Box 6.1

Fuel prices and the terms of trade

Although the surge in international oil price over the past year had not pushed up consumer price inflation by a significant extent (paragraph 6.4), its impact on import prices and on the terms of trade (TOT) was considerably larger. Soaring oil prices was actually the key factor underlying the deterioration in the terms of trade over the past few quarters.

The TOT is the ratio between the prices of total exports and imports faced by local exporters and importers in Hong Kong, as measured by their respective unit value index (UVI). Each of the export/import UVI is an average of export/import prices of a basket of commodities, weighted by their respective export/import values in the same month last year.

For import prices in particular, its movements are determined by a number of factors : (1) the exchange rates of the Hong Kong dollar against the currencies of import sources, in that depreciation of the Hong Kong dollar will lead to a rise in import prices, and vice versa; (2) higher inflation and higher production costs in Hong Kong's major import sources, if passed onto the output price level, will also lead to higher import prices for Hong Kong; (3) movements of world commodity prices as directly reflected in their respective import prices.

Table (1) indicates that the movements of exchange rate can explain the fluctuations of import prices quite well. The strong negative correlation suggests that a strengthening of the Hong Kong dollar would generally lead to lower import prices, which in turn should result in an improvement in the terms of trade, and vice versa.

Table (1): Simple correlation shows that the import weighted effective exchange rate index (EERI) generally explains the fluctuation of the import prices well

Months of Lag	Correlation coefficient between the levels of EERI and import UVI of various lags	Correlation coefficient between the y-o-y % changes of EERI and import UVI of various lags
0	-0.68	-0.50
1	-0.70	-0.57
2	-0.73	-0.62
3	-0.75	-0.65
4	-0.76	-0.67

However, as seen in Table (2), the relationship is not as obvious recently as in the past, namely, when the Hong Kong dollar strengthened between November last year and April this year, i.e. Hong Kong's import prices did not ease significantly enough and as a result the terms of trade has continued to deteriorate despite the dollar strengthening.

To investigate the cause, the fuel import UVI is discerned from the import UVI. As shown in Table (2), the import prices excluding fuel actually showed a much larger degree of softening over that particular period. This is because the prices of fuel imports, despite having only a small weighting of around 2-3% in the compilation of the import UVI, have pushed up the overall import UVI by more than 1 percentage point over the past few quarters due to the feed-through of soaring international oil prices. From Diagram 6.5d, it is also clear that the fuel import UVI actually follows the global crude oil market very well. The correlation coefficient between fuel import UVI and international oil price is as high as 0.94, indicating an almost immediate 100% feed-through from the world market to the local fuel import prices.

Box 6.1 (cont'd)

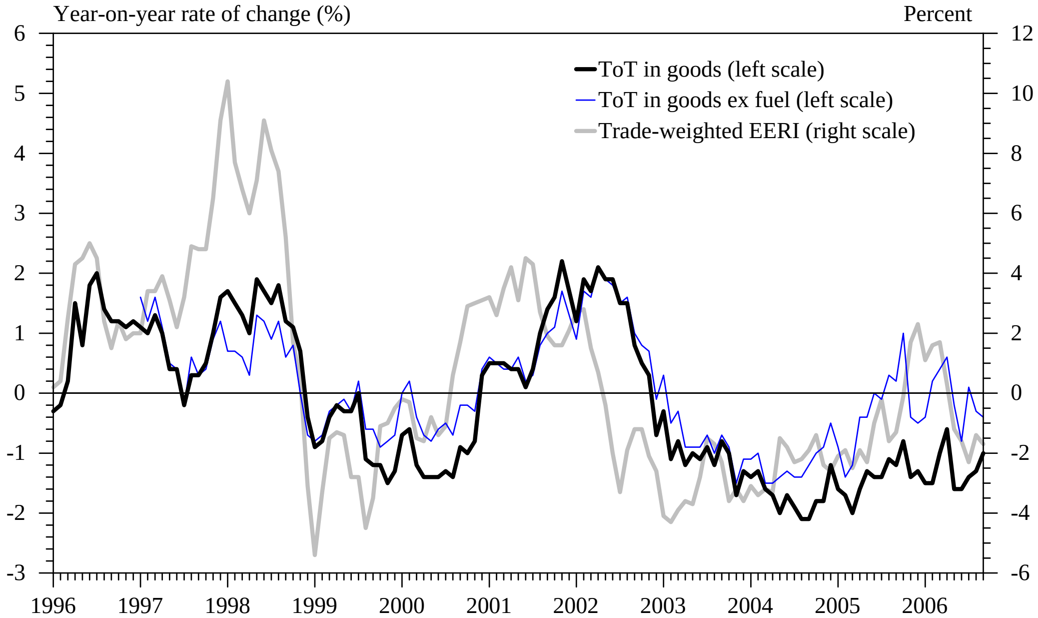
Table (2): The import prices did not ease significantly enough despite the strengthening of the Hong Kong dollar in late 2005/early 2006

Year	Month	Import UVI [(a)]	UVI of fuel imports [(a)]	Import UVI excluding fuel [(a)]	Import-weighted EERI [(a)]
2005	Jul	2.7	40.1	1.4	-0.6
	Aug	2.2	36.0	0.7	-2.0
	Sep	2.0	39.2	0.5	-1.6
	Oct	1.4	32.8	-0.4	-0.1
	Nov	1.9	25.1	0.9	1.7
	Dec	1.4	25.1	0.5	2.3
2006	Jan	1.1	37.6	*	1.0
	Feb	0.9	36.0	-0.8	1.4
	Mar	0.9	25.2	-0.6	1.6
	Apr	1.0	20.9	-0.3	0.1
	May	2.1	26.8	0.6	-1.3
	Jun	2.6	22.9	1.8	-1.6
	Jul	2.6	19.9	1.0	-2.3
	Aug	2.7	16.3	1.6	-1.3
	Sep	2.7	4.7	2.1	-1.6

Notes: (a) All figures are year-on-year percentage changes.
* Change of less than 0.05%

The scenario of the import UVI being shored up by its component of fuel prices actually traces back to the beginning of the year 2004, when oil prices began to soar. Thus, when the import UVI with the fuel component excluded is used to compare with the export UVI, the resultant terms of trade actually showed an improvement not shown in the original series in the period between early last year and the middle of this year. This was mainly due to the fuel price effect stated in the previous paragraph.

Chart 1 : The TOT trod a very different path when the fuel component is excluded from the imports



Box 6.1 (cont'd)

Table (3): Terms of Trade (TOT) did improve in relative terms along the strengthening of the Hong Kong dollar when the fuel component in import UVI is excluded

Year	Quarter	TOT of Goods [a]	TOT of Goods, excluding fuel [a]	Import-weighted EERI [a]
2004	Q1	-1.5	-1.3	-3.0
	Q2	-1.8	-1.4	-2.4
	Q3	-2.0	-1.4	-2.0
	Q4	-1.6	-0.8	-2.1
2005	Q1	-1.8	-1.1	-2.5
	Q2	-1.4	-0.2	-2.0
	Q3	-1.3	0.1	-1.4
	Q4	-1.2	0.0	1.3
2006	Q1	-1.3	0.1	1.3
	Q2	-1.3	-0.1	-0.9
	Q3	-1.3	-0.2	-1.8

Note : [a] All figures are year-on-year percentage changes.