South Asian Focus

India: Oil at $100 - growth slows

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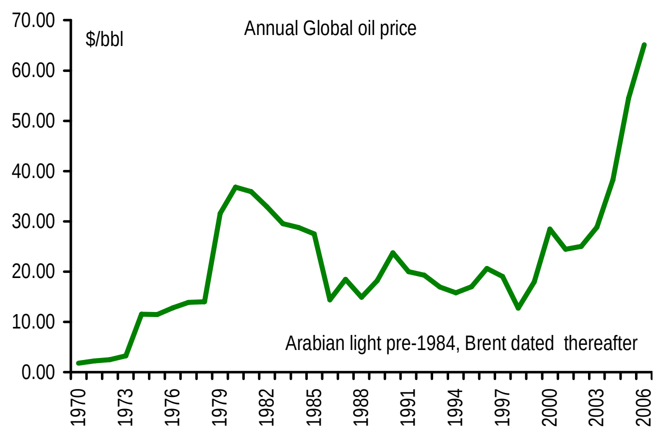
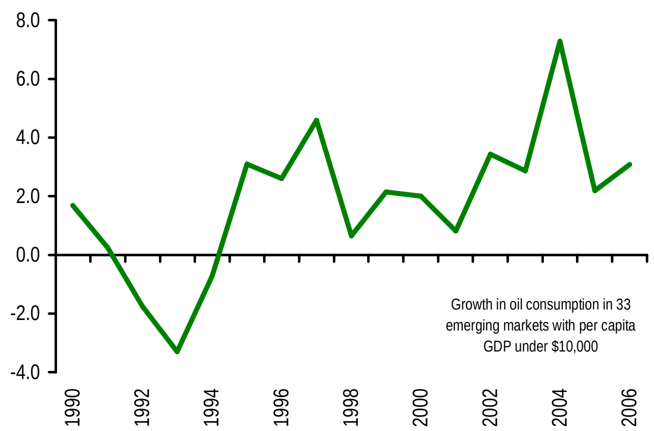
With oil hitting new highs what does this mean for India? If today's tighter monetary policy persists, longer term inflation should be contained to around 5%. But short term there is a risk of a sharp, but temporary growth shock, possibly by more than the 1% we expect this year. Domestic price controls while stabilising domestic inflation also generate a wider fiscal gap. This in turn, threatens to lower the long term savings rate thereby making it harder for the economy to return to today's 8-9% growth range. What is unclear is the degree of fiscal discipline. Will the government allow higher oil-related subsidies to crowd out other government spending, or let the full burden squeeze out private spending and temporarily drive up bond yields? The position of India in its stage of industrial development tells us that it has reached the point where oil consumption is least responsive to price hikes. As a result private discretionary spending should suffer, even without freer domestic fuel prices. The most surprising thing from our scenario analysis is the smallness of the impact on the fiscal & external accounts even if global prices stay at around $90-100/bbl. The implication of this is the economic impact of the shock would be lower than that in the 1970s and any currency correction could prove small & short-lived.

Chart 1: Oil prices from 1970



Source: BP Statistical review of World Energy 2007

Chart 2: Emerging market oil consumption



Source: BP Statistical review of World Energy 2007

Shock, overshoot or both?

A widely debated question is the cause of today's rising global oil prices. Is it: supply constraints & disruption risks? a case of irrational exuberance in oil markets or a legitimate symptom of the economic upswing across emerging markets? There is a strong case for viewing higher oil prices as a symptom of higher emerging economic growth, but equally there is a case for oil price 'overshoot'. GDP growth in places like India and China has yet to slow decisively, and as this happens it should make an impact. More generally oil consumption growth in newer emerging markets has not continued to accelerate in recent years (chart 2). As a result of these factors, India could be experiencing a modest 'oil price-shock', part of which will turn out to be transitory.

Official response – monetary restraint matters

On the face of it higher oil prices push up inflation. But how to tell whether the effect will be sustained or not? Monetary policy provides one answer. Globally, one key difference between the oil price shock in 1973 and in 1979 is the official policy response. The 1973 shock was accommodated in many economies by easier money – Phillips curve 'think' ruled the roost. In essence, financial leverage was added to a transitory shock which locked in higher inflation. By contrast, the 1979 shock was followed by tighter money and a general dismantling of price controls. So the outlook for short term growth & inflation (irrespective of exchange rate regime) is heavily determined by what the monetary authorities do.

Most of Asia faced a sharp economic downswing in the early 1970s. Eg. Korean growth slowed from (14-15% to 5% and raced back up again). However, there were some differences in response. Korea devalued and inflated a bit so although growth rebounded strongly inflation stayed high for some years after. Meanwhile Japan, which had recently de-pegged, pursued a more independent monetary policy which led to slower inflation after the shock. The yen depreciated more modestly taking the strain of the trade deficit. Today, the basic choice for the authorities is similar, if less dramatic: either inflate a bit and weaken the exchange rate or stay tight through the shock, maintain exchange rate stability & lower longer term inflation. For India, which has only recently attained a high growth path, keeping inflation low with stable fiscal balances is critical to maintaining higher longer term savings rates and therefore, growth. So pushing for a much weaker exchange rate now may not give savers the right signals.

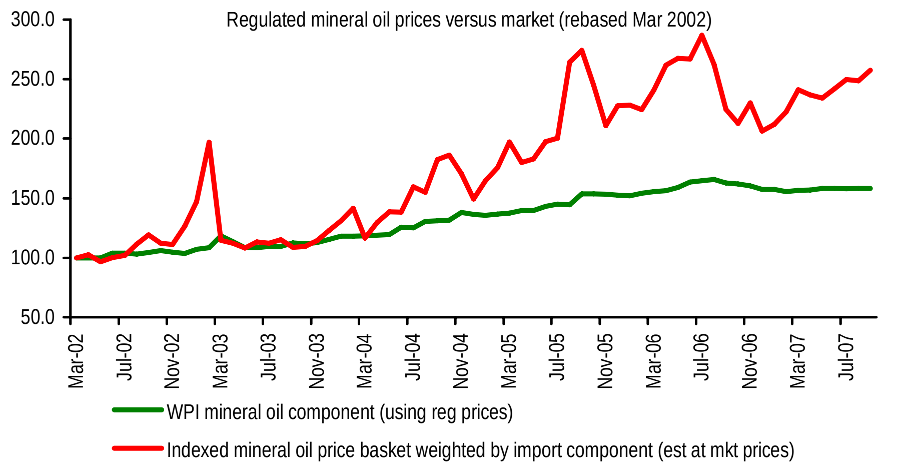
Low inflation impact

For India domestic price rigidities mean there is a minimal price pass-through so one would not expect an overt price shock. But even if prices were freed up, at this point the RBI would be unlikely (in our view) to accommodate such a price shock. There is a recent precedent – last year's food grain price hikes. Then the RBI's response was to tighten. Aggregate demand was strong and high food prices magnified the demand effect. The common man is still wary of inflation and demand remains strong. WPI may be suppressed at 3-3.5% for now, but CPI or consumer price deflator measures are still up at 5.5-6%. And with State elections in Nov-Dec and national elections likely next year the government can ill afford another price shock. As a result we would expect the RBI to keep conditions tight for longer. However, the reality is prices are semi-controlled. With fairly unresponsive demand (on which more below) the effect is still to squeeze private expenditures via a higher fiscal deficit rather than through higher fuel costs.

Subsidies – a defunct price mechanism

The more thorny aspect is the very limited pass-through from this transitory oil price shock to the real economy. Prices of diesel, gasoline, LPG & kerosene are under government control and altogether they account for around ¾ of petroleum product consumption. The administered price mechanism (APM) was dismantled in March 2002 and in theory oil companies have been allowed to adjust domestic prices according to import parity after government approval. In practice, kerosene and LPG have remained subsidized while a replacement pricing mechanism for petrol & diesel prices was never put into practice[1]. As can be seen from the chart the gap between global prices and domestic ones (as proxied by those in the India WPI basket) widened in FY04-05, then narrowed last year before re-widening again this year.

Chart 3: Global versus domestic mineral fuel prices



Source: CEIC

From subsidizing price to subsidizing losses

The result of this has been to increase the gross fuel 'subsidy' and curtail oil sector revenues to the government[2]. Excise, import duties, royalties, dividends etc have remained stable at around 4% of GDP in the years up to FY2005. The explicit LNG & SKO subsidy (a line item on the budget) has been cut over the years from 0.5% of GDP in FY02 to an almost negligible 0.1% in FY2007. In 2004-05 when the gap between global & domestic prices widened the government had to organise compensating transfers from the exploration companies in order to be able to cut this subsidy further. However, since then part of this burden has likely been met not just by lower dividends and taxes to the government, but also by the issue of oil bonds. By issuing oil bonds the government has shifted the oil subsidy burden away from the central government fiscal balance to the state owned oil company accounts. As a result, when global oil prices rise the central government deficit itself is barely affected – interest payments on oil bonds are included, but the bond amount is not.

Oil bonds – scenario analysis

For political reasons it appears that the move to deregulate domestic oil prices has stalled under the current administration. The recent pledge by the government to maintain stable domestic fuel prices tells us this is unlikely to change in the foreseeable future and that oil bonds will continue to be issued to compensate for a certain percentage of oil companies under-recoveries (losses on domestic fuel sales). What does this mean for the broader fiscal risks to higher oil prices? First, the stock of government debt goes up and second, interest payable on those bonds, which is a line-item on the budget, rises. In the table below we present a very crude scenario analysis for the change in fiscal burden under various global oil price assumptions. Here we assume: government oil sector revenues as % GDP will remain little changed. More difficult is to derive an estimate for oil companies gross under-recoveries[3]. Although it makes sense that higher global oil prices should correspond

[1] In August 2004 the government approved a system where oil marketing companies were permitted to change petrol & diesel domestic prices by +/-10% of a 3 month rolling average of the imported parity price.

[2] Excise, import duties, royalties, dividends etc have remained stable at around 4% of GDP in the years up to FY2005.

[3] Gross under-recoveries = net under-recoveries + oil bonds

to higher under-recoveries there is no cast iron relationship and many potentially opposing factors. But we take a macro view and observe that since FY04, when oil prices were on a rising trend, the percentage increase in gross under-recoveries is, on average, 3 times the annual percentage rise in global oil prices. We further assume the government continues to issue oil bonds at the current rate (ie 42.7% of gross under-recoveries).

Table 1: Sensitivity of oil bond issue to global oil price

	FY04	FY05	FY06	FY07E	FY08E	FY08E	FY08E	FY08E
Brent crude ($/bbl)	31.1	42.7	58.5	63.8	73	83	93	103
Gross under-recoveries (Rsbn)	95.0	185.0	390.0	504.0	722	959	1196	1433
Gross under-recoveries (%GDP)	0.3	0.6	1.1	1.2	1.5	2.1	2.6	3.1
Oil bonds (% GDP)	-	-	0.32	0.6	0.7	0.9	1.1	1.3
Oil bond interest (%GDP)	-	-	0.05	0.08	0.09	0.12	0.15	0.18
Fuel Subsidies (% GDP)	0.23	0.09	0.08	0.07	0.06	0.06	0.06	0.06
Fiscal deficit (Central Govt) %GDP	-	-	3.8	3.3	3.3	3.3	3.3	3.3
Adjusted Fiscal deficit (incl. oil bonds & resid interest cost)	-	-	4.1	3.9	4.0	4.2	4.5	4.7

Source: CEIC, UBS, RBI Quarterly Macroeconomic & monetary Developments, Business Standard

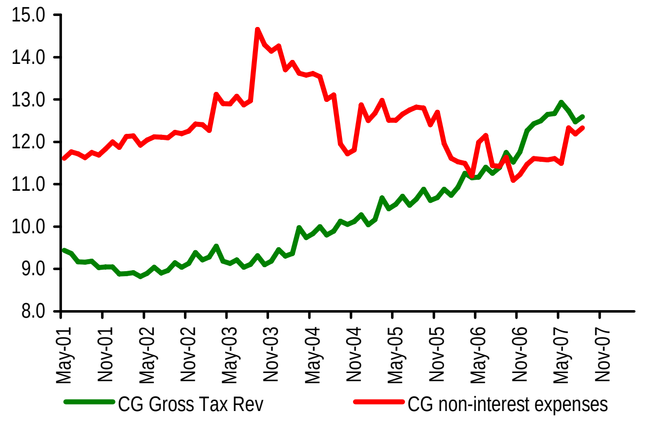
Fiscal reversal ahead?

The surprise is that even with significantly high oil prices and such a bold assumption for under-recoveries that the oil bond amount grows relatively slowly as a % of GDP. However, the big shock is the reversal in fiscal improvement. It implies that for the government to meet its 3.3% target it would have to cut deeper into other expenditures, possibly up to 1% of GDP - something which appears unlikely in view of the climbing trend in central government non-interest expenditures and upcoming elections (chart 4). After a good run at improving fiscal balances slippage appears inevitable, even under a fiscal responsibility act (chart 5)[4]. While the short term impact of these fuel subsidies is to widen the effective budget deficit and encourage over-consumption of fuels, the longer term impact would be to lower the savings rate. Without other offsetting changes, such as a narrower current account deficit, the hard-won fiscal savings of recent years which have helped spur higher private sector-driven GDP growth will ebb away. The net effect of any serious fiscal reversal would be to dampen the economic rebound following the economic dip and even reduce the longer term economic growth rate.

The problem with any scenario analysis, particularly in the table above is there comes a point when the assumed structure changes. Subsidies may be hard to withdraw, but at some stage we believe they will likely squeeze out some other part of spending (public or private). Therefore, we are inclined to downplay the effect of higher oil prices on the fiscal balance and its knock-on effects on private spending. However, the fiscal risks are rising and this can have a material negative impact on bond market & interest rate expectations. But at this stage, we do not change our GDP or interest rate forecasts.

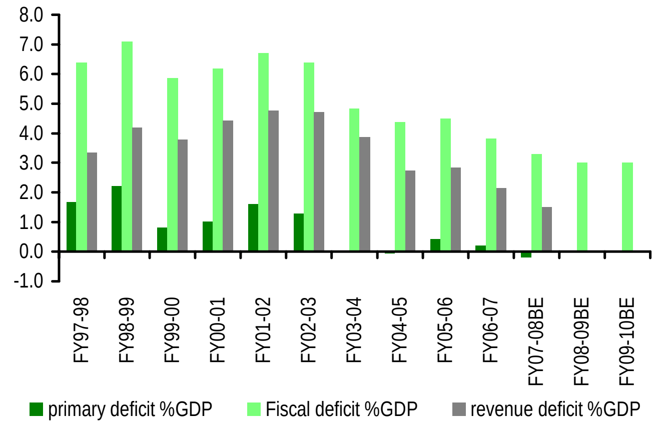
[4] The Fiscal Responsibility and Management Act puts a brake on Revenue deficit (a measure of current spending). This is a subset of the overall fiscal balance. Even absent oil bonds there is a divergence this year between the declining revenue deficit (on track) and the fiscal balance (roughly unchanged from last year). More on the fiscal outlook in a later article.

Chart 4: Non-interest central government spending



Source: CEIC

Chart 5: Annual Central Gov fiscal deficits

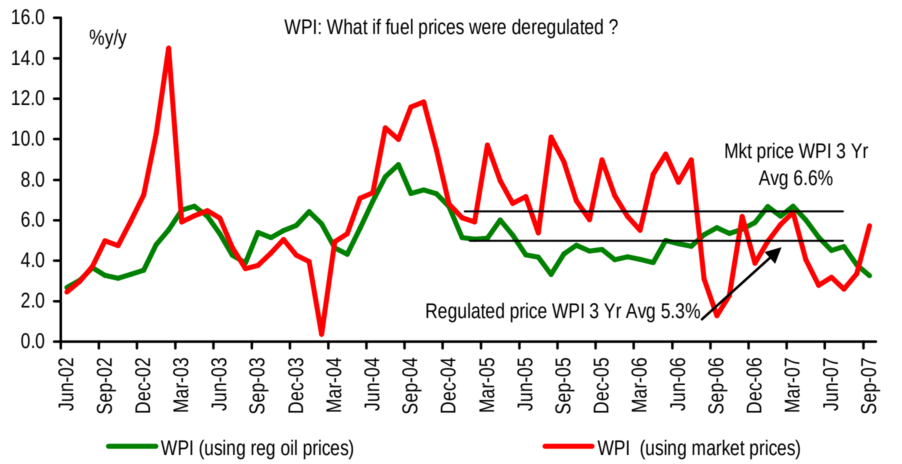


Source: CEIC

Alternatives?

The alternative is to free up domestic fuel prices. If domestic prices of LPG, kerosene, petrol & diesel were to be fully freed-up what would the WPI look like? In the chart below we stripped out those regulated prices and replaced them with market priced equivalents. Taking the average over the last 3 years the market price-based WPI would have been around 1.3% higher than the regulated one. Clearly the differential is higher than this in years when oil prices are rising like 2007-08 and 2004-05. In the table below we calculate the impact of $10 increases in global oil prices for such a synthesized WPI. A $30 increase in global oil prices in FY2007-08 from last year's average level corresponds to a 2% rise in the WPI. Could such pass-through happen? Ultimately we believe it is a question of political timing. The fiscal burden eventually will force a less politically constrained government to allow pass-through pricing to happen. In such circumstances we would expect the RBI to lean against such price pressures by holding policy tighter for longer – essentially sacrificing a bit of short term growth for longer term inflation stability.

Chart 6: WPI with regulated versus free market fuel prices



Source: CEIC

Table 2: Inflation and current account

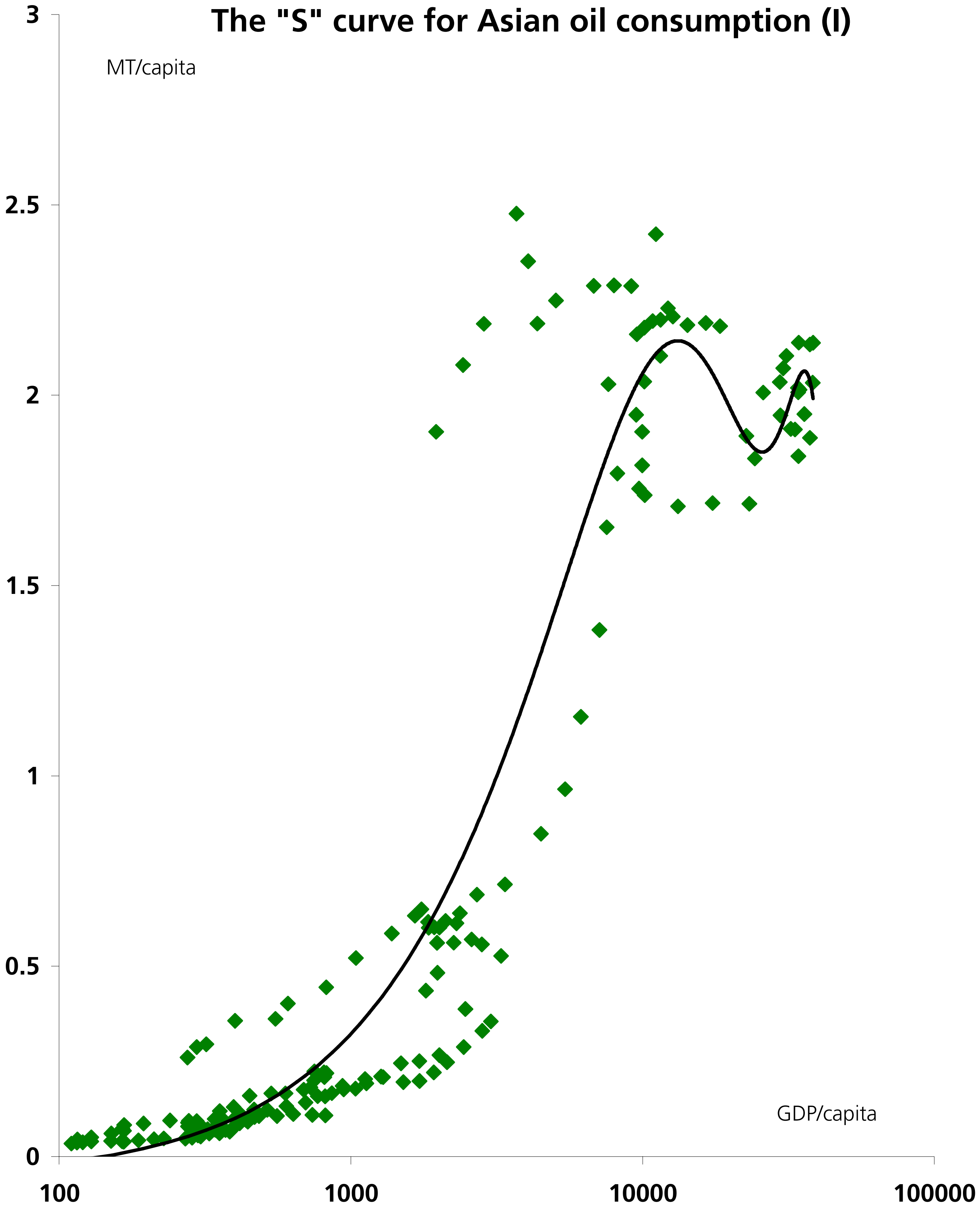
	2006/07	2007/08E	2007/08E	2007/08E	2007/08E
INFLATION					
average imported oil price ($/bbl)	60	70	80	90	100
WPI %y/y (avg)	5.5	6.2	6.9	7.6	8.2
EXTERNAL TRADE ($bn)					
Exports (Petrol prods assume 18% of total)	125	151	155	158	162
Imports	181	213	223	233	243
imports non-oil (15% growth)	124	143	143	143	143
imports oil (6% volume gr + price gr)	57	71	81	91	101
Trade balance	-56.7	-62.4	-68.8	-75.1	-81.5
Current a/c	-10.9	-16.6	-23.0	-29.3	-35.7
Current a/c (%GDP)	-1.2	-1.8	-1.9	-2.4	-3.0

Source: CEIC

Current account drag could halt currency gains

Aside from the fiscal and direct inflation affects, higher global oil prices also hit the external balances (table above). We have made a few simplifying assumptions to derive a current account based on relatively ungenerous assumptions. These are: no rise in petroleum products as a share of total exports, oil imported volumes rise to 6% and no change in the net income and services account surpluses. On this basis a $30 increase in global oil prices in FY2007-08 from last year's average level corresponds to a 1.2% increase in the current account deficit. Worrying but not alarming. Moreover it appears likely that one or more of our assumptions probably is too meagre and so the rise could be less than 1%. The classic response to a supply-side shock for an economy running a current account deficit is to undergo currency weakness. However, the scale of the widening is not large. So once again we are tempted to under-emphasise this aspect of the oil price phenomenon and conclude that currency appreciation viz USD may just slowdown, rather than reverse on a trend basis.

Chart 7: "S" curve (I)



Source: CEIC, BP Statistical Review of Energy 2007

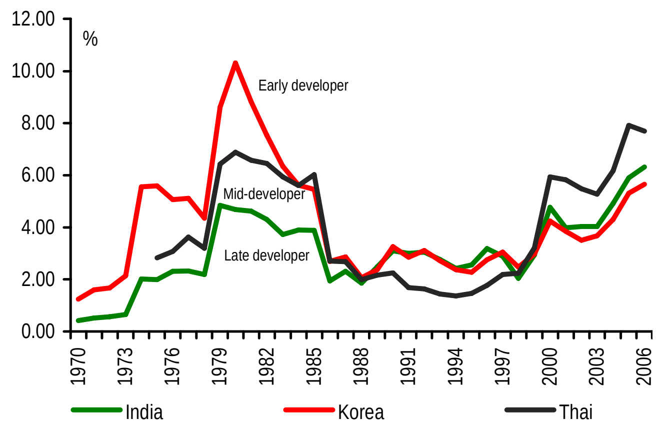
India at the bottom of the 'S'

In the short term, if inflation is barely affected and the slippage in the fiscal and external accounts is under 1% of GDP can we just ignore higher global oil prices, even after the overshoot? Unfortunately, unless or until India either develops a strong manufacturing export base or, extracts its alleged huge gas reserves the hydrocarbon demand by India is likely to remain higher than at any time in its history. The main reason is its stage of industrial development.

India to conform to Asian norm

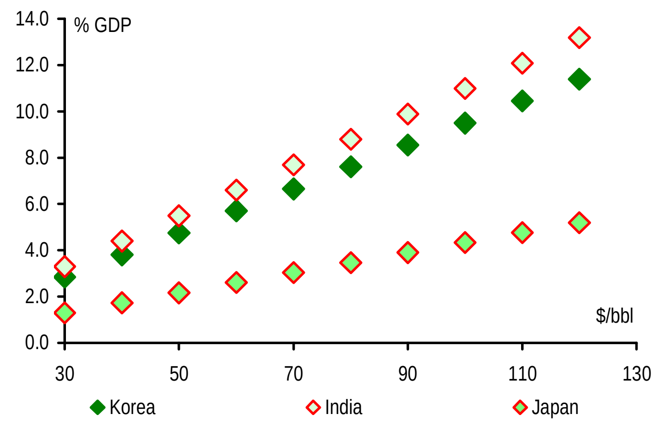
Turn back the pages of history to the early 1970s and one finds the same worries hanging over other Asian economies. Will high oil prices derail Japan's growth? The elderly member of the Pac-rim group, Japan, has now left this debate as its pace of industrialization has dropped. Chart 7 plots oil consumption per capita for Japan, Korea, Thailand, India & China. The fitted curve describes a clear 'S' shape where the intensity of use appears to reach a maximum somewhere between $2-10,000 per capita GDP for this group. There are variations in intensity based on transport and electricity generation policy decisions[5]. However, if India at least partly conforms to this Asian norm then we should expect its oil intensity to rise almost exponentially, retracing the footsteps of industrialized Asia. One would not expect Indian oil consumption to be responsive to higher global oil prices – whatever the cause in global price rises, people will pay the price.

Chart 8: Oil consumption as % GDP



Source: CEIC, BP Statistical Review of World Energy 2007

Chart 9: Oil consumption sensitivity



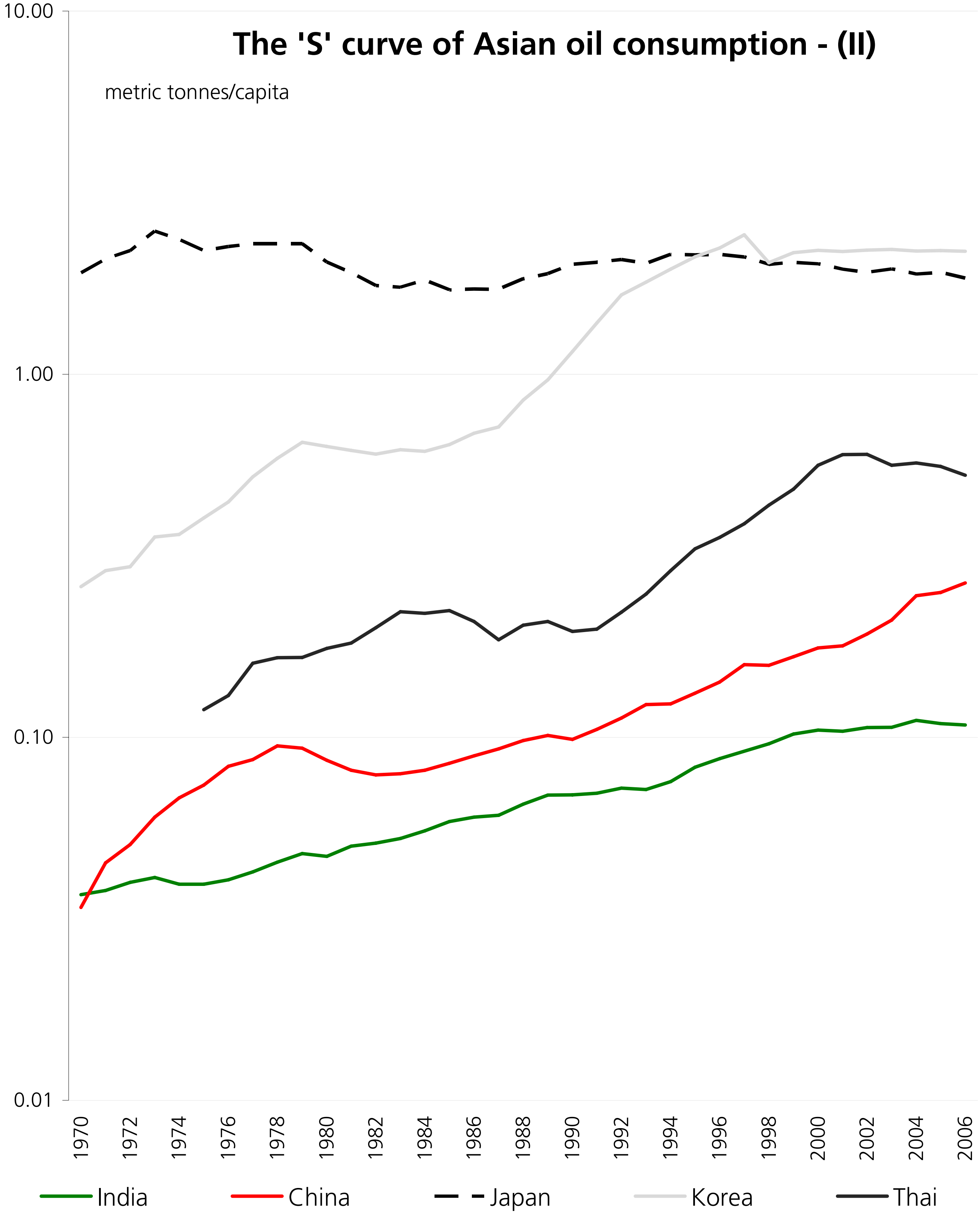
Source: CEIC, BP Statistical Review of World Energy 2007

India at point of maximum burden

Although we doubt oil price spikes alone can bring a halt to industrial development, the stage of development affects the burden. Chart 8 shows how Asian economies at different stages of industrial development carry a different burden. Back in the 1970s Korea led the way, Thailand followed and India grew relatively slowly. Although all suffered from higher oil costs which squeezed out some private sector growth there was a ranking according to the stage of development. Korea was hit hardest. Today by contrast Thailand and India are carrying a load similar to Korea 30yrs earlier. Meanwhile Korea (along with Japan and other 'early-developers' see a lower hit from oil (also chart 9). Chart 10 shows this through time. India while still at the low end of the 'S' curve has already reached the stage where its oil consumption will escalate disproportionately rapidly over the next few years.

[5] Over the next decade, a major assumption in the degree of intensity is that oil remains the transport fuel of choice. Another important assumption is the mix of fuels used for electricity generation.

Chart 10: "S" curve (II)



Source: CEIC, BP Statistical Review of World Energy 2007

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