	<b>Trend Growth in recent years</b>	
	2014-15 to 2041-42	1997-98 to 2014-15	2009-10 to 2014-15
Real GDP	2.8%	3.4%	3.9%
Nominal GDP	4.4%	2.9%	6.0%
Government revenue	4.5%	2.5%	6.2%
Government expenditure	5.3%	4.7%	7.5%

# Housing Authority

- Flats production
  - PRH – 20 000 p.a. (unit cost : \$0.54 M<sup>#</sup>)
  - HOS – 5 000\* p.a. (unit cost: \$0.99 M<sup>#</sup>)
- Cash shortfall
  - \$490 B (rent increase @ 5% biennially)
  - \$130 B (rent increase @ 10% biennially)

\* 8 000 p.a. announced in 2014 Policy Address

# Figures provided to FC of LegCo in April 2013 based on HA's June 2012 Construction Cost Yardstick

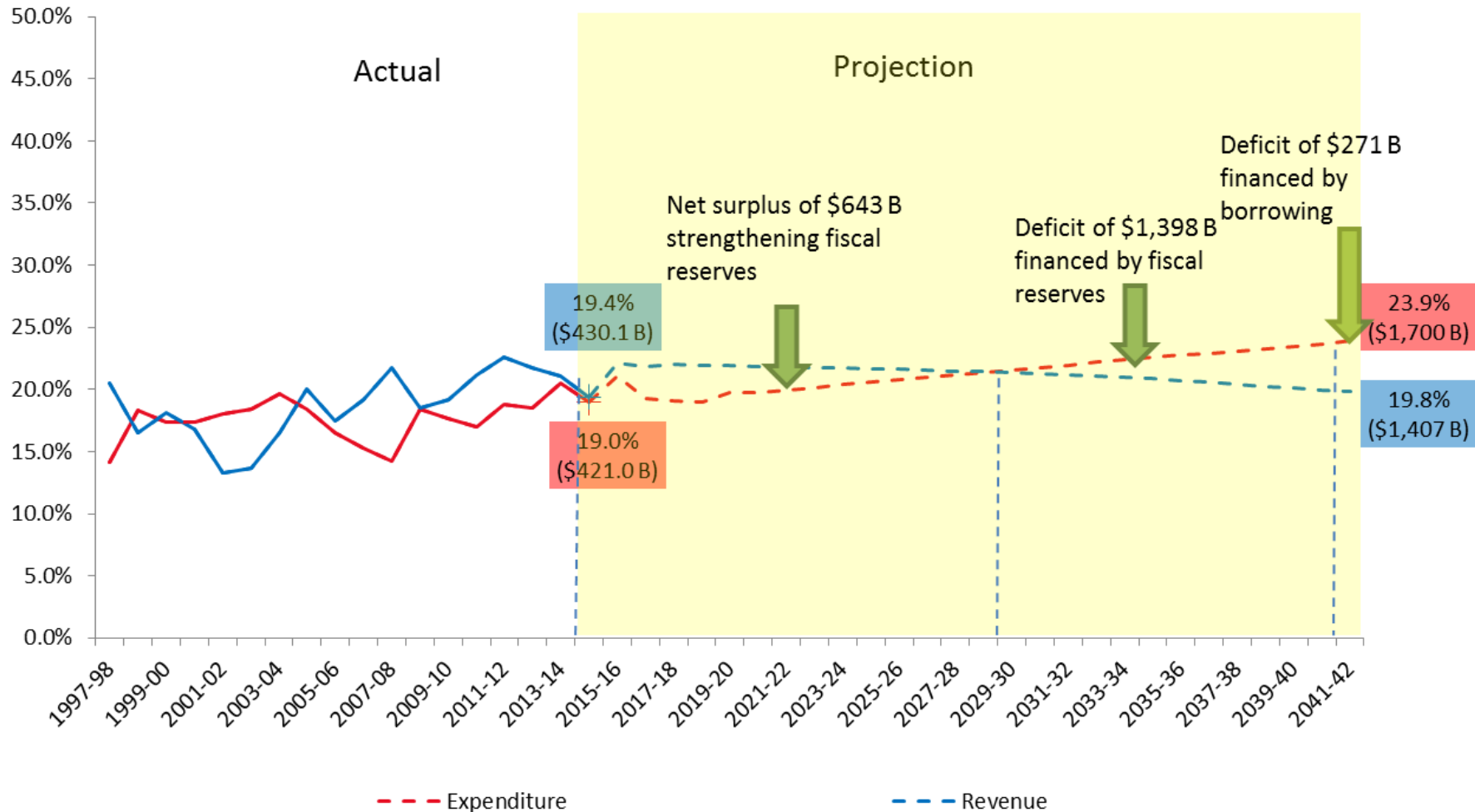
# **Fiscal Sustainability**



# Fiscal Outlook

## (Base Case, No Service Enhancement)

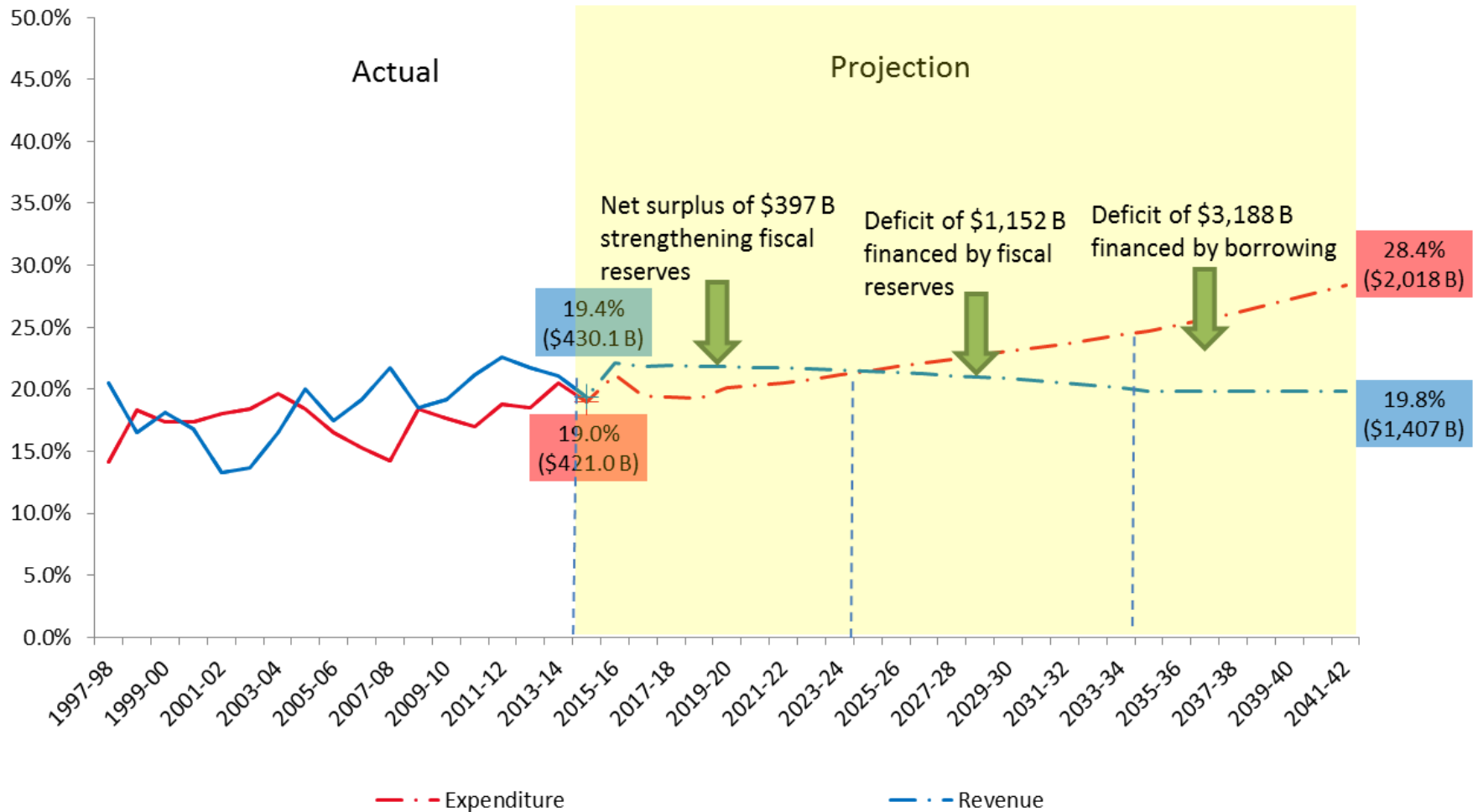
% of Nominal GDP



# Fiscal Outlook

(Base Case, Service Enhancement @ 1%)

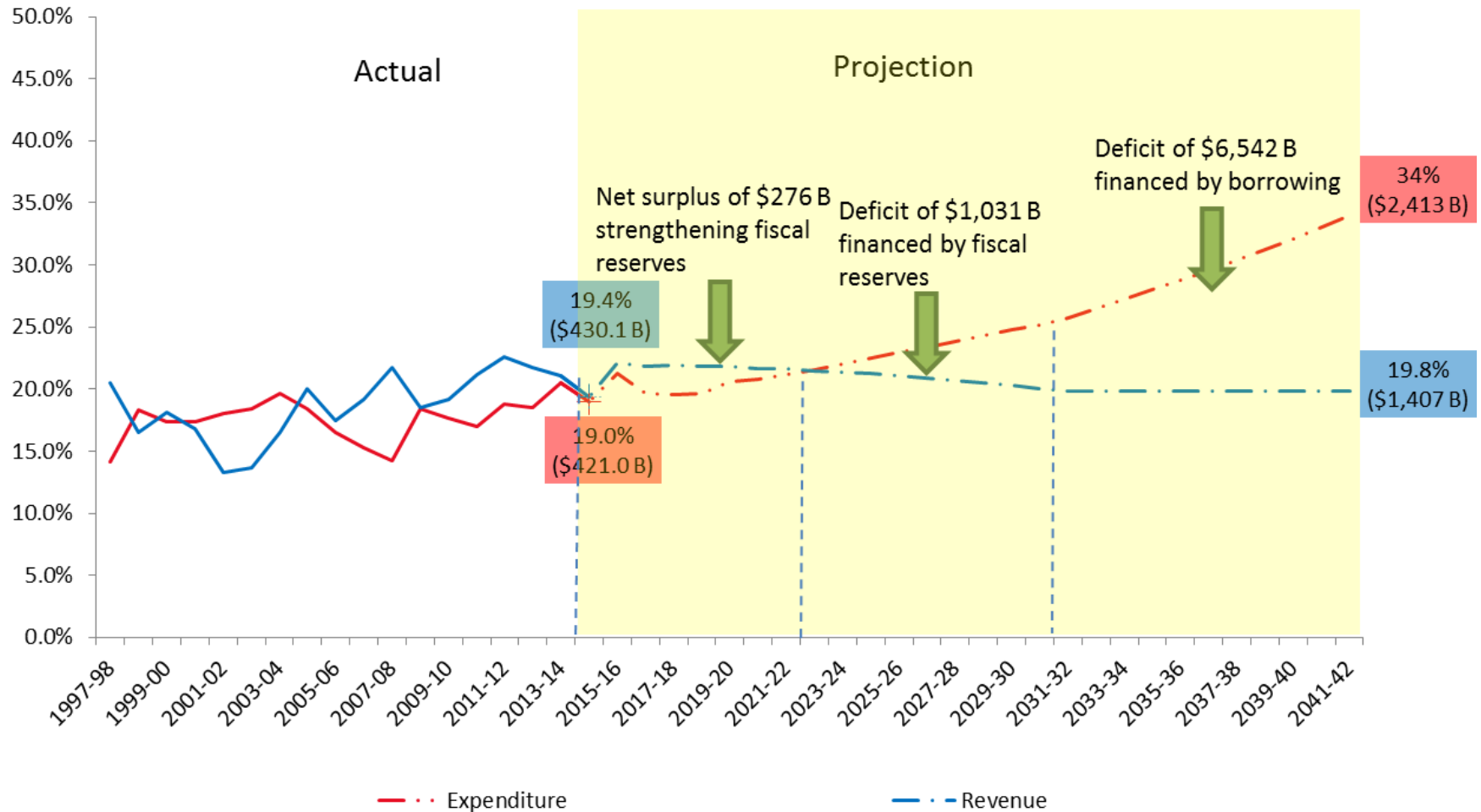
% of Nominal GDP



# Fiscal Outlook

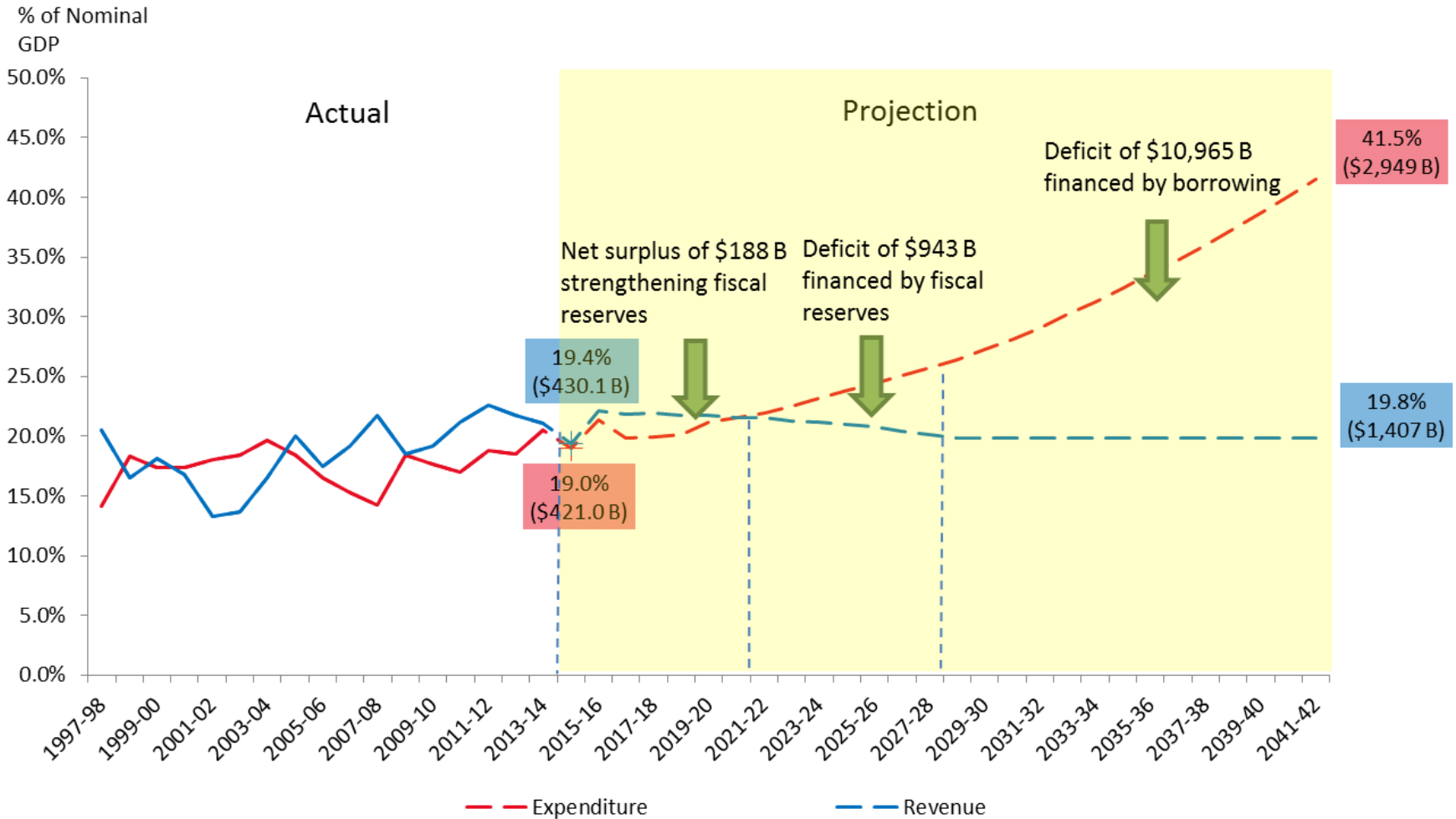
(Base Case, Service Enhancement @ 2%)

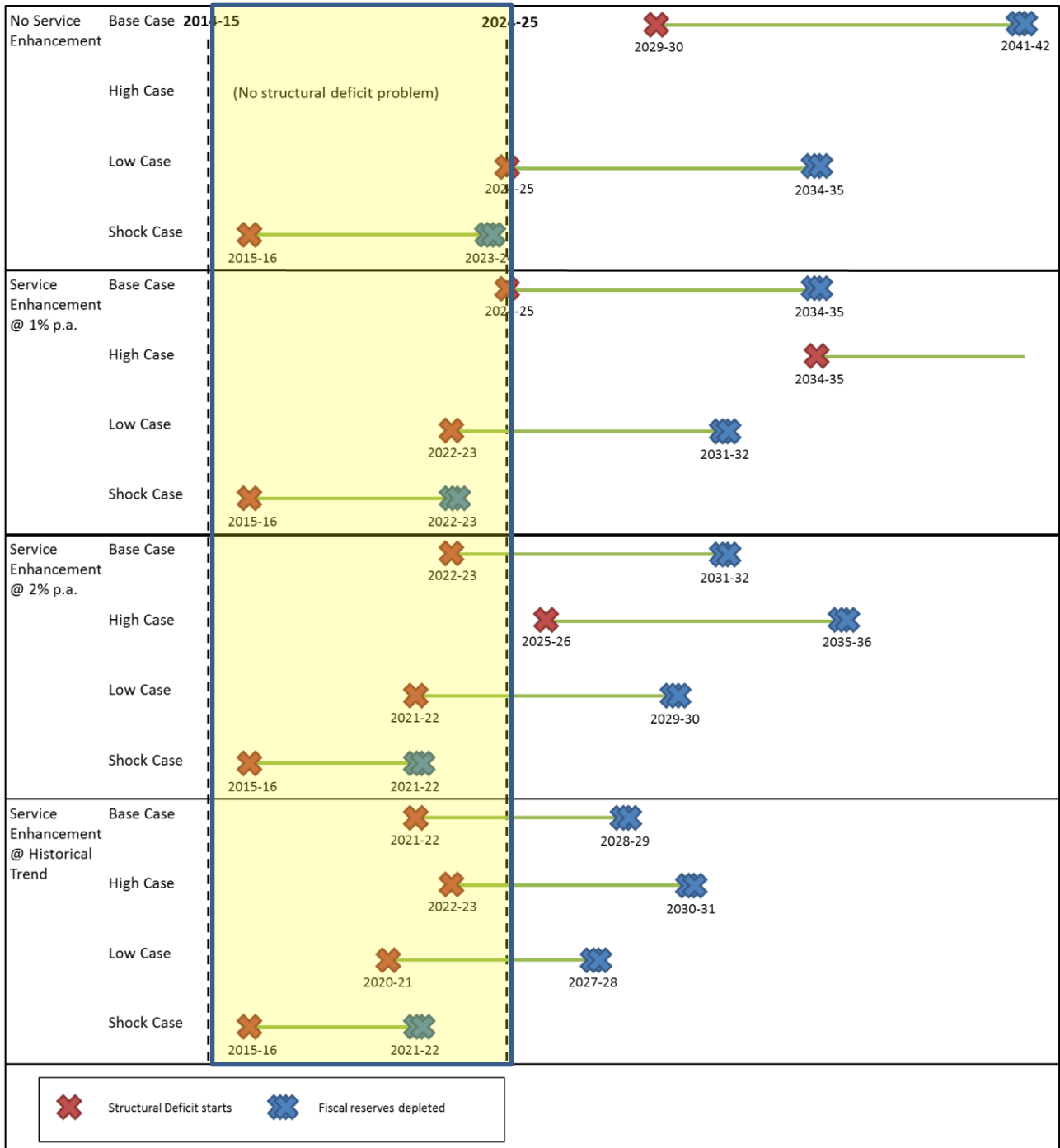
% of Nominal GDP



# Fiscal Outlook

(Base Case, Service Enhancement @ Historical Trend)





# Projections of Government Revenue and Expenditure

## Results of Sensitivity Analyses

	2041-42			
	Base Case	High Case	Low Case	Shock Case
<b>Revenue in \$ billion (% of GDP)</b>				
No Service Enhancement	1,407 (19.8%)	2,285 (25.8%)	937 (16.5%)	943 (19.8%)
Service Enhancement at 1% per annum	1,407 (19.8%)	2,135 (24.1%)	937 (16.5%)	943 (19.8%)
Service Enhancement at 2% per annum	1,407 (19.8%)	2,076 (23.5%)	937 (16.5%)	943 (19.8%)
Service Enhancement at Historical Trend	1,407 (19.8%)	2,076 (23.5%)	937 (16.5%)	943 (19.8%)
<b>Expenditure in \$ billion (% of GDP)</b>				
No Service Enhancement	1,700 (23.9%)	2,010 (22.7%)	1,544 (27.1%)	1,393 (29.3%)
Service Enhancement at 1% per annum	2,018 (28.4%)	2,258 (25.5%)	1,829 (32.1%)	1,646 (34.6%)
Service Enhancement at 2% per annum	2,413 (34.0%)	2,660 (30.1%)	2,186 (38.4%)	1,965 (41.3%)
Service Enhancement at Historical Trend	2,949 (41.5%)	3,253 (36.8%)	2,670 (46.9%)	2,398 (50.4%)
<b>Structural deficit starts</b>				
No Service Enhancement	2029-30	n.a.	2024-25	2015-16
Service Enhancement at 1% per annum	2024-25	2034-35	2022-23	2015-16
Service Enhancement at 2% per annum	2022-23	2025-26	2021-22	2015-16
Service Enhancement at Historical Trend	2021-22	2022-23	2020-21	2015-16

# Projections of Government Revenue and Expenditure


## Results of Sensitivity Analyses

	2041-42			
	Base Case	High Case	Low Case	Shock Case
<b>Fiscal Reserves depleted</b>				
No Service Enhancement	2041-42	n.a.	2034-35	2023-24
Service Enhancement at 1% per annum	2034-35	n.a.	2031-32	2022-23
Service Enhancement at 2% per annum	2031-32	2035-36	2029-30	2021-22
Service Enhancement at Historical Trend	2028-29	2030-31	2027-28	2021-22
<b>Debt level as at end-March in \$ billion (% of GDP)</b>				
No Service Enhancement	271 (3.8%)	n.a.	3,480 (61.1%)	4,226 (88.8%)
Service Enhancement at 1% per annum	3,188 (44.9%)	n.a.	6,097 (107.1%)	6,440 (135.3%)
Service Enhancement at 2% per annum	6,542 (92.1%)	2,676 (30.2%)	9,180 (161.3%)	9,088 (191%)
Service Enhancement at Historical Trend	10,965 (154.3%)	7,497 (84.7%)	13,274 (233.2%)	12,624 (265.2%)

# **Proposed Fiscal Measures**



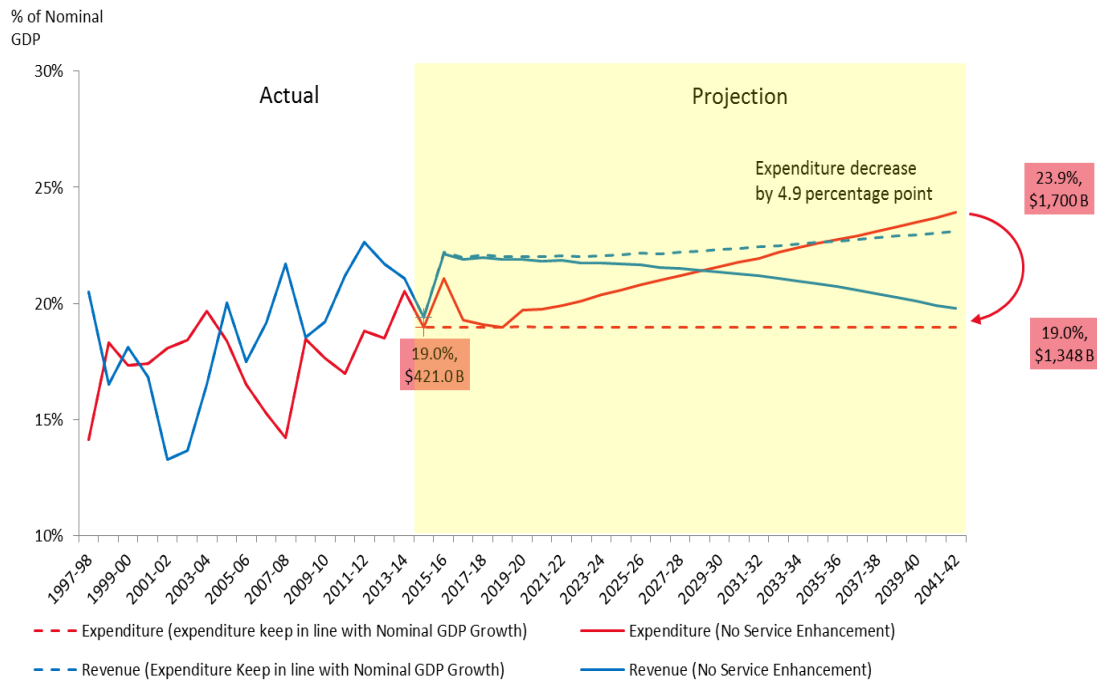
# Economic growth needed to avoid structural deficit

- No Service Enhancement  3.1% p.a.
- Service Enhancement @ 1% per annum  3.6% p.a.
- Service Enhancement @ 2% per annum  4.4% p.a.
- Service Enhancement @ Historical Trend  5.4% p.a.

# Recommendations

## (A) Containing expenditure growth

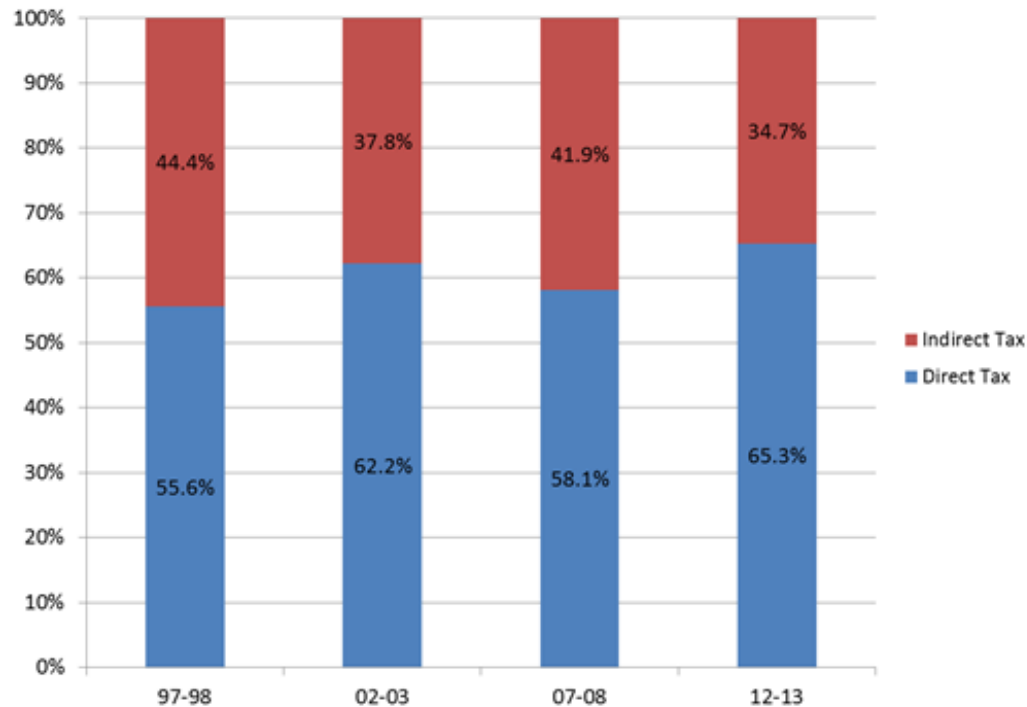
- contain expenditure growth within nominal GDP growth



- keep public expenditure at 20% of GDP
- assess fiscal sustainability of new initiatives

## (B) Preserving, stabilising and broadening the revenue base

- avoid excessive reliance on direct taxation



- step up tax enforcement
- reinforce user pays principles

## (C) Saving for the future

- “freeze” the Land Fund
- not account for as fiscal reserves
- endowment, withdrawal and operation
- consult stakeholders

## (D) Segregating and balancing the Operating and Capital Accounts

(\$ Billion)	2013-14 Estimate	2014-15 Estimate	2015-16 Forecast
<b>Operating Account</b>			
Operating revenue	347.9	348.9	392.3
<i>Less:</i> Operating expenditure	(338.8)	(325.0)	(388.8)
Operating surplus	9.1	23.9	3.5
<b>Capital Account</b>			
Capital revenue	99.9	81.2	70.0
<i>Less:</i> Capital expenditure	(97.0)	(86.2)	(101.7)
Capital surplus/(deficit)	2.9	(5.0)	(31.7)
Bond repayment	-	(9.8)	-
<b>Consolidated surplus/(deficit)</b>	<b>12.0</b>	<b>9.1</b>	<b>(28.2)</b>
<b>Fiscal reserves at 31 March</b>	<b>745.9</b>	<b>755.0</b>	<b>726.8</b>
Represented by:			
<b>Operating Account balance</b>			
Opening balance		394.2	413.1
Operating surplus		23.9	3.5
Transfer to Capital Account		(5.0)	-
Closing balance	<b>394.2</b>	<b>413.1</b>	<b>416.6</b>
<b>Capital Account balance</b>			
Opening balance		351.7	341.9
Capital deficit		(5.0)	(31.7)
Bond repayment		(9.8)	-
Transfer from Operating Account		5.0	-
Closing balance	<b>351.7</b>	<b>341.9</b>	<b>310.2</b>

# (E) Making clear what the fiscal reserves cover

	<b>2013–14</b>
<b>(\$ million)</b>	<b>Revised Estimate</b>
<b>General Revenue Account</b>	<b>394,241</b>
<b>Funds with designated use</b>	<b>131,957</b>
Capital Works Reserve Fund	78,679
Capital Investment Fund	1,992
Civil Service Pension Reserve Fund	27,029
Disaster Relief Fund	29
Innovation and Technology Fund	1,801
Loan Fund	1,357
Lotteries Fund	21,070
<b>Land Fund</b>	<b>219,730</b>
<b>Total</b>	<b>745,928</b>

(F) Stepping up the management of the Government's assets

- disposal or securitization
- operational and management cost effectiveness

(G) Sustaining the financial health of the Housing Authority

- review the business mode





**End**