

The fiscal deficit and macroeconomic stability in Hong Kong SAR

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The consolidated government budget, which was broadly balanced or in surplus before 1997/98, turned into deficit in recent years and reached a historical high in 2001/02. Our estimates suggest that the bulk of the deficit is of a structural nature, as concluded in a government study released in early 2002. The deterioration in the underlying position has emerged due to persistent growth in recurrent expenditure and sharp declines in asset trade receipts and investment income.

It is therefore important to establish a credible medium-term strategy for budget consolidation. However, account needs to be taken of the current weak economic conditions when deciding on the adjustment measures in the near term. The 2002/03 budget represents an effort to strike a balance between providing short-term fiscal stimulus and moving towards medium-term retrenchment.

1. Introduction

Hong Kong SAR has an impressive record of fiscal prudence and stability. The consolidated government budget was balanced or in surplus in most years during the past two decades. However, the budget has been in deficit since 1998/99, except for a small surplus in 1999/2000. The deficit reached a historical high of 5% of GDP in 2001/02 and was 4¾% of GDP in 2002/03. This deterioration has raised concerns about the sustainability of the fiscal position and its implications for monetary stability. A study by the government concluded that Hong Kong's fiscal deficit is of a structural nature.² The budget for financial year 2002/03 projects that Hong Kong's substantial fiscal reserves - currently at about 30% of GDP - would be reduced to 18% of GDP by 2006/07.

This paper provides a preliminary analysis of the fiscal position, and draws macroeconomic and policy implications, particularly from the standpoint of the potential impact on the linked exchange rate system. Using the "structural budget balance" approach, which differs somewhat from the approach taken by the government study, we provide an alternative estimate of the structural balance. The remainder of the paper is organised as follows. Section 2 briefly reviews the role of fiscal policy in a small open economy with a currency board arrangement. Section 3 provides an estimate of the structural balance. Section 4 discusses some macroeconomic and policy implications of a structural deficit. Section 5 provides concluding remarks.

2. The role of fiscal policy

Fiscal prudence is a key factor underpinning a fixed exchange rate system. Under the currency board arrangement, the government cannot rely on the central bank to finance its spending. There is no question of monetisation of fiscal deficits, which threatens monetary stability in many emerging economies. However, while a currency board shows a commitment to responsible fiscal policy, it cannot prevent the government from running persistent deficits and accumulating a large public debt, as international experience shows. If the public debt becomes unsustainable, the government would have incentives to abandon the currency board and inflate away its domestic debt.

¹ All from the Economic Research Division of the Hong Kong Monetary Authority.

² Report by the Task Force of Review of Public Finances, February 2002, Hong Kong SAR Government.

In an open economy with developed financial markets, perceptions of fiscal sustainability matter. With increasing fiscal deficits, markets may fear that the monetary authority may be tempted or forced to engage in monetary financing at some stage. Interest rates could thus rise due to an increased risk premium. This presents risks of increasing debt servicing costs, and concerns from rating agencies and others about the ability to repay and about macroeconomic balance more generally. In an extreme case, a vicious circle could develop and investors' expectations become self-fulfilling. However, such problems are more likely to affect economies with a history of lax fiscal and monetary discipline that has led to unsustainable levels of indebtedness and hyperinflationary tendencies.

Under a currency board arrangement, fiscal policy is of particular importance for macroeconomic stabilisation since there is no room for manoeuvre on the monetary policy front. At the same time, tax and expenditure measures could be more effective than under a flexible exchange rate regime. This is because interest rates would not rise - to the extent that policy measures do not lead to a rise in the risk premium - to crowd out any stimulus from fiscal policy.

However, conflict may arise between preserving fiscal sustainability and pursuing countercyclical stabilisation. Specifically, in an economic downturn when there is already a sizeable fiscal deficit, the desirability of expansionary policies depends importantly upon the nature of the deficit. If it mainly reflects cyclical effects, implying that it would disappear when the economy recovers, a case could be made for providing fiscal stimulus to support aggregate demand. The situation will be complicated if there are concerns about the long-term fiscal position. On the one hand, measures need to be taken to correct the underlying imbalance. On the other hand, such policies may result in a large contractionary effect that worsens the economic downturn.

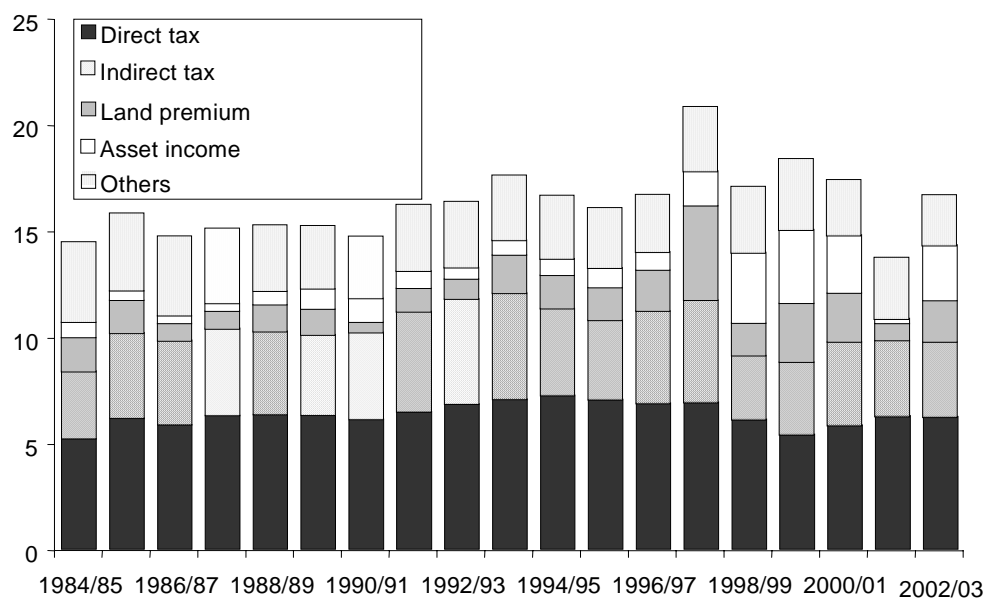
3. Estimating the structural deficit in Hong Kong

Government revenue in recent years has on average decreased to 16¾% of GDP during the fiscal years of 1998/99 to 2002/03, from 17½% in the previous five years (Graph 1). Moreover, there have been some undesirable developments in the composition of revenue. Specifically, tax and non-tax income has declined in the past few years, although this was offset by increases in the land premium, privatisation proceeds and investment income on fiscal reserves. Aggregate revenue has thus become more variable because of the increased importance of these relatively volatile asset-related receipts.

Government expenditure has been on the rise, reflecting mainly changes in recurrent expenditure, over the past decade (Graph 2). All the major categories of recurrent expenditure have increased steadily, including personnel-related expenses, health, education and social welfare (Graph 3). At first glance, therefore, the numbers suggest that the deterioration in the fiscal balance in recent years was mainly attributable to rising expenditure. However, volatile asset-related receipts and the recent cyclical downturn obscure the assessment of the developments in the underlying balance. This is discussed in the following sections.

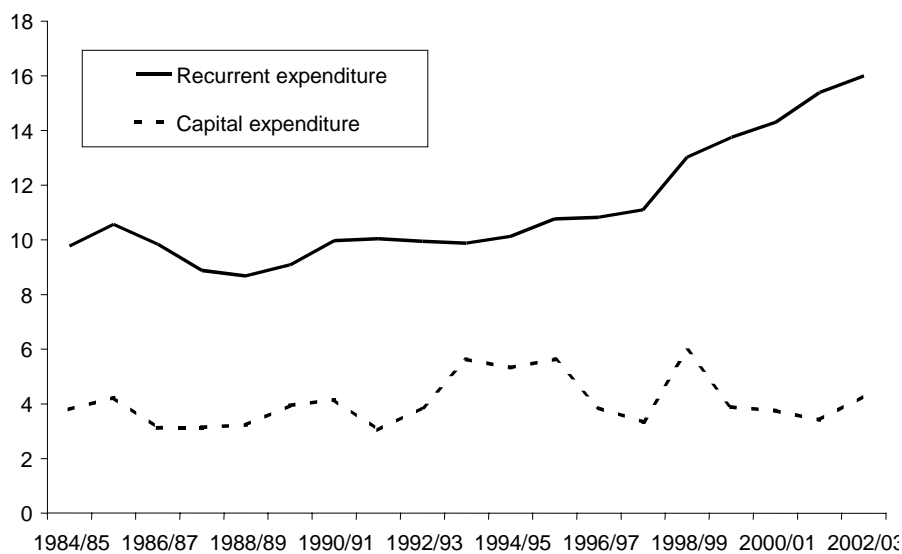
The first step in assessing the structural balance is to consider the treatment of the land premium, privatisation proceeds and investment income. Land owned by the government can be viewed as a non-renewable resource which is part of its net worth. Sales of land represent an asset transaction that does not change the net worth of the government. As a result, drawing down resource wealth - in this case, land - to build financial assets or pay down debt does not impact on the long-term fiscal position. However, running down resource wealth to fund government spending is not sustainable indefinitely. Conceptually, there is thus a case for placing the land premium as a financing item rather than a revenue source in the fiscal accounts. The same can be argued for privatisation proceeds. In practice, of course, these asset-related receipts can improve the financial position of the government because they improve the latter's liquidity position. Furthermore, it could be argued that, if land supply is abundant, any impact on the long-run fiscal position may be beyond the horizon of the current economic agents. Nevertheless, concerns may arise if there is over-reliance on receipts from asset sales in financing government expenditure for a sustained period.

Graph 1
Total revenue¹
as a percentage of GDP



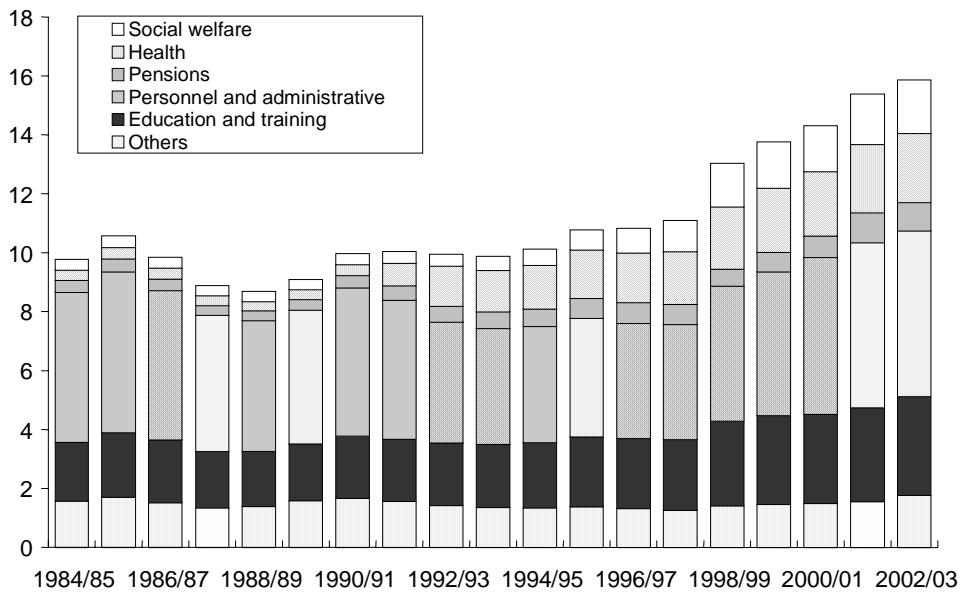
¹ Based on 2002/03 budget projection.

Graph 2
Recurrent and capital expenditure¹
as a percentage of GDP



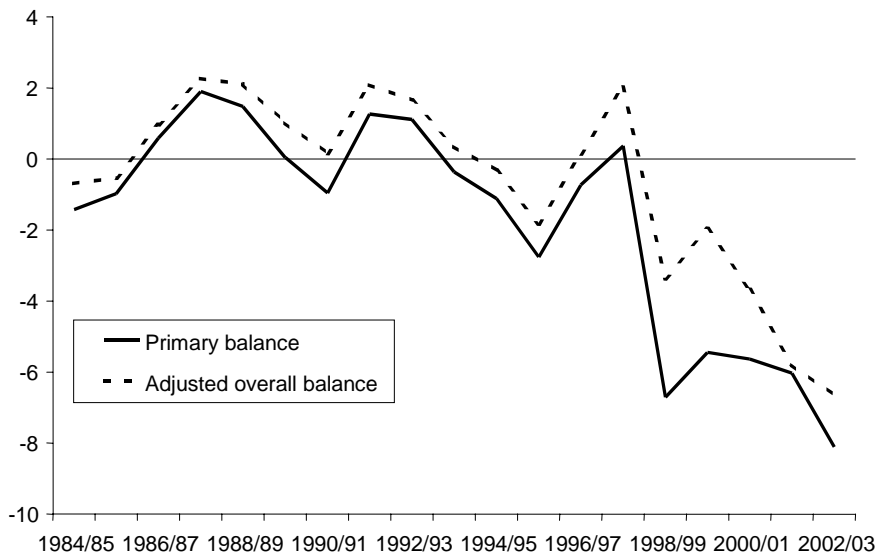
¹ Based on 2002/03 budget projection.

Graph 3
Recurrent expenditure¹
as a percentage of GDP



¹ Based on 2002/03 budget projection.

Graph 4
Fiscal balance¹
as a percentage of GDP



¹ Based on 2002/03 budget projection.

The investment return on fiscal reserves is recurrent income and should be treated as a revenue item. However, it is different from tax revenues in that it is outside the control of the fiscal authority and can be volatile due to changes in market conditions. Thus, over-reliance on investment income in order to finance spending could also be a problem. Based on these considerations, we derive a measure of

primary fiscal balance by excluding the land premium, privatisation receipts and investment income from aggregate revenue (Table 1). The results indicate that a significant primary deficit emerged in financial year 1998/99 (Graph 4). It remained at 5½-6% of GDP in the following three years, and is projected to be above 8% in 2002/03. The balance that excludes asset trade receipts but includes investment income - the “adjusted” overall balance - was also in deficit in recent years, albeit at a lower level.

Table 1
An analytical presentation of fiscal accounts
as a percentage of GDP

Fiscal year	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	Projection ¹ 2002/03
Revenue	16.1	16.7	20.9	17.1	18.4	17.5	13.8	16.8
Tax	10.8	11.2	11.8	9.1	8.8	9.8	9.8	9.8
of which:								
Direct tax	7.0	6.9	6.9	6.1	5.4	5.8	6.3	6.2
Indirect tax	3.7	4.4	4.8	3.0	3.4	3.9	3.6	3.5
Non-tax	5.3	5.5	9.1	8.0	9.6	7.7	4.0	7.0
Of which:								
Land premium	1.5	1.9	4.4	1.5	2.8	2.3	0.8	2.0
Privatisation proceeds	0.0	0.0	0.0	0.0	0.0	0.8	0.0	1.2
Investment income	0.9	0.9	1.7	3.3	3.5	2.0	0.2	1.5
Expenditure	16.4	14.7	14.4	19.0	17.6	18.1	18.8	20.3
Recurrent	10.8	10.8	11.1	13.0	13.8	14.3	15.4	16.0
Capital	5.6	3.9	3.3	6.0	3.9	3.8	3.4	4.3
Overall balance²	-0.3	2.1	6.4	-1.8	0.8	-0.6	-5.0	-3.5
Adjusted overall balance ³	-1.8	0.1	2.0	-3.4	-2.0	-3.7	-5.8	-6.7
Primary balance ^{3,4}	-2.8	-0.7	0.4	-6.7	-5.4	-5.6	-6.0	-8.1
Memorandum								
Structural primary balance	-3.0	-1.1	-0.0	-5.9	-5.1	-5.9	-5.8	-7.2
Structural adjusted overall balance	-2.3	-0.4	1.8	-4.0	-3.2	-4.1	-4.2	-5.9
Fiscal reserves	13.3	13.9	34.0	34.4	35.1	33.4	29.3	25.4

Source: HKMA Research Department staff estimates.

¹ Based on the 2002/03 budget, and projections therein for economic growth and price inflation. ² Budget definition. ³ Excluding land premium and privatisation proceeds. ⁴ Excluding investment income.

The primary balance and adjusted overall balance derived above reflect cyclical conditions as well as the effects of policy measures and structural changes in the economy that may have a durable effect on revenue and expenditure. A structural balance is obtained by purging the effects of cyclical conditions. To this end, we employ the “structural budget balance” approach developed by the IMF (see Annex for a technical note on the methodology). The estimates suggest that only a small part of the deterioration in the primary balance was attributable to cyclical effects, and that a sizeable structural primary deficit of 5-7% of GDP emerged in recent years. The adjusted overall structural

balance was obtained by estimating investment income using a trend return rate.³ The results indicate a structural deficit of 4-6% of GDP.

These indicators suggest a considerable deterioration in the structural balance starting from 1998/99. The underlying shortfalls were covered by asset trade and investment income, with only modest deficits recorded in the earlier years. However, the unfavourable market conditions significantly affected these asset-related receipts in 2001/02, leading to a sharp rise in the overall deficit.

The government study examines fiscal sustainability using a somewhat different approach. It projects the likely future fiscal balance under existing revenue and expenditure policies, on the assumption that the economy will grow at its trend rate in the long term.⁴ The study concludes that there is a sizeable structural deficit. Specifically, the projections suggest persistent deficits at about 3-4% of GDP in the next five years. These projections include a land premium assumed at 2% of GDP per annum. Adding the same number to our structural balance - which excludes the land premium - would give a deficit of about the same size as estimated in the government study. The exact magnitude of the estimated structural deficit should be treated with caution, considering the caveats and uncertainties with both estimation methods. Nevertheless, it is clear that there has been a significant deterioration in the underlying fiscal position. The government study notes a combination of factors that have contributed to this unfavourable development. These include the structural changes in the economy, such as the consolidation of the property market, and countercyclical measures adopted in recent years. Our analysis highlights the risk and vulnerability of relying on volatile revenue sources such as asset trade receipts and investment income to finance a significant part of the expenditure.

4. Macroeconomic implications of the structural deficit

The existence of a structural deficit would call for fiscal consolidation. However, the exact measures, timing of implementation and strength of adjustment should be carefully considered, taking into account a number of factors. These include the urgency of adjustment, current economic conditions, and the need to rationalise revenue and expenditure to improve the microeconomic efficiency of fiscal operations. On the latter, for example, there are concerns about the broad-based increase in recurrent government expenditure relative to output in recent years. Thus, in addition to the need for fiscal retrenchment, there is an issue as regards the appropriate size of the public sector. Government spending on capital projects should also be justified by cost-benefit analysis or reference to any implied market failure in the private sector. It is beyond the scope of this note to provide a comprehensive review of the related issues. Nevertheless, it is useful to outline some broad considerations in relation to monetary and macroeconomic stability.

First, it should be emphasised that a continuing fiscal deficit in the short term does not necessarily pose a serious threat to monetary stability or to the exchange rate link. There would appear to be scope to run budget deficits, given the substantial fiscal reserves and absence of any government debt. However, it is important to have a credible medium-term strategy to tackle the issue of fiscal sustainability. Market confidence concerning monetary stability generally and the link in particular may be affected if investors perceive signs of the imbalance persisting into the longer term. The proposal to cut civil service salaries in 2002/03 and the medium-term strategy of expenditure retrenchment, as announced in the 2002/03 budget, represent a move in the direction of fiscal consolidation and

³ We estimated a trend return rate with reference to the yield on US treasury bonds, which turned out to be very close to the assumption of 5.5% per annum in the government study.

⁴ The projection and the structural balance approach adopted have advantages and limitations. Specifically, the projection approach is subject to uncertainties about future growth and inflation rates, and asset and investment income. However, the projection framework can be used to assess the effects of the alternative revenue and expenditure policy measures. Our approach focuses on the current underlying position. For example, our estimates suggest that the main shift in the underlying balance took place in the wake of the Asian financial crisis. However, it is less suitable for examining the effects of alternative future policy measures.

demonstrate the government's commitment to the maintenance of a prudent fiscal policy.⁵ Specifically, the government proposed to balance the budget by 2006/07, mainly through cuts in expenditure.

Second, it should be noted that weak economic activity and uncertain prospects for recovery constrain the pace of fiscal adjustment in the near term. A tightening of the fiscal position would represent a procyclical policy stance for the first time in the past two decades. HKMA (2000) suggested that fiscal policy had been expansionary in the previous economic downturns, including notably in the mid-1980s and following the Asian financial crisis. An updating of that analysis indicates a continuation of an expansionary stance in the past two years (Table 2). Furthermore, the fiscal impulse is projected to raise GDP growth by about 1 percentage point in 2002/03, mostly due to increased expenditure. The significantly expansionary stance of policy contrasts with the concerns about a considerable structural deficit raised by the government study. This indicates that the priority has been placed on helping the economy in the near term, while pursuing the required adjustment to correct the underlying imbalance in the medium term. A front-loaded and drastic adjustment in the fiscal position would worsen economic conditions and lead to a rise in the unemployment rate, which is already at a high level.

Table 2
Fiscal impulse and multiplier effect on GDP
as a percentage of GDP

Fiscal year	1995/ 96	1996/ 97	1997/ 98	1998/ 99	1999/ 2000	2000/ 01	2001/ 02	Projec- tion ¹ 2002/03
Fiscal impulse²	1.9	-1.0	-0.8	3.1	1.7	0.2	0.7	1.6
Revenue	0.7	-0.3	-0.8	1.8	1.4	-0.9	0.1	0.4
Expenditure	1.2	-0.7	0.0	1.2	0.3	1.1	0.6	1.2
Multiplier effect on GDP³	1.0	-0.5	-0.3	1.5	0.7	0.3	0.4	0.9
Contribution from:								
Revenue	0.3	-0.1	-0.3	0.7	0.6	-0.4	0.0	0.2
Expenditure	0.7	-0.4	0.0	0.7	0.2	0.6	0.4	0.7

Source: HKMA Research Department staff estimates.

¹ Based on the 2002/03 budget. ² Base year is fiscal year 1992/93. ³ The tax and spending multipliers are assumed to be 0.4 and 0.6 respectively, based on HKMA (2000).

5. Conclusions

Our analysis concludes that there has been a considerable deterioration in the underlying fiscal balance in recent years. A structural deficit emerged mainly due to rising recurrent expenditure and falling asset-related receipts. To address the issue of fiscal sustainability, it is important to have a concrete and credible medium-term framework. At the same time, the immediate threat to fiscal and monetary stability should not be exaggerated, and due consideration should be given to the current weak economic conditions in deciding on the adjustment measures in the near term. In that regard, the 2002/03 budget represents an effort to strike a balance between providing short-term fiscal stimulus and moving towards budgetary consolidation over the medium term.

⁵ The actual reductions in civil service salaries, effected from 1 October 2002, were 4.42% for the directorate and the upper salary band, 1.64% for the middle salary band and 1.58% for the lower salary band, representing an estimated average reduction of 2-2½% in civil service salaries.

References

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Annex: Methodology for estimating structural balance

The conventional measure of budget balance does not fully reflect the underlying fiscal position, because it reflects the effect of cyclical conditions. The structural budget balance (SBB) provides a measure of the underlying position by purging cyclical effects. The SBB framework is widely used by IMF staff in assessing member countries' fiscal policy. The methodology is described in Heller et al (1986), IMF (1993, 1995) and Hagemann (1999).

The IMF's SBB approach

The IMF's SBB method assumes that actual real output moves around an underlying path that reflects the long-run potential growth of the economy. A fiscal deficit will emerge during a cyclical downturn, but the cyclical effects will dissipate during the subsequent upturn, when output reverts to its long-run equilibrium path. By quantifying the size of the deviation of actual output from potential and the cyclical sensitivity of revenues and expenditures to such a deviation, the SBB method estimates the portion of the budget balance that is attributable to cyclical changes in economic conditions. An estimate of the SBB is derived by subtracting the estimated cyclical component from the observed balance. The SBB methods thus involve estimating the output gap and the responsiveness of revenue and expenditure to that gap. In particular, a measure of "structural revenue" is estimated by adjusting observed revenue using elasticities for major tax items and taking account of the output gap. A measure of "structural expenditure" is calculated by adjusting total outlays by an amount that reflects the expenditure impact of the divergence between the actual and the natural rate of unemployment.

Caveats

Structural balance estimated under the SBB approach needs to be interpreted with caution. First, it relies on estimates of potential GDP and the natural rate of unemployment, which can be subject to considerable uncertainties. Second, estimates of revenue elasticities could be influenced by the effect of policy changes, which are empirically difficult to disentangle from other factors.