# THE MONSTER IN THE CLOSET? THE OIL PRICE SHOCK AND THE SOUTH EAST ASIAN ECONOMY

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### 1. Introduction

One of the biggest outcomes of globalization is that local economies are becoming much exposed more developments in other parts of the world economy. This is particularly the case for the economies of South East Asia, which rely heavily on both exports and foreign investment to drive local growth. Over the last four years one of the most significant negative developments in the world economy has been the surge in global oil prices. History suggests that South East Asia is extremely vulnerable to high oil prices. Yet, this region has resilient and remained indeed experiencing some of its strongest economic conditions for decades.

This paper will examine recent and prospective developments in the global

oil price and will then attempt to explain why South East Asia has been able to withstand the current oil price shock so well. The serious risks facing South East Asia, should the current oil price rise be sustained, will then be outlined and some policy recommendations will be developed for avoiding this potential 'monster in the closet'.

### 2. The outlook for oil prices

Today, the crude oil prices<sup>(1)</sup> is hovering around a record high of around US\$78/barrel (EIA, 2006). Since most recently troughing at just under US\$20/barrel at the beginning of 2002, world crude oil prices have increased by a phenomenal 260%. As chart 1 illustrates, this is both the biggest and most sustained rise in (nominal) oil prices that the post-war world has ever seen<sup>(2)</sup>.

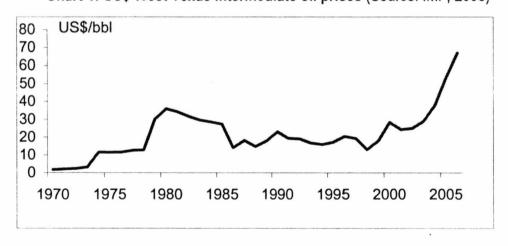


Chart 1: US\$ West Texas Intermediate oil prices (Source: IMF, 2006)

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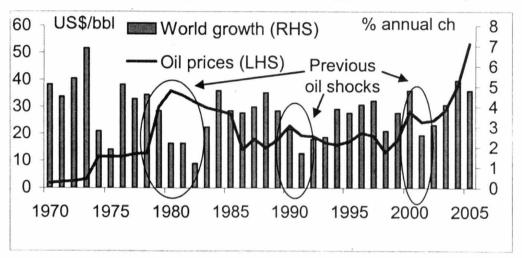
<sup>(1)</sup> West Texas Intermediate crude oil spot price

<sup>(2)</sup> It is the sharpest price rise in US\$ amount, not in percentage terms.

Today's unprecedented rise in global crude oil price has been primarily driven by strong increases in global oil demand. The strong rise in global demand for oil itself is an outcome of strong synchronized global growth. The global economy is currently experiencing its strongest performance in over two decades, with growth sitting well above 4% per annum

for the last three years (Chart 2). This upturn has been driven primarily by strong growth in the United States and China, but all of the world's major regions are also performing well with growth at above trend rates across large parts of Asia, South America and Europe.





A depletion of spare oil production capacity amongst the world's suppliers has also helped to keep oil prices high. While proven oil reserves remain high<sup>(3)</sup>, there appears little scope for significant increases in global oil production in the short-term. Mature oil fields amongst OPEC and non-OPEC nations are leading to a natural slowdown in oil extraction but to date there has been little new investment in either finding or developing new oil fields. Instead of undertaking large amounts of new investment. companies are instead either returning their profits to shareholders or, in the case of national oil companies, having their profits used by governments to repay debt and/or undertake spending. Moreover, there has been little new investment in expanding refinery capacity in recent years. This is creating a considerable restriction on the world's ability to respond to the recent significant increase in the demand for refined petroleum products and has become another factor in keeping oil

<sup>(3)</sup> The latest estimates (IMF, 2005) suggest reserves are sufficient to meet world demand at current levels for at least 40 years. However this is likely an underestimate as it can easily be argued that technological improvements will in turn lead to increased discovery and access to oil reserves in the future.

prices elevated (Eslake, 2005; IMF, 2005).

Finally, geopolitical tensions are also adding a 'risk premium' to the price of oil. The recent missile tests by North Korea and then tensions between Israel and Lebanon both saw oil prices spike to new highs. With little hope that the world's geopolitical tensions will be resolved quickly, the risk premium that is pushing up the price of oil is likely to be retained for some time.

The three main determinants of oil prices - global growth, global oil (and refined petroleum) supply geopolitical tensions - all look like they will continue to work to keep oil prices high for some time. There is no 'quickfix' to either the current shortfalls in oil geopolitical tensions. production or Furthermore, the outlook for the global economy remains strong. Indeed, the IMF has recently upgraded its outlook and now expects world output to grow by an above-trend rate of 4.9% in 2006, slowing only slightly to 4.7% in 2007 (IMF, 2006b).

The outlook for oil prices, at least in the short term, is thus fairly stark. The IMF is currently predicting that oil prices will average US\$61.25 in 2006 and US\$63 in 2007. The consensus group of private sector economic forecasters is more pessimistic. predicting that oil prices will fall to US\$68.60 by the end of October 2006 and US\$65 by the end of July 2007 (Consensus, 2006).

# 3. The oil price shock and South East Asia

### 3.1. A theoretical perspective

With a high dependence on oil imports, South East Asia is one of the most vulnerable regions in the world to oil price shocks. Indonesia, Malaysia, Vietnam and Thailand are the only notable crude oil producers in the South East Asian region and of these four only Indonesia, Malaysia and Vietnam produce enough oil to match their domestic needs. Refinery constraints in Vietnam however mean that this nation has to export crude oil products and reimport refined petroleum products, while Indonesia also now relies on imported crude products to meet domestic demand. This makes Malaysia the only true net oil exporter in the region. All other nations in the South East Asian region are net oil importers. proportion of local demand that is met by oil imports varies within the region, ranging from less than 5% in Indonesia to up to 100% in Singapore and Hong Kong.

Consistent with its status as one of the world's fastest growing economic regions, South East Asia is also one of the world's fastest growing consumers of oil. As with economic growth, over the last two decades annual growth in oil consumption in South East Asia has consistently outstripped the global average. This rapid growth in demand is further increasing the region's reliance on oil imports and creating further vulnerability to oil price shocks.

An oil price shock impacts an economy through a variety of internal and external channels. On the internal front, a sharp rise in oil prices leads to a loss of output and an increase in inflation. Oil tends to be an inelastic good, such that the demand for this commodity cannot be easily changed in response to variations in price. As a result, higher oil prices cause an increase in the fixed costs of production inputs for businesses and households. These higher input costs discretionary income and this in turn lowers discretionary expenditure by both businesses and households. This erodes the rate of growth in national output, or GDP, and eventually can lead to a rise in unemployment.

The inflationary effect of an oil price shock also, eventually, tends to erode GDP growth. While small rises in oil prices can usually be absorbed in the profits margins  $\mathbf{of}$ producers and importers, large. sustained price increases must generally be passed through as higher prices for final goods and services. This boost to inflation erodes the purchasing power households and businesses, thus cutting into spending and ultimately GDP growth. Moreover, any increase in wages that attempts to offset the rise in oil prices will only add further fuel to inflation, more than likely prompting a policy-response of higher interest rates

that will simply cut further into spending and growth<sup>(4)</sup>.

The extent to which these 'internal' effects from higher oil prices will impact an economy depends on how the placed to economy is handle the 'external' effects from this shock. The most immediate external impact from higher oil prices is a transfer of income oil-importing to oil-exporting nations. A higher oil price creates higher income for the oil sellers, in this case oil exporters, and erodes income amongst the oil buyers, in this case the oil importers. This impact is transmitted through a nation's terms of trade, or ratio of export to import prices. boost to income in oil-exporting nations provides an important offset to the negative 'internal' impacts from higher oil prices. For oil-importing nations however, the reduction in real national income from a lower terms of trade simply exacerbates the negative internal effects from an oil price shock. In this instance, we would expect a transfer of income from the South East Asian region to oil-exporting regions, such as the Middle East and former Soviet There would also be a net Union.

<sup>(4)</sup> Experience from the early 1980s, when higher oil prices provoked a wage-cost spiral that drove many economies into recession has made today's policy-makers extremely cautious about the 'second-round' impact of higher commodity prices. Indeed, the IMF has advised that monetary policy should not accommodate the second round impacts of higher oil prices but instead should seek to pre-empt possible inflationary pressures (IMF, 2000). It is no surprise then that official interest rates in all of the major economies have been increased during the current oil price shock.

transfer of income within South East Asia, towards Malaysia, the only net oil exporter, from the rest of the region.

There are various macroeconomic models that have attempted to quantify these 'theoretical' effects of higher oil prices on economic growth and inflation. The Asian Development Bank (ADB) for example has estimated that a US\$10 oil price rise sustained over two years will subtract a cumulative 0.8 percentage points from Asian<sup>(5)</sup> GDP growth and add 1.1% to inflation (Park, 2004). These consistent results are with macroeconomic models with the IMF for estimating example also that sustained US\$10 rise in oil prices would subtract <sup>3</sup>/<sub>4</sub> percentage points from Asian growth (IMF, 2006c). The ADB model estimates that Thailand, the Philippines and Singapore would suffer the biggest cuts to economic growth, followed by Hong Kong and Malaysia. This model estimates that the Indonesian economy would actually receive a small boost as this nation's gasoline exports more than compensates for its oil imports<sup>(6)</sup> (Table 1). Unfortunately, Vietnam was not included in this model.

Table 1: Impact of a US\$10 rise in oil prices (Source: ADB, 2004)

	GDP	Inflation
Asia ex-Japan	-0.8	1.1
Hong Kong	-0.6	0.3
Indonesia	+0.1	1.3
Malaysia	-0.9	1.4
Philippines	-1.9	1.4
Singapore	-1.7	1.3
Thailand	-2.2	1.5

### 3.2. The empirical evidence

With oil prices having increased by around US\$50 in the last four years, an extrapolation of the 'rules of thumb' derived from the ADB's and IMF's models suggest the impact on South East Asia should be severe. A priori, this price shock should have been enough to tip at least the economies of Thailand, the Philippines and Singapore into recession with inflation rising sharply across the entire region. The actual impact from the current oil price shock however has, to date at least, been much more benign then expected. Economic growth in the region has slowed but was still slightly above trend in 2005. Moreover, despite an expected continued rise in oil prices, the outlook for South East Asia is firm with economic growth expected to remain broadly on trend over the next few years (Chart 3) (IMF, 2006).

<sup>(5)</sup> Asia includes China, Hong Kong, India, Indonesia, Korea, Malaysia, Philippines, Singapore, Taipei and Thailand

<sup>(6)</sup> Since this model was estimated Indonesia has become a net oil importer it likely overestimates the net positive impact on the Indonesian economy from higher oil prices.

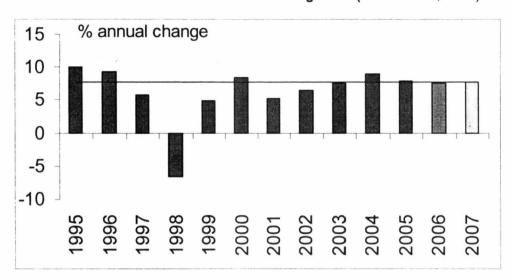


Chart 3: South East Asian economic growth (Source: IMF, 2006)

Note: South East Asia includes Hong Kong, Indonesia, Malaysia, the Philippines, Singapore, Thailand and Vietnam

The impact of higher oil prices on inflation has been more significant with prices accelerating at a notably sharper pace in South East Asia compared with the world average. However, this largely reflects a double-digit inflation rate in Indonesia (>15% at the time of writing) due to a recent sharp reduction in subsidies government fuel (Economics@ANZ, 2005). Inflation across the rest of the region, while also accelerating sharply in the Philippines and Vietnam, is nevertheless not at the rates that could a priori be expected by the current oil price shock.

## 3.3. How has South East Asia beaten the oil price shock?

This is truly a remarkable performance. Oil prices have surged to record levels and South East Asia, one of the most vulnerable regions in the world to changes in oil prices, maintains strong growth and keeps inflation relatively

well in check. There appear to be a number of reasons behind this impressive achievement.

One important development that has allowed both South East Asia and the rest of the world to ride out the current oil price shock better than previous shocks is the fact that while the nominal world price of oil is at record levels, oil prices in real terms, that is inflationadjusted terms, are still well below record levels (IMF, 2005). Hence, the rise in oil prices has not eroded real wages or real incomes and thus, real spending and real GDP growth, as much as in previous shocks.

Turning to regional specifics and it appears that shrewd decisions by oil importers have been one important factor that has helped to mitigate the pass through of higher oil prices to the economies of South East Asia. Rather than exposing themselves to future market price increases, many importers in the South East Asian region have been able to secure significant amounts of oil imports on long-term contracts that have locked in agreed price increases. Moreover, many importers have hedged against higher future oil costs, by using derivative products for example (IMF, These practices limit 2006c). exposure of oil importers to swings in market oil prices and thus also limit the extent to which the rise in global oil prices passes through to final import prices in the South East Asian region.

An appreciation of South East Asian currencies has also helped to counter the impact of higher oil prices on the region's import bill. Exchange rate regimes across South East Asia remain tightly managed by national central banks. While these central banks normally favor a relatively low exchange rate in order to maintain exportpolicy-makers have competitiveness, gradual appreciation allowed a national currencies, particularly over the last year.

The combination of forward contracting, hedging and currency appreciation has helped to soften the impact of the global oil price shock in national currency terms. Overall, it has been estimated that since 2002 Asian oil import prices have increased by only around half of the rise in world oil prices (IMF, 2006c).

Government fuel subsidies are another important factor that has, thus far, helped to insulate the South East

Asian region from higher oil prices. Retail fuel prices are administered by the government in Indonesia, Malaysia, Thailand and Vietnam. administered prices can also be called government-subsidized prices as the retail price is almost always set below the world market price. The risks of this policy to the government budget and long-run economic performance severe, and indeed has already prompted a reduction in subsidies across all three Nevertheless, the short-term objective of this policy - to insulate households and ultimately economic activity from the oil price shock has been relatively successful with domestic retail fuel prices in South East Asia rising by much less than the global market price.

Another important factor that has provided some offset to households and businesses in the South East Asian region from higher fuel prices is the fact that prices for other important goods and services have been falling. The continuing pressures of globalization and low-cost production in China and nations have other emerging put considerable downward pressure on the prices of manufacturing goods. result, the loss of purchasing power from higher oil prices is being matched by an increase in purchasing power for other goods and services. This is both keeping a lid on inflation and helping to preserve national income and output.

The strong performance of the rest of the world's economy has also been vital. We have already seen that global growth is running at the strongest pace in over two decades. This is an ideal external environment for South East Asia for these economies continue disproportionately on exports to fuel economic growth. Hence, the strong global conditions, by creating strong demand for South East Asian exports, are providing a huge boost to this region's economic and national income growth. The rise in national income in turn is proving to be one of the most effective means of countering the impact, to income and spending, of higher oil prices.

### 4. The risks ahead

South East Asia's resilience against the current oil price shock has to date been outstanding. However, the question we must now consider is whether the current good times can go on. With oil prices set to remain at elevated levels and indeed possibly rise over the coming period, there are a number of significant risks threatening South East Asia's current happy times.

Perhaps the biggest risk facing South East Asia relates to the global imbalances that have emerged and worsened in recent years. Record low interest rates have supported strong household consumption, fueling strong housing and asset price increases as well as a substantial deterioration in the current accounts of major many economies. These imbalances have become most notable, and of most concern, in the United States (US), where asset prices, household debt and the current account deficit are all at record levels (IMF, 2006). There is growing concern that a continued climb in oil prices could be the tipping point for some of these imbalances in the world's biggest economy, leading to severe disruption.

On the domestic side, there is concern that the inflationary pressures created from sustained higher oil prices could force a bigger interest rate rise in United States than currently expected. With American households grappling with record debt levels, a steep interest rate rise could cause a major disruption to domestic spending. American consumers are currently the largest purchases of South East Asian exports, such that any shock to this group will have significant negative consequences for economic growth in the South East Asian region.

On the external side, there is also growing concern about the sustainability of the record US current account deficit. While strong domestic spending has been driving this deficit, the rise in oil prices has become an important contributor. Indeed, it is estimated that higher oil prices have accounted for around half of the deterioration in the US current account deficit in the last two years (IMF, 2006b). As oil prices remain at elevated levels and domestic consumption of oil continues to grow, we could reasonably expect the US deficit to worsen further.

This type of scenario raises serious concerns about the viability of funding

this massive deficit. To date, this deficit has largely been funded by the record savings of the emerging Asian region, particularly South East Asia, which has been running large current account surpluses due to favorable net export positions and high levels of domestic savings. However, record high oil prices are now eroding the current account surpluses of the Asian region, in turn reducing their ability to fund the US current account deficit. This decrease in Asia's current account surplus is being offset by a rise in the surpluses of the world's oil exporting nations (IMF, 2006b). However, there are serious concerns about whether these nations. most of which are in the Middle East, will be prepared to invest their surpluses in the US as willingly as Asia (Eslake, 2006). The future of the funding of the US current account deficit therefore is starting to come into some doubt. Should the US be unable to meet their funding needs willingly from the oil exporting nations. US interest rates will most likely be forced up, in order to make investment more appealing and a severe correction in US domestic spending would be on the cards. Once again, this would be an extremely hostile environment for South East Asian exports and ultimately economic growth.

As well as these 'external' risks, continued high oil prices also create some significant 'domestic' risks to the South East Asian economy. Continued rises in oil prices will create upside risk for domestic interest rates and will also

dampen domestic spending, by lowering discretionary income and eroding business and consumer confidence.

Further deterioration in government budget positions, as a result of the increased costs of fuel subsidy programs, also poses a risk to the real economy. An increased budget deficit directly reduces funds available to the government for spending on other areas, such as social or infrastructure support programs spending. It also leads to an increased risk perception of the country by global investors. This increases the cost of capital, or the interest rate, that the nation can access on global markets as foreign investors become more reluctant to invest in the nation. This can potentially lead to not only lower levels of investment but also increases the nation's vulnerability to other adverse financial market economic ordevelopments. While the region has learnt many lessons from the Asian financial crisis, and thus has greater 'protection' in the form of higher levels of international reserves and stronger institutions, such financial market and disruption investment nevertheless still be detrimental to growth.

# 5. Conclusion and Recommendations

The world economy, and particularly the South East Asian region has spent the last few years surprising onlookers with its resilience and there are many reasons to comfortably expect that this resilience will continue into the future, even as oil prices rise to new records. Nevertheless, an understanding of the risks, particularly the downside risks currently facing this region imperative to the setting ofgood economic policy. The risks currently facing South East Asia from record oil prices raise some important policy objectives for the region going ahead.

Perhaps the most important policy objective that this analysis has emphasized is the need for the South East Asian economy to continue to reduce its vulnerability to external developments by rebalancing growth. While an export-oriented economy is serving South East Asia well at present, we have seen that it also leaves the region extremely vulnerable to swings in global growth. Investment consumption must become the drivers of this regional economy if it is to become more immune to external developments. Policies to promote improvements in governance, financial system development, legal and institutional frameworks, infrastructure development and equitable income distribution will all help drive this desired rebalancing of growth.

Policy-makers must also not use current global risks as an excuse to back away from reforming and liberalizing currency regimes and domestic financial market arrangements. Increased flexibility in currency arrangements and increased flexibility and depth in interest rate markets, while perhaps increasing the short-term exposure of

the region to financial market developments, will also, by exposing rather than hiding imbalances, increase the region's ability to deal with these developments. This will certainly reduce the likelihood of governments and policymakers being forced to do too much too late as happened in the Asian financial crisis.

Governments must also be mindful of the risk to their budget positions from continued fuel subsidization programs. While these programs are doing a good short-term job at insulating businesses and households from the full effects of higher oil prices, increasing accumulation means that this policy is now increasingly coming at the cost of future expenditure. The 'shock' to the economy from sudden forced changes in these subsidy rates can also have disruptive effects on the economy, as we've seen from the big jump in inflation in Indonesia after subsidies there were cut. Governments must not use oil prices as an excuse for fiscal irresponsibility but instead should use them as a catalyst to continue to peruse fistal reform.

South East Asia must, finally, view current developments as an opportunity to reduce its reliance on oil imports. Firstly, this can be pursued through ensuring that domestic fuel supply is more secure. Vietnam, Indonesia and Malaysia for example should continue to both expand refinery capacity as well as undertake exploration and investment in new fields and production, with of course the appropriate environment controls

and respect and sensitivity to local community rights and concerns. Perhaps more importantly however, South East Asia should look at current oil price developments as an opportunity to become less reliant on oil through increased energy efficiency and increased investment, promotion and use of alternative energy sources.

In conclusion, the threat to South East Asia from higher oil prices is far from over. Indeed, there are some significant and potentially severe risks lying on the road ahead. However, with economic growth and inflation in the region still on track and with local governments showing a commitment to continued economic reform and sound macroeconomic management, the South East Asian region is better placed than at any other time to face this 'monster in the closet'.

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## QUÁI VẬT GIẤU MẶT? CÚ SỐC VỀ GIÁ DẦU VÀ NỀN KINH TẾ ĐÔNG NAM Á

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Giá dầu thế giới hiện nay đã đạt đến mức cao kỷ lục mới và đang được sự đoán là sẽ ở mức cao hơn trong giai đoạn sau này. Đến nay, tác động của giá dầu cao hơn đối với vùng Đông Nam Á đã được kiềm chế tương đối tốt. Tuy nhiên việc giá dầu tiếp tục lên cao làm nảy sinh nhiều rủi ro cho giai đoạn sắp tới. Với tư cách là nhà nhập khẩu dầu ròng, vùng Đông Nam Á dự đoán có thể sẽ phải gánh chịu sự suy giảm về tăng trưởng kinh tế và tăng lạm phát. Hơn nữa, giá dầu cao kéo dài có thể gây ra sự suy yếu trong cán cân vãng lai hiện nay và cán cân ngân sách của chính phủ các nền kinh tế Đông Nam Á nói chung. Các rủi ro này cũng đặt ra một số mục tiêu chính sách quan trọng cho Vùng. Những vấn đề này tính đến sự cần thiết đối với kinh tế Đông Nam Á phải tiếp tục giảm sự tổn thương của nó từ sự phát triển bên ngoài bằng cách cân bằng lại sự tăng trưởng xa rời xuất khẩu và hướng về phía nhu cầu nội địa. Tiếp tục theo đuổi chính sách linh hoạt thị trường tài chính cùng với sự chịu trách nhiệm về tài khoá trong thời gian sắp tới cũng sẽ giữa Vùng Đông Nam Á có thể đối phó được với tình hình giá dầu cao. Cuối cùng Vùng Đông Nam Á phải coi sự phát triển hiện nay như một cơ hội để giảm sự lệ thuộc của nó vào dầu, thông qua việc tăng hiệu quả năng lượng và phát triển các nguồn năng lượng thay thế.