

## HIGHLIGHTS & OUTLOOK

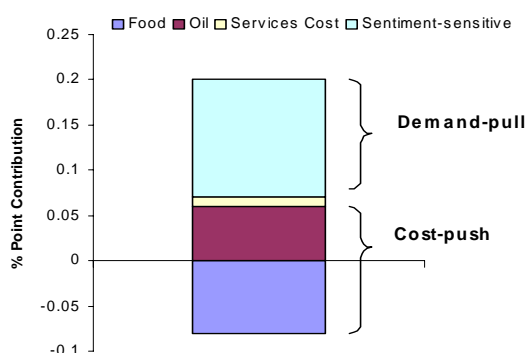
### DEMAND-PULL AND COST-PUSH PRESSURES

**Headline CPI inflation** came in at **1.3%** year-on-year (y-o-y) in April, unchanged from the previous month.<sup>1</sup> This brought average inflation for the first four months of the year to 1.4%. The MAS underlying inflation – which excludes accommodation and private road transport – trended down to 1.6% y-o-y, from 1.9% in March.

*Special Feature:  
Rising global oil  
prices and the  
Singapore economy*

On a seasonally adjusted, month-on-month (m-o-m, SA) basis, the overall price index recorded a small uptick of 0.1% in April, after rising by 0.2% in the previous month. Weighed down by the decline in non-cooked food prices, the slowdown in the rate of overall price increases masked the emergence of some underlying demand-side pressures, as prices of various retail items rebounded during the month. Apart from these *demand-pull* forces, consumer price developments in April were also underpinned by several *cost-push* factors including increases in commodity-related items and consumer services. (Chart 1)

**Chart 1**  
**% Point Contribution to Increase in SA CPI in April**



### BOUNCE-BACK IN PRICES OF RETAIL ITEMS COULD BE TRACED TO DEMAND-PULL FORCES

After remaining fairly weak in the first few months of the year following the GST hike, prices of several retail items made a strong comeback in April, alongside improved consumer sentiment. In particular, prices of ready-made clothing, footwear, personal effects and household durables experienced fairly significant average m-o-m gains of about 2%. The recovery in prices also revealed some underlying strength in selected retail items, with prices of ready-made clothing, for example, rising to their highest levels not seen since early 1998. The price increase in the recreation category was also partly due to the doubling in handling fees by ticketing agents Sistic and Ticketcharge.

Car prices saw a slight dip, as dealers could have continued to pass on some of the tax savings from the 20-percentage-point cut in the Additional Registration Fee (ARF) since March. There were, however, indications that the tax savings had some part to play in lifting the demand for cars. This was reflected by the steady rise in the COE premiums for small and medium sized cars, from an average of S\$23,800 in Jan-Feb 2004 to around S\$27,500 more recently. At the same time, the number of passenger cars sold

<sup>1</sup> The April headline figure was slightly below market expectations, with many analysts projecting a median forecast of 1.4%. Source: Reuters News on 21 May 2004, "Poll: Singapore April inflation rate set to pick up".

in Q1 2004 hit a record high of almost 24,000 – around 18% more than the previous quarter.<sup>2</sup>

### **COST-PUSH FACTORS LED TO HIGHER OIL AND COOKED FOOD PRICES...**

Apart from these demand-side price pressures, the April's CPI was also influenced by several cost-push factors. In particular, commodity-related price pressures showed up again in overall CPI after some momentary relief in the previous month. Petrol prices and electricity tariffs saw another round of increases in April, as global oil prices remained high. The former was hiked by three cents a litre while the latter was revised upwards by 2.3%.

Although non-cooked food prices retreated following the decline in prices of vegetables, seafood and meat & poultry, prices of cooked food rose with more expensive restaurant meals. The increase in the latter could in part reflect some second-round effects of earlier hikes in food prices, as operators passed on these higher costs to consumers.

### **...AS WELL AS HEALTHCARE COSTS**

Healthcare costs trended up slightly, on the back of higher private medical fees for general consultation as well as more expensive health products. The upward adjustment in the consultation fees could be attributed to the earlier rise in doctors' insurance premiums, which may have led some doctors to pass on the costs to consumers.<sup>3</sup> The Medical Protection Society, which insures the vast majority of the 6,455 doctors practising here, has upped the premiums of all categories of doctors by 18% since February. This latest increase implied a doubling of insurance premiums for doctors over a span of two years.

There was, however, some respite for healthcare costs following the cut in charges for certain treatments by some hospitals. For example, the National University Hospital has recently announced a cut in their charges for six types of treatments for B1 patients.<sup>4</sup> This move followed a series of cost reductions in hospital bills since September last year, in line with the government's efforts to keep medical costs affordable.

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### **MORE EVIDENT SIGNS OF DEMAND-PULL FORCES TO EMERGE, ALTHOUGH EXTENDED GSS MAY CAP PRICE INCREASES IN THE SHORT TERM**

For 2004 as a whole, our forecast for headline CPI inflation is between **1.5-2.0%**, with demand-pull and cost-push pressures expected to influence consumer prices during the year.

With the economic recovery on a firmer footing, the upward price adjustments of various consumer sentiment-sensitive items could strengthen. Nonetheless, over the short term, with this year's Great Singapore Sale (GSS) lasting eight weeks instead of the usual six, prices of retail items could remain soft till end-July. Already, some Orchard Road retailers have begun offering discounts of up to 50% before the commencement of the island-wide GSS at end-May.

### **COST-PUSH FACTORS INCLUDING PRICE HIKES IN OIL-RELATED ITEMS...**

The developments in world commodity prices, especially that of oil, are likely to continue to be the key cost-push factor underpinning consumer price movements for the rest of the year. Apart from rising demand conditions, the rise in global oil prices also reflected a risk premium with fears of disruption to Middle Eastern oil supplies due

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<sup>2</sup> Source: The Straits Times on 8 April 2004, "Car sales hit a record high".

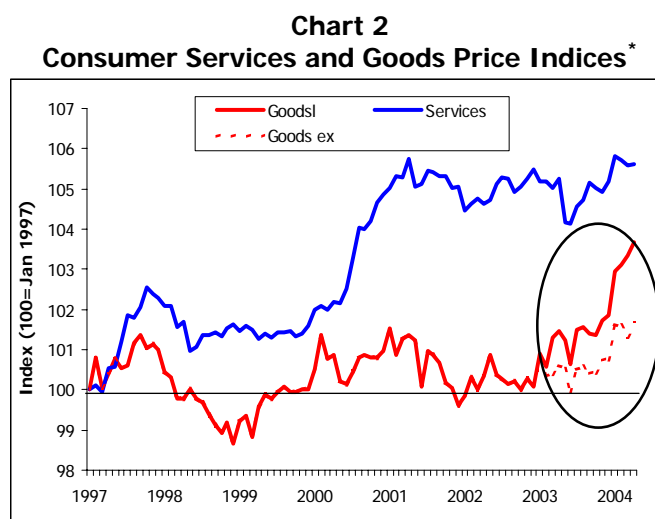
<sup>3</sup> Source: The Straits Times on 10 February 2004, "Doctors' insurance premiums up 18%".

<sup>4</sup> Source: The Straits Times on 10 April 2004, "NUH B1 patients now pay less for six treatments".

to heightened security concerns. In late May, the terrorist attack in Saudi Arabia led to the NYMEX WTI crude oil futures soaring as high as US\$42 per barrel, while OPEC oil prices also spiked up to around US\$37. While the vital oil infrastructure in the country has so far been spared from the spate of attacks, there have been rising concerns of further attempts at causing disruption to these oil production and export facilities. OPEC's recent decision to raise its output quota by two million bpd from July 1 may provide some relief for oil prices, although some analysts are not convinced that this would bring prices substantially lower. Reflecting the recent global oil price developments, prices of petrol and LPG, as well as electricity tariffs could see further upward adjustments in the coming months. (Please see box item on the impact of rising global oil prices on the Singapore economy.)

### ...AND CONSUMER-RELATED SERVICES TO REMAIN KEY UNDERPINNINGS OF OVERALL PRICE MOVEMENTS

Aside from external price pressures, the anticipated pickup in domestic cost pressures is likely to have an impact on consumer-related services, which has been on a steady uptrend over the years. Indeed, a closer look at breakdown of the CPI into its services vs. goods components<sup>5</sup> suggests that there has been a growing divergence between the two price indices since 1997. (Chart 2)



\* The two price indices are indexed to 100 in January 1997.

Although the goods price index has risen substantially in recent months, this was largely attributed to supply-side factors including the upward revision in the excise duties on alcoholic drinks & tobacco, and the increase in oil-related items. Abstracting the effects of these exogenous shocks, prices of consumer goods (as shown by the red dotted line) would have remained generally subdued, as compared to that of services.

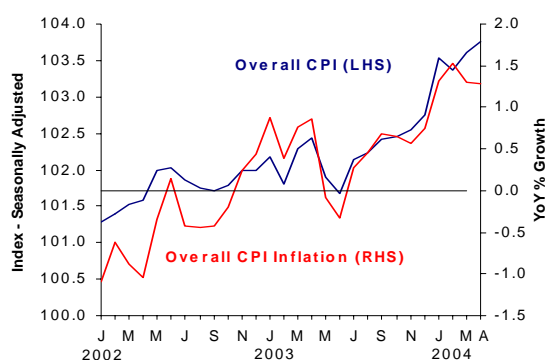
The steady rise in prices of consumer services over the years could be largely traced to increasing prices of healthcare and education services. While partly reflecting the rising demand for the provision of these services, the increase in prices has also been underpinned by rising operating costs due to labour constraints and service improvements. For example, the significant hikes in newspaper prices and medical treatment costs in early 2004 were attributed to the lagged impact of earlier cost increases. Going forward, prices of consumer-related services are likely to continue to trend up, as firms may decide to pass on earlier cost increases which had built up over the years of demand weakness.

<sup>5</sup> Consumer services include items such as medical, education, travel and accommodation services, while consumer goods include food, vehicles, clothing and personal effects. On the basis of this classification, consumer goods make up 51% of the CPI basket, compared to 49% for consumer services.

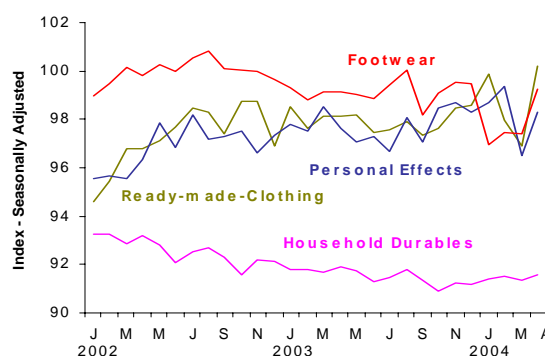
## REVISION OF ANNUAL VALUES FOR HDB FLATS WILL PUSH UP ACCOMODATION COSTS

Another recent development that will impact consumer price movements is the decision by the Inland Revenue Authority of Singapore (IRAS) to revise the Annual Values (AV) of HDB flats upwards over the second half of this year. This is likely to lead to higher accommodation costs, which are based on these AVs.<sup>6</sup> Although the IRAS regularly revises the AVs of private properties to reflect current market conditions, it had deferred doing so for HDB flats in view of the difficult economic conditions in recent years. The first update since 1990, the new AVs will be on average around 44% higher than before.

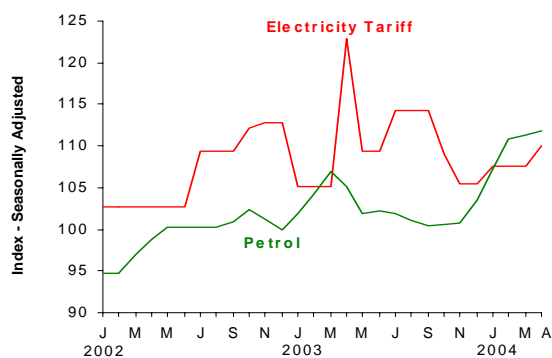
Headline CPI inflation remained at 1.3% in April, unchanged from the previous month. The seasonally adjusted index edged up by 0.1%, after rising by 0.2% last month.



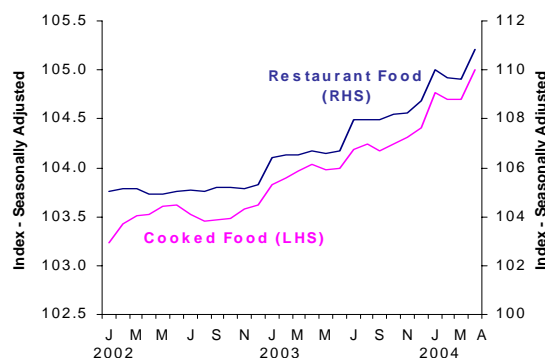
Prices of several retail items including ready-made clothing, footwear and personal effects rebounded with the brightened economic outlook, after the sharp retraction earlier in March. Prices of household durables also picked up.



Petrol prices and electricity tariffs were hiked in the month, in tandem with the persistently high global oil prices.

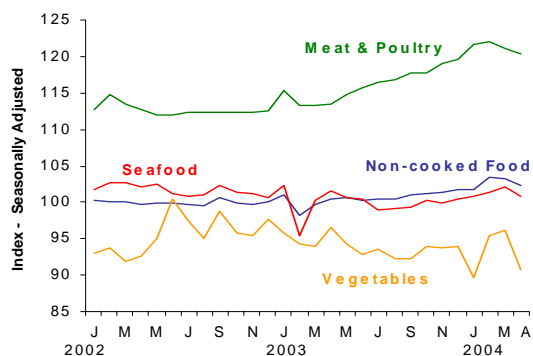


Cooked food prices rose, on the back of more expensive restaurant meals...

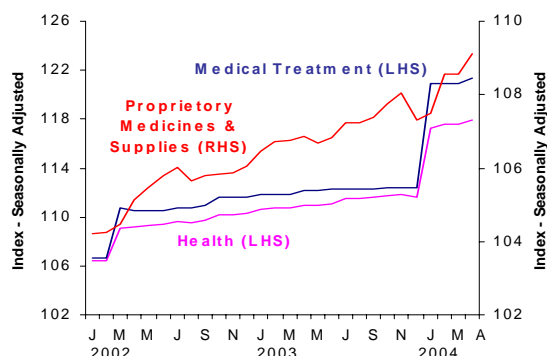


<sup>6</sup> Owner-occupied accommodation costs are calculated based on imputed rentals (i.e. the expected rental the owner would have to pay if he were a tenant of the premise.) These in turn are obtained from the AVs assessed by the IRAS.

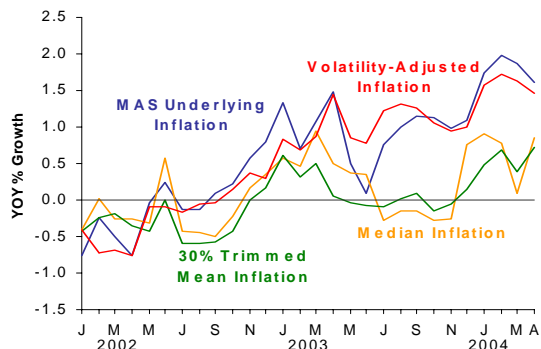
...although non-cooked prices fell on account of cheaper vegetables, seafood and meat & poultry.



Healthcare costs trended up as well, with more expensive medical treatment and proprietary medicines & supplies.



While the MAS underlying inflation and volatility-adjusted inflation moderated to 1.6% and 1.5% respectively, the trimmed mean inflation and median inflation rose to 0.7% and 0.9% respectively.



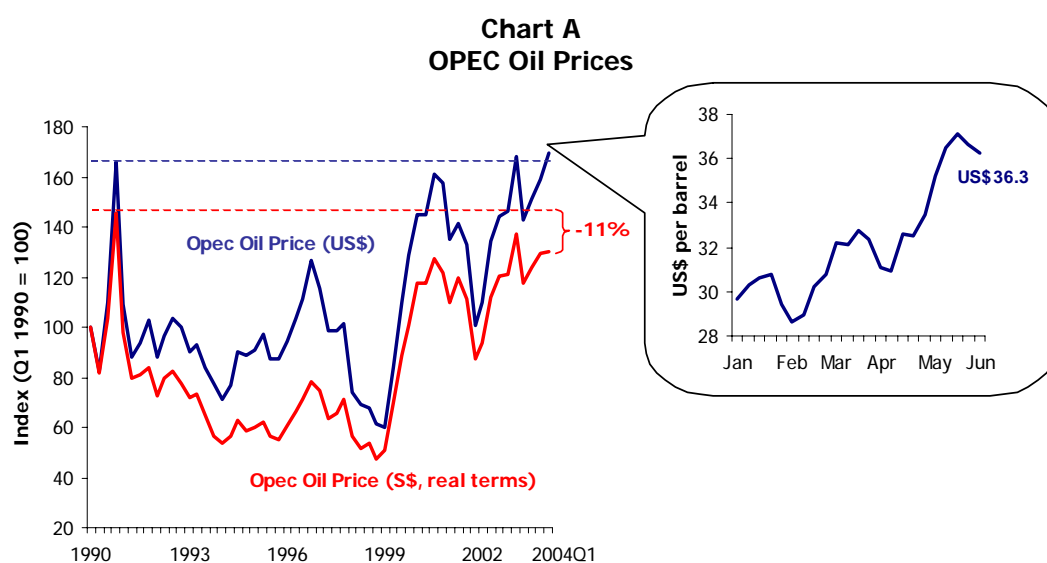
*Note: CPI SA series are used only when seasonality is detected. Otherwise, non-SA series are used.*

**MONETARY POLICY DIVISION  
ECONOMIC POLICY DEPARTMENT**

## Rising Global Oil Prices and the Singapore Economy

### Introduction

There has been increased attention on the oil market developments lately, with global oil prices soaring to a 14-year record high. Fuelled by strong world economic growth and worries about supply security in the Middle East, the NYMEX WTI oil futures breached the psychological US\$40 mark in early May, while OPEC oil prices concomitantly spiked up to around US\$37 following a steady uptrend since mid-2003. As shown in Chart A, global oil prices are currently around their 1990 Gulf War peak levels, although they still remain some 11% below their 1990 peak in real domestic currency terms. With current oil prices sustained at such high levels for an extended period of time, this has in turn sparked off concerns about their impact on economic activity. This box item aims to review the recent spike in global oil prices and to analyse the impact of such high prices on growth and inflation in the Singapore economy. We also attempt to quantify the dynamic effects of oil price movements on the domestic economy, using EPD's macroeconomic models.



### Reasons for the current surge in oil prices

The recent upsurge in global oil prices reflected a combination of supply- and demand-side factors. The growth in world oil consumption has been stronger than anticipated, led in part by China's economic boom as well as the synchronous global upturn. In view of this, the International Energy Agency (IEA) had revised its forecast for world oil demand growth to 2.9% (equivalent of around 2.3 million bpd) for 2004, as compared to 1.5% in its earlier forecast in December 2003.<sup>1</sup> According to the IEA, demand growth this year is expected to be the highest in 23 years, with China being the main driver.

Apart from strong demand, there are supply constraints such as the slow return of Iraqi oil production to world markets and historic lows in commercial inventories. According to the IEA's estimates, excess capacity of OPEC only amounts to around 3% of global demand. More recently, the spike in oil prices has also reflected a risk premium, alongside heightened security concerns with repeated attacks in the Middle East. Notably, the attacks in Saudi Arabia spooked oil markets, given that the country is the swing producer with 60% of the world's spare capacity. In addition, the weak US\$ has led to a terms of trade deterioration for oil exporters and could have also affected their pricing/supply behaviour.<sup>2</sup> There has also been continued speculation activity with a large build-up of long positions, reinforcing the upward pressure on spot prices.

<sup>1</sup> Source: World Oil Market Report on 12 May 2004.

<sup>2</sup> It is estimated that around one-half of the increase in dollar oil prices may be attributed to the depreciation of the dollar. (Source: IMF World Economic Outlook, April 2004)

## A comparison with previous episodes of oil price shocks

Despite the sharp rise in oil prices recently, we note that there are disparities between the current situation and the earlier oil price shocks in 1980, 1990 and 2000. To better analyse the impact of the current oil price developments, we have identified several key differences:

First, the extent of the earlier surge in oil prices was steeper, as compared to the current oil price shock. This can be seen in Table A, which shows the peak-to-trough oil price increases across the four periods. This time round, OPEC oil prices have risen from a low of around US\$25 per barrel in mid-2003 to US\$36 so far in May, which translates into a relatively less remarkable 40% rise. This compares with a more significant peak-to-trough increase of about 170% in the previous episodes.

**Table A**  
**Peak-to-trough Oil Price Increases**

Period	%
1980	176
1990	163
2000	167
2004	40

Second, the earlier oil price shocks were typically triggered by extreme geopolitical uncertainty even as demand conditions had remained relatively subdued. These developments had in turn led to a sharp pull-back in production activity, which slowed down the economy. While geopolitical tensions are one of the key driving forces pushing up oil prices this time round, several demand-side factors as alluded to earlier are also important determinants accounting for a sizable portion of the recent increase.

Third, the earlier oil price shocks also coincided with a general rise in inflationary pressures. Amidst soaring interest rates and deteriorating confidence, this eventually led to a global economic slowdown. The current situation appears to be different, as underlying inflationary pressures have generally remained contained in most economies, although some concerns about price pressures have started to surface more recently.

### Effects of high oil prices on domestic economy

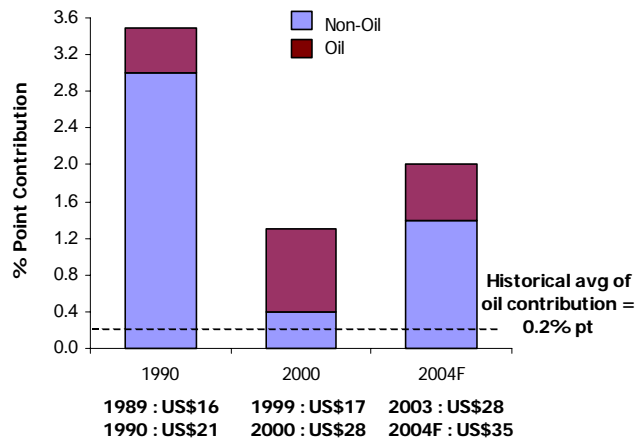
#### *Oil prices are estimated to account for 0.4-0.6% points of the CPI inflation this year*

Notwithstanding the key differences in the economic backdrop of the previous episodes of oil shocks as identified above, the current upsurge in oil prices has important implications for inflation and growth. High global oil prices will directly impact consumer prices, via its pass-through into those items with significant oil content in the CPI basket. These items are estimated to make up around 5% of the domestic CPI basket, and include electricity tariffs, liquefied petroleum gas (LPG) and petrol. However, high oil prices may also have other indirect effects on CPI inflation. For example, rising fuel costs could result in higher operating costs of airlines, forcing them to pass on these cost increases to consumers as higher airfares. Similarly, public road transport costs may be revised upwards with higher diesel costs, while restaurant meals may become more expensive with higher utility bills.<sup>3</sup> Chart B compares the contribution of oil-related items to overall CPI inflation during the more recent oil price shocks in 1990 and 2000, as well as the current surge in global oil prices.<sup>4</sup>

<sup>3</sup> Due to some time lags, these additional effects usually materialise only in the following year after the oil price increases.

<sup>4</sup> These oil price shocks were selected for comparison as data for earlier periods of oil price shocks is not available. In addition, for the purpose of comparing the contribution of global oil prices to CPI inflation, the yearly average of oil prices were used. This differs from the earlier peak-to-trough comparison in Table A.

**Chart B**  
**% Point Contribution of Oil vs Non-oil to CPI Inflation**

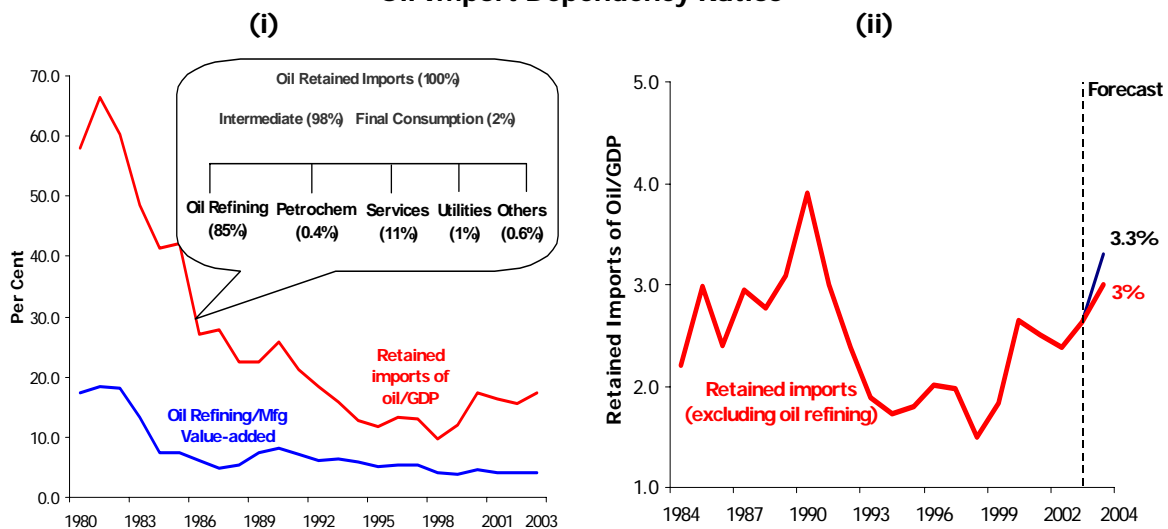


The contribution of oil-related items to CPI inflation was relatively large during 2000 at 0.9% points, as the increase in oil prices from US\$17 to US\$28 (65%) was significantly sharper. In comparison, oil prices have been sustained at fairly high levels at the mid-twenties level for much of 2003. Thus, assuming OPEC oil prices average around US\$35-40 per barrel for the whole of this year, oil-related items is estimated to contribute 0.4-0.6% points to CPI inflation in 2004.

***Impact on growth is likely to be contained given our low reliance on oil***

Turning to the assessment of the impact of high oil prices on GDP growth, it is notable that while retained imports of oil amounted to around 60% of Singapore's GDP in the early 1980s, it accounted for only 17% in 2003. Based on the latest input-output table, around 85% of these retained imports of oil are channelled to the oil-refining industry, which accounted for only 1% of GDP in 2003. The output of this industry as a share of manufacturing value-added has also fallen to 4%, from 18% in the early 1980s. (Chart Ci)

**Chart C**  
**Oil Import Dependency Ratios**



The declines in these ratios reflect the shift in the industrial base of Singapore towards less energy-intensive industries, including services. Indeed, excluding oil refining, Singapore's reliance on oil has been fairly low at around 3%. If OPEC oil prices were to spike up to US\$40 this year, this ratio is estimated to increase slightly to 3.3%. (Chart Cii) Thus, given our relatively low dependence on oil

and the industry's limited inter-linkages with the rest of the economy, this suggests that the impact of high oil prices on growth is likely to be fairly contained. Nonetheless, given our high external orientation, a slowdown in the global economy induced by higher oil prices would have negative spillovers to the domestic economy.

### Quantitative estimates of impact of high global oil prices

Table B summarises the quantitative estimates of the impact of an oil shock on GDP growth and inflation from both EPD's macroeconomic model as well as the IEA. Both estimates suggest that a 10% increase in oil prices would lead to a 0.1-0.2% points fall in GDP, while CPI inflation would increase by 0.2-0.3% points.

**Table B**  
**Impact of High Global Oil Prices**

Source	Assumptions	Impact on GDP Growth	Impact on CPI Inflation
EPD Internal Estimates	A sustained increase in oil prices from US\$25 to US\$40 for two quarters for Singapore	-0.7% pts	+0.9% pts
International Energy Agency	A sustained US\$10 increase in oil prices from US\$25 to US\$35 for Asia	-0.8% pts	+1.4% pts

### Sum-up

While high oil prices remain a risk factor, our analyses showed that growth momentum of the domestic economy is unlikely to be derailed, given Singapore's fairly low dependence on oil. Our estimates also showed that the pass-through of higher oil prices into domestic consumer prices is expected to be fairly contained, with the forecast for headline CPI inflation projected to remain within the 1.5-2% range for 2004 as a whole. Nevertheless, the volatility of oil prices in international markets will be closely monitored, together with its effects on the world economy.

<sup>5</sup> Source: International Energy Agency on 12 May 2004, "Analysis of the Impact of High Oil Prices on the Global Economy".

CONSUMER PRICE INDEX								
Period	All Items	Food	Clothing	Housing	Tpt & Comm	Education	Health	Misc
Weights	10000	2752	443	2292	1803	729	305	1676
	INDEX – SEASONALLY ADJUSTED							
2001 Jan	102.4	102.9	97.2	102.7	100.1	103.9	104.7	103.6
Feb	102.0	101.4	98.3	103.1	99.8	104.0	104.8	103.3
Mar	102.5	101.9	98.1	103.1	100.4	104.2	104.8	104.4
Apr	102.7	101.9	98.1	103.2	100.5	104.7	105.4	105.0
May	102.3	101.9	98.1	101.8	100.2	104.8	105.6	105.3
Jun	101.9	101.8	98.0	102.0	98.3	104.9	105.9	105.6
Jul	102.3	101.9	98.0	101.5	99.7	105.3	106.1	106.2
Aug	102.2	102.0	97.2	101.3	99.7	105.4	106.0	106.1
Sep	102.1	101.8	98.5	101.0	99.6	105.6	106.0	106.1
Oct	102.0	101.9	97.3	101.0	98.9	105.9	106.3	105.9
Nov	101.7	102.0	96.6	100.6	97.9	106.1	106.3	105.4
Dec	101.6	101.6	97.1	100.6	97.2	106.3	106.4	105.2
2002 Jan	101.3	101.6	95.7	99.9	97.4	106.0	106.4	104.9
Feb	101.4	102.1	96.5	99.5	97.7	106.2	106.4	105.1
Mar	101.5	101.9	97.5	99.5	98.0	106.4	109.0	105.0
Apr	101.6	101.8	97.5	99.3	98.6	106.3	109.2	104.7
May	102.0	101.9	97.8	99.6	99.1	106.4	109.3	106.0
Jun	102.0	101.9	98.2	99.7	98.8	106.6	109.4	107.4
Jul	101.9	101.8	98.9	99.8	99.3	106.3	109.6	105.3
Aug	101.8	101.7	98.8	99.6	99.2	106.5	109.5	105.4
Sep	101.7	102.2	98.5	99.5	98.3	106.7	109.7	105.2
Oct	101.8	101.9	99.0	99.6	98.4	106.8	110.2	105.4
Nov	102.0	102.0	99.0	99.9	98.3	107.1	110.2	105.7
Dec	102.0	102.1	97.5	99.8	97.8	107.3	110.3	106.0
2003 Jan	102.2	102.3	98.7	99.4	98.6	107.6	110.6	106.4
Feb	101.8	101.4	97.9	99.1	98.9	107.7	110.7	106.2
Mar	102.3	101.9	98.3	99.1	99.5	107.8	110.7	107.4
Apr	102.4	102.4	98.4	100.4	98.8	108.0	111.0	105.9
May	101.9	102.4	98.5	99.4	98.1	108.1	110.9	104.6
Jun	101.7	102.3	97.8	99.5	98.3	108.3	111.1	104.6
Jul	102.1	102.5	98.0	99.4	98.5	109.7	111.6	105.6
Aug	102.2	102.6	98.4	99.3	98.6	109.7	111.6	106.2
Sep	102.4	102.8	98.0	99.2	98.3	110.0	111.6	107.1
Oct	102.4	103.0	98.0	98.6	98.3	110.2	111.8	107.5
Nov	102.6	103.1	98.7	98.4	98.2	110.4	111.9	107.7
Dec	102.7	103.4	98.8	98.3	98.3	110.6	111.6	108.0
2004 Jan	103.5	103.6	99.3	99.0	99.1	112.5	117.3	108.6
Feb	103.4	103.6	97.9	98.8	99.5	112.9	117.6	108.3
Mar	103.6	104.0	97.0	98.7	99.3	113.1	117.6	109.5
Apr	103.7	103.7	100.0	98.9	99.4	113.0	118.0	109.0

SELECTED INFLATION INDICATORS				
Period	CPI	Import Price Index	Non-fuel Primary Commodities	Opec Oil Price
	YOY% Growth			
2001 Jan	2.0	0.9	-2.1	-2.4
Feb	1.3	0.3	-3.0	-5.2
Mar	1.8	-0.5	-3.0	-12.3
Apr	2.0	1.3	-2.3	7.7
May	1.9	1.2	-1.7	-2.9
Jun	1.2	-0.1	-1.3	-10.5
Jul	1.3	-0.9	-1.6	-14.1
Aug	0.7	-1.4	-2.1	-14.5
Sep	0.5	-3.2	-7.0	-22.7
Oct	0.2	-3.9	-9.3	-36.0
Nov	-0.2	-3.5	-7.2	-43.2
Dec	-0.6	-2.3	-8.4	-26.5
2002 Jan	-1.1	-2.8	-8.7	-24.4
Feb	-0.6	-2.8	-7.6	-25.6
Mar	-0.9	-2.3	-4.6	-4.4
Apr	-1.1	-2.7	-5.2	0.5
May	-0.3	-3.2	-6.3	-5.8
Jun	0.1	-3.7	-2.7	-8.9
Jul	-0.4	-3.2	0.2	6.0
Aug	-0.4	-2.0	1.4	5.7
Sep	-0.4	-1.3	7.9	13.8
Oct	-0.2	-0.5	13.5	40.2
Nov	0.2	-1.1	11.3	37.2
Dec	0.4	0.0	11.4	59.6
2003 Jan	0.9	1.0	11.8	65.5
Feb	0.4	2.5	11.5	66.7
Mar	0.8	2.1	7.3	30.4
Apr	0.9	0.0	7.2	1.9
May	-0.1	-1.2	6.9	3.6
Jun	-0.3	-0.3	3.9	12.7
Jul	0.3	0.1	1.4	9.3
Aug	0.5	0.6	4.0	10.7
Sep	0.7	-0.9	3.1	-4.7
Oct	0.6	-1.0	6.8	3.8
Nov	0.6	0.4	9.6	17.4
Dec	0.7	0.2	12.2	4.8
2004 Jan	1.3	0.3	15.8	-0.3
Feb	1.5	-2.0	19.2	-6.4
Mar	1.3	-1.9	23.6	9.3
Apr	1.3	-0.3	25.5	27.8