

# COMPARING FLEXIBILITY IN ARGENTINA AND HONG KONG<sup>1</sup>

*Internal flexibility is a key factor underpinning the sustainability of any fixed exchange rate. Quantitative analysis shows that prices and labour costs adjust to cyclical conditions more readily in Hong Kong than in Argentina. The relative inflexibility of the labour market in Argentina is also reflected in a much higher structural rate of unemployment.*

*Under a fixed exchange rate system, where there is little room for monetary discretion, the lack of internal flexibility increases the reliance on fiscal policy in cushioning shocks. The ability to withdraw fiscal stimuli and reverse budget deficits is, however, important in ensuring a long-term budgetary balance.*

*Compared with Argentina, Hong Kong has much sounder public finances, manifested in resilient budgetary institutions and strong fiscal discipline. Nevertheless, the widening deficits in recent years underline the importance of preserving sound Government finances to ensure long-term sustainability.*

## I. Introduction

One of the preconditions for a viable fixed exchange rate regime is a high degree of flexibility of the economy to domestic and external shocks. This can be manifested in responsive changes in costs/prices in the goods and factor markets. A sound fiscal policy is another important dimension underpinning an economy's resilience. Rigidities in Argentina's markets and fiscal institutions were among the major reasons leading to an eventual abandonment of the currency board. Hong Kong, in contrast, has been known for the adaptability of the economy and a prudent fiscal policy. This paper compares the two economies in terms of flexibility on various dimensions.

Section II provides an overview of the macroeconomic performance in both economies after the Asian financial crisis, in particular, the

cost/price movements and fiscal developments. Section III examines flexibility in the goods and labour markets based on some preliminary quantitative results. Section IV discusses resilience of fiscal institutions in Argentina and draws comparison with Hong Kong. Section V concludes.

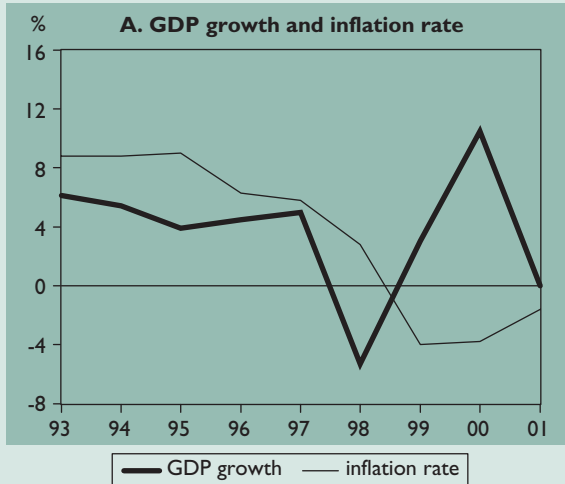
## II. Macroeconomic Developments in Argentina and Hong Kong

Chart I compares the main macro-economic indicators of Hong Kong and Argentina. Both economies were hit by financial crises in neighbouring economies and underwent severe economic contractions in 1998-1999. But they behaved very differently after the shock: Hong Kong managed to stage a sharp rebound in late 1999,

<sup>1</sup> The analysis presented in this article was carried out before Argentina abandoned its currency board. That event tends to have reinforced the conclusions which were reached.

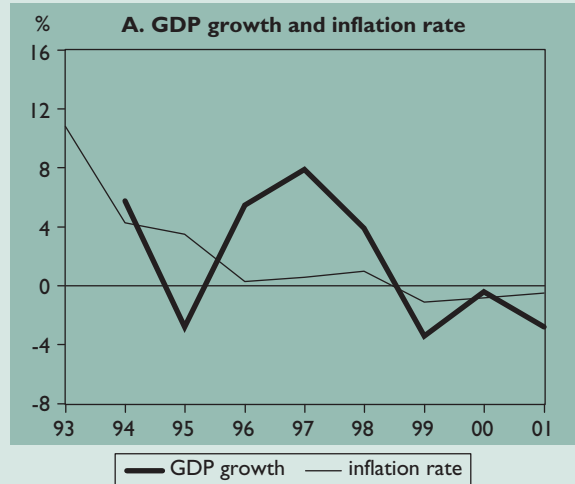
Chart I

Hong Kong



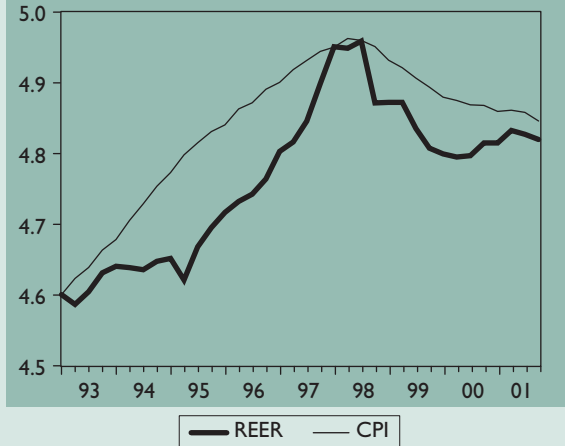
Note: 2001 figure for GDP is the Government forecast.

Argentina

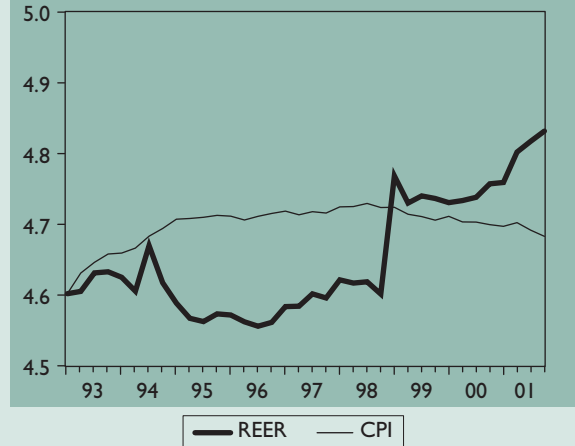


Note: 2001 GDP refers to the annualised figure for the first three quarters.

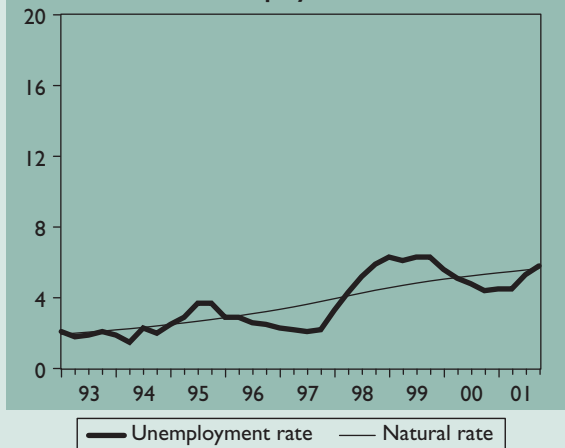
B. Real exchange rate and prices (log scale)



B. Real exchange rate and prices (log scale)



C. Unemployment rate



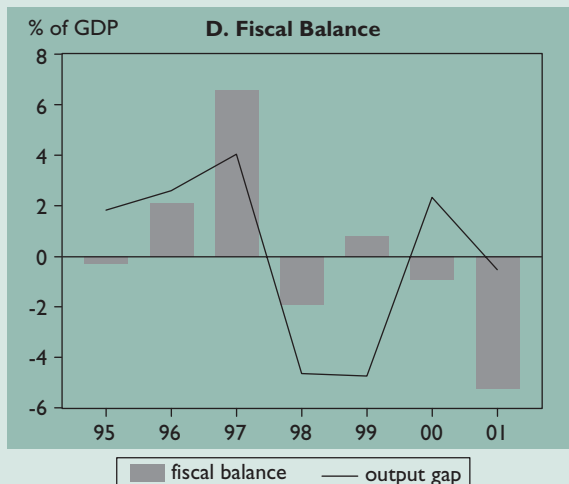
C. Unemployment rate



Note: The natural rate of unemployment is obtained from Hodrick-Prescott filter.

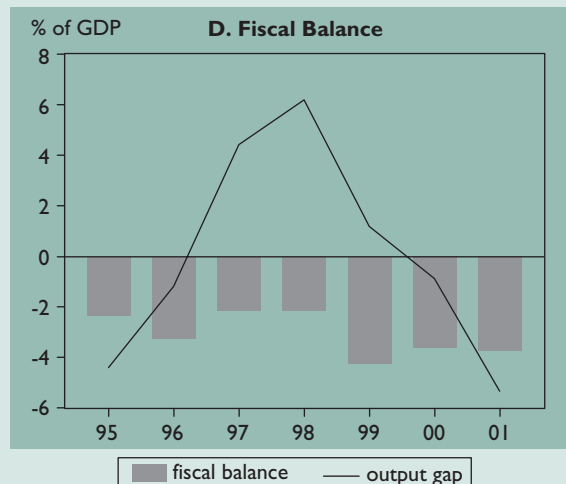
Chart I (con't)

**Hong Kong**



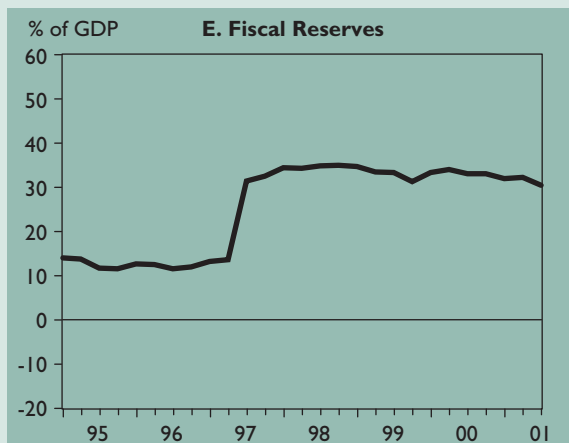
Note: 1) 2001 figure is based on Government projection.  
2) The output gap is obtained from Hodrick-Prescott filter.

**Argentina**



Note: 1) Fiscal balance for Argentina refers to the consolidated public sector balance.  
2) 2001 GDP refers to the annualised figure for the first three quarters.  
3) The output gap is obtained from Hodrick-Prescott filter.

**E. Fiscal Reserves**



Note: From 1 July 1997, figures include Land Fund.

**E. Public Debt**



that is, within a year or so from the trough; but Argentina suffered from a prolonged recession (Chart IA).

The divergent experiences of Hong Kong and Argentina reflect, among other things, differences in the flexibility of product and factor markets. In particular, downward nominal rigidities would prolong the relative cost adjustment and in turn a recession, when nominal exchange rate cannot be changed to absorb shocks. In Hong Kong, the Real Effective Exchange Rate (REER) rose sharply

after the onset of the Asian financial crisis, but consumer prices fell significantly afterwards, helping to restore external competitiveness (Chart IB). Argentina, by contrast, showed only modest declines in prices, with the REER continuing to increase in recent years.

Price flexibility depends on responsive adjustments in costs of production factors, notably rental and wages. In Hong Kong, property rental has fallen substantially from the peak in 1997 (around 40% for both residential and office

property). Similar data from Argentina are lacking but land is unlikely to be a major cost factor there.

Labour market flexibility can be assessed in two ways: first, the adjustment to structural changes in the economy, which is related to the natural rate of unemployment; and secondly, changes due to cyclical conditions, which can be reflected in changes in wages and/or unemployment rate (relative to the natural rate).

Chart 1C shows the unemployment rate together with its natural rate obtained from Hodrick-Prescott filter in both economies.<sup>2</sup> Argentina's natural rate of unemployment (16% in 2001) was about three times that of Hong Kong. In Argentina, the natural rate rose rapidly in the first half of the 1990s and stayed at a high level afterwards. This reflected the frictions in the labour market in coping with structural reforms, notably the trade liberalisation and privatisation. In Hong Kong, although the natural rate appeared to have risen, its relatively low level and modest pace of increase testify to the adaptability of the labour force.

In terms of labour market adjustment to cyclical conditions, the rise of unemployment rate relative to the natural rate, i.e. the unemployment gap, appeared to be more significant in Argentina than in Hong Kong. This may be due to varying degrees of severity of the shocks, or different extents of adjustment being borne by other factors, particularly wages. In the event of downward rigidities in nominal wages, a larger decline in employment will be needed to adjust to demand changes.<sup>3</sup>

In respect of budgetary policy, Argentina has a long history of a lack of fiscal discipline and failed attempts to improve public finances. In particular,

it has been incurring deficits in economic booms as well as in downturns in recent years (Chart 1D). Public debt has been ballooning, rising from about 30% of GDP at end-1994 to 50% at end-2001 (Chart 1E). The solvency concerns have been weighing heavily on the risk premium of the peso, increasing the cost of capital. Public finances in Hong Kong, though deteriorating in the past few years, are in a much better shape. The Government has sizeable fiscal reserves. Nevertheless, recent developments have raised concerns about structural fiscal imbalances. The resilience of fiscal institutions will be discussed in greater depth in Section IV.

### III. Quantitative Analysis on Flexibility in Goods and Labour Markets<sup>4</sup>

To explore flexibility more formally, some simple regressions were performed. The exact sample periods vary between regressions depending on data availability, but typically start in the early 1990s and end in 2001. While these are preliminary estimates, they provide a basis for quantitative comparison. Two aspects of flexibility are explored:

- (a) how fast prices change in response to disequilibrium in the real sector, as measured by the output gap; and
- (b) how readily labour markets adjust to the output gap.

First, the goods market flexibility is examined. Chart 2 presents the scatterplots of quarterly inflation rates and lagged output gap. In contrast to Hong Kong, Argentina did not seem to display significant price adjustments to changes in demand conditions. Nevertheless, the plot does not take into account other factors such as import prices.

2 The relatively high rates of unemployment toward 2001 could introduce upward bias in the estimation of the natural rate for both economies.

3 There are management studies suggesting that employers may prefer cutting jobs to reducing salaries, because the number of affected is smaller under job losses and the morale of the company would be less affected. Should this be the case, while a shock may induce a large rise in unemployment, it may not necessarily be due to wage stickiness.

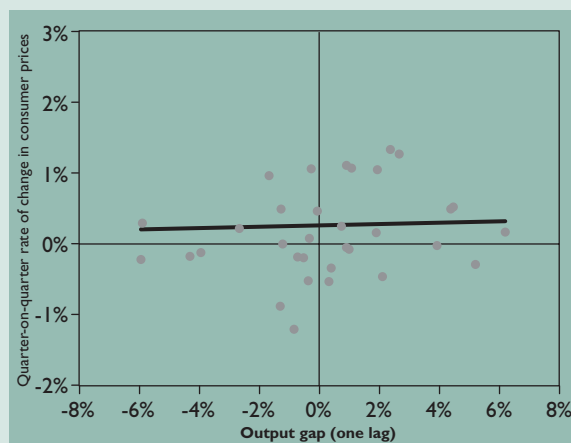
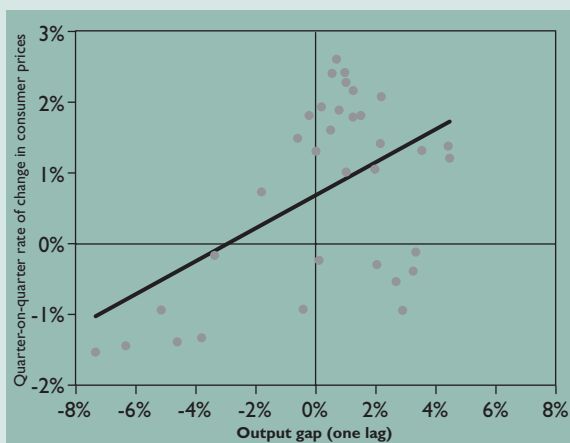
4 The analytical framework was suggested by Mr Stefan Gerlach, Executive Director (Research) of the Hong Kong Monetary Authority.

Chart 2

Adjustment in domestic prices with respect to the output gap

Hong Kong

Argentina



To examine the quantitative relationship between the two, the inflation rate is regressed on the output gap (with potential GDP estimated by the Hodrick-Prescott filter) and import prices, as well as four lagged inflation rates. The hypothesis to be tested is that inflation responds more strongly to the output gap in Hong Kong than in Argentina. The estimated coefficients of output gap are reported below.<sup>5</sup>

Regression 1:

$$\pi_t = \alpha + \beta(y_{t-1} - y_{t-1}^*) + \gamma\pi_{t-1}^{import} + \delta(L)\pi_{t-1} + e_t$$

where  $y_t$  denotes the logarithm of real GDP,  $y_t^*$  potential GDP, and  $\pi_t^{import}$  the quarterly change in import prices.

|                                  | Hong Kong | Argentina |
|----------------------------------|-----------|-----------|
| Estimated $\beta$                | 0.18      | 0.07      |
| (t-value)                        | (5.01)*   | (2.13)*   |
| Adjusted R-squared               | 0.88      | 0.44      |
| p-value for Q statistic (8 lags) | 0.87      | 0.89      |

Notes: Quarterly data during Q1/1991-Q4/2001 and Q3/1993-Q4/2001 are used for Hong Kong and Argentina respectively. All coefficients are of expected signs and there is no evidence of serial correlation of residuals.

\* Statistically significant at 5% level.

The estimates suggest that the coefficient on the output gap is more than twice as large in Hong Kong than in Argentina, thus supporting the notion that price changes play a more active role in the adjustment to economic shocks in Hong Kong.

In the labour market, the scatterplots of unemployment gap and output gap reveal that unemployment rate was more affected by cyclical conditions in Argentina than in Hong Kong (Chart 3).

To better quantify the effect, the unemployment gap is regressed on the output gap, import prices and its own lags. This formulation follows from Okun's Law. Okun's original work related changes in unemployment rate to changes in GDP growth, with both variables intended as proxies for deviation from their trend levels. Import prices are included to account for supply shocks. The hypothesis to be tested is that Hong Kong's labour market is more flexible, in the sense that the unemployment rate (relative to the natural rate) responds less to changes in economic conditions.

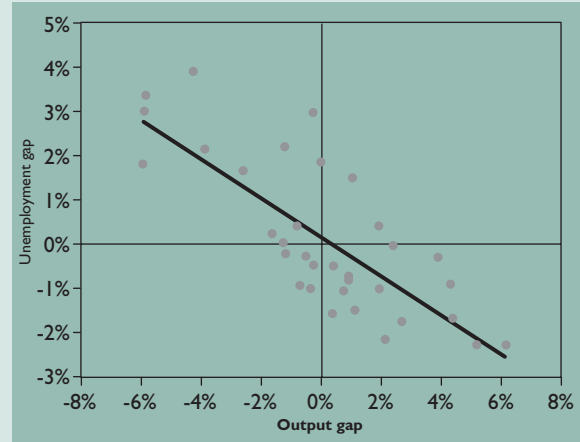
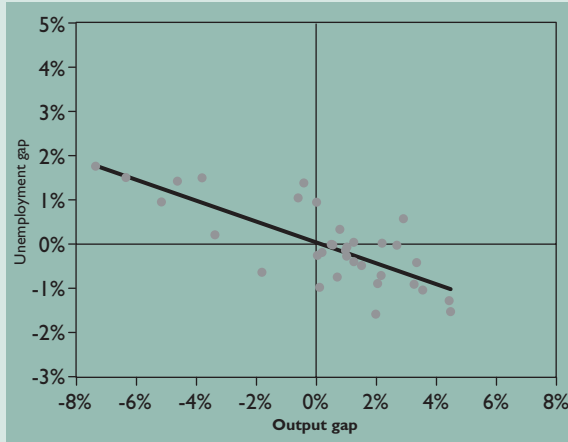
5 For the sake of comparison, both regressions use the same formulation with four lags of inflation rate. Nevertheless, deleting insignificant lags from each equation does not materially alter the results.

Chart 3

Adjustment in the labour market with respect to the output gap

Hong Kong

Argentina



Deficiencies in wage data prevent us from testing directly the hypothesis of wage flexibility.<sup>6</sup> The estimated coefficients of output gap are reported as follows.

Regression 2:

$$(u_t - u_t^*) = \alpha + \beta(y_t - y_t^*) + \gamma\Delta\pi_t^{import} + \delta(L)(u_{t-1} - u_{t-1}^*) + e_t$$

where  $u_t$  denotes the unemployment rate, and  $u_t^*$  the natural rate.

|                                  | Hong Kong | Argentina |
|----------------------------------|-----------|-----------|
| Estimated $\beta$                | -0.14     | -0.21     |
| (t-value)                        | (-4.81)*  | (-4.59)*  |
| Adjusted R-squared               | 0.84      | 0.90      |
| p-value for Q statistic (8 lags) | 0.21      | 0.15      |

Notes: Quarterly data during Q3/1990-Q1/2001 and Q2/1993-Q3/2001 are used for Hong Kong and Argentina respectively.

\* Statistically significant at 5% level.

The estimates again support the notion of greater flexibility in Hong Kong than in Argentina. The short-run effect of output decline on unemployment is larger in Argentina, and the full effect (-0.77) is nearly twice of that for Hong Kong.<sup>7</sup> This suggests that while a contraction in economic activity in Argentina is passed on more to unemployment, in Hong Kong, other factors including labour costs carry more of the adjustment.

The above findings are not surprising. Labour market rigidities are reportedly pervasive in Argentina. Labour market regulations are often considered onerous. Strong union power and widespread collective bargaining are likely to constrain wage adjustment. Employment cost is

6 Wage statistics are often plagued with measurement problems, notably the failure to account for changes in working hours and other employment costs (such as fringe benefits). The changing composition of labour force also complicates the comparison of average wages over time. In particular, the increased share of skilled labour in our employment tends to lift the average wage level in Hong Kong.

7 The full effect was calculated by taking into account the dynamic influences of the lagged dependent variable in the equation.

also burdened by substantial social security contributions from employers (almost one-third of basic compensation) and heavy severance payments. Furthermore, institutional and political constraints on cutting public sector salaries abound. Indeed, the lower degree of price flexibility reflected to a certain extent the labour market rigidities, in addition to other factors such as inefficiencies in the state sector and high level of protectionism.

#### IV. Fiscal Flexibility

Conceptually, under a fixed exchange rate, an economy which lacks internal flexibility would place heavier demands on fiscal policy in coping with shocks. This would involve larger budget deficits in a downturn, resulting from a combination of expansionary measures and cyclical effects. Nevertheless, sustainability in the medium to long term depends critically on the ability to withdraw fiscal stimuli and reverse the deficit position upon revival of economic activity. This in turn hinges on the resilience of fiscal institutions.

In Argentina, many institutional factors point to rigidities inherent in its budget deficits, which led to a failure to improve fiscal balance even in times of robust economic growth. The following highlights some of the institutional rigidities in Argentina.

##### (a) *Rigidities of spending*

The spending of Argentine government has been rigid, due to persistently large payments of pension benefits and transfers to provinces. High unemployment has also increased the demand for social security benefits. Public sector salaries are difficult to cut, because of political and institutional resistance. Debt-service costs were on the rise, amid the government's excessive borrowings and investors' increased worries on its creditworthiness.

##### (b) *Decentralised fiscal management*

Argentina has a federal tax revenue-sharing system. The federal government is mandated to transfer payments to provinces, which runs education and health services. Such transfers took up one-third of the non-interest federal expenditure. The government, however, has little control over provincial spending, nor their borrowings. As a result, even though the federal government managed to limit its deficit, provincial deficits and indebtedness added to the imbalances of the consolidated public sector.

##### (c) *Weak administration*

Tax evasion and corruption are often considered to be rampant in Argentina. The size of tax base and social security contributions is further affected by a large informal sector. Past efforts to raise additional revenue through increasing taxes have failed by pushing more people into the informal sector and led to more tax evasion.

##### (d) *Political obstacles*


The lack of political will to observe fiscal discipline within the government and legislature often jeopardised budgetary adjustment programmes. The problem was compounded by the lack of united political leadership. In the past few years, Argentina was ruled by a coalition government, which fell apart over time. The presidency lacked majority support in both the Congress and provinces, and key reform bills were often stalled or vetoed by the Congress. Support from governors to reduce federal transfers and rein in provincial finances was hardly forthcoming.

In short, ineffective fiscal administration, decentralised management, coupled with political problems, led to a failure in instituting sustained fiscal adjustment in Argentina.

By comparison, public governance is sound in Hong Kong. The stronger fiscal institutions have enabled the Government to have a better grasp on public finances. The Government has a track record of fiscal discipline. Nevertheless, the deterioration in the budget balance in recent years has raised concerns about an emergence of a structural deficit. It is important to have a credible medium-term strategy to address the underlying imbalance. Although difficulties in garnering necessary support for implementing reforms can be envisaged, the Government is in a better position to start with, where presence of fiscal reserves, rather than debt, would provide some breathing room to implement the needed adjustments.

## V. Conclusion

Overall, the analysis supports the notion that economic adjustments in Hong Kong's goods and labour markets took place in a more flexible manner than in Argentina in the period studied. This is surely one factor contributing to the success of the Currency Board arrangements in Hong Kong. Preservation of our flexible economic structure is essential in underpinning exchange rate stability.

The experience of Argentina also illustrates the importance of resilient budgetary institutions and fiscal discipline in sustaining a fixed exchange rate. While Hong Kong is facing the problem of increased budget deficits, public finances are on a sounder footing as reflected in a debt-free Government and the availability of sizable fiscal reserves. Unlike Argentina, fiscal administration and discipline is strong. The Government has stated its determination to rein in spending and address fiscal imbalances over the medium term. 

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