# Chapter 6:

#### Conclusion

### 6.1 Introduction

Recalling the primary objective to examine the effect of the oil price and gold price shocks on the economy of Malaysia compared to the US. The coefficients are calculated using annual data from 1970 to 2002. Section 6.2 gives a summary of the E-views results in Chapter 5. Next, section 6.3 discusses factors that can cause commodity price shocks, drawing evidence from the past. Section 6.4 presents the impact of high oil prices on the economy. Lastly, section 6.5 gives a briefing on the limitations of the study.

#### **6.2 In Perspective**

In the initial OLS test, we found that the oil prices and gold prices have significant relationship with the GDP in Malaysia and the US. In both cases, gold prices are positively related to the GDP while the oil prices are negatively related to the GDP. The VAR test; using two key devices through which the dynamic structure of the model is characterized; failed to show any significant impact of oil price shocks and gold price shocks on the GDP in both country. The results show that past GDP innovations do not contain any significant information about the variation of either gold prices or oil prices. Hence, we can conclude that gold prices and oil prices do not contribute much in explaining the growth rate of the countries, Malaysia and the US.

On a deeper scrutiny, the impulse response function shows that the response of oil price on one standard deviation innovation dies out more quickly compared to the response of gold price and GDP in Malaysia and the US. When comparing between the two countries, the response of an oil price shock is more long lasting in the US as oppose to Malaysia. The same

result is observed on the response of the gold prices. In addition, the impact of oil price shock is more important compared to a gold price shock, as seen in the variance decomposition result. Granger causality test also shows uni-directional causality from gold price and oil price to GDP in both Malaysia and the US.

## 6.3 Factors Affecting Commodity Prices

There are quite a number of factors affecting commodity prices. So far, the most prominent factor is the supply and demand relationship. For instance, in the crude oil market, OPEC has the power to control the supply of crude oil to the word, being the largest producer (as a group of countries). Demands for oil are also dependent of factors such as weather, the inventory situation and so on. Needless to say, the supply and demand for oil are very volatile.

The supply and demand relationship in turn involves politics and policies. For example, strikes in Venezuela, one of the top producer and exporter of crude oil, have often disrupted supply of oil. The US-Iraq tension in 2003 has also exacerbated the rise of oil prices due to worries of supply disruption.

Besides, speculative and psychological elements may also affect commodity prices. The speculative activities and expectations of an increase in gold prices due to the fall of the dollar have led to the spectacular rise in gold prices recently. As the dollar remains low, gold prices have sustained at high levels.

## 6.4 The Impact of High Oil Prices on the Economy

Oil prices remain a key determinant of global economic performance. Higher oil prices have contributed to the recent downturn in the global economy. Together with declining business and consumer confidence, the recent increase in oil prices threatens to stall the expected economic recovery in 2003 and 2004.

Generally, higher oil prices affect the global economy through a number of channels. Firstly, an increase in oil prices leads to a transfer of income from the importing to the exporting country through a shift in the terms of trade. For net oil-importing countries, an increase in oil prices directly reduces real national income because spending on oil rises and there is less national income available to spend on other goods. For net oil-exporting countries, such as Malaysia, a price increase directly increases real national income through higher export earnings.

Secondly, higher oil prices will translate into a rise in cost of production of goods and services. Higher energy prices will put pressure on profit margins. The degree of impact would depend on the relative share of oil in production. The vulnerability of oil-importing countries to higher oil prices varies. Recent study by Mussa (2000) for the International Monetary Fund has suggested that a sustained increase of \$10 in the crude oil price would reduce economic growth in the OECD as a whole up to 0.5%. The impact on growth in developing countries is thought to be significantly higher, because energy-intensive manufacturing generally accounts for a larger share of their GDP and energy is used less efficiently. On average, oil-importing developing countries use more than twice as much oil to produce a unit of economic output as do developed countries. Other studies suggest that a

sustained in increase of \$10 in the crude oil price would reduce economic growth by around 0.5% in the industrialised countries and by 0.75% in the developing countries.

Thirdly, high oil prices have impact on the price level or inflation rate of a country This is known as the adjustment effects, which result from real wage, price and structural rigidities in the economy, add to the direct income effect of an oil-price increase. Higher oil prices lead to inflation, increased input costs, reduced demand for goods and services other than oil and lower investment in net oil-importing countries. Tax revenues fall and, due to rigidities in government expenditure, the budget deficit increases driving interest rates up. Because of resistance to real declines in wages, an oil price increase typically leads to upward pressure on nominal wage levels. Wage pressures together with reduced demand tend to lead to higher unemployment. These effects are greater the more sudden the price increase and are magnified by the impact of higher oil prices on consumer and business confidence.

For net oil-importing countries, an increase in oil prices directly reduces real national income, because spending on a constant amount of oil rises relative to income and there is less national income available to spend on other goods. The magnitude of the direct effect of a given price increase depends on the share of the cost of oil in national income, the degree of dependence on imported oil and the ability of end-users to reduce their consumption and switch away from oil. It also depends on the extent to which natural gas prices rise in response to an oil-price hike and the gas-intensity of the economy. Naturally, the bigger the oil-price increase and the longer higher prices are sustained, the bigger the macroeconomic impact.

For net oil-exporting countries, a price increase directly increases real national income through higher export earnings, though part of this gain would be later offset by losses from lower demand for exports generally due to the economic recession suffered by trading partners.

Lastly, there are also direct and indirect impacts on financial markets. The anticipated changes in economic activity, corporate earnings, inflation and monetary policy following oil price increases will effect equity and bond valuations and currency exchange rates.

In conclusion, for as long as oil prices remain high, global economic recovery will be slow. Nevertheless, the fragility of the global economy is not only attributed to high oil prices but also due to other macroeconomic and structural factors. High oil prices, are contributing to low consumer and business confidence. In tackling these problems, governments could improve the long-run resilience of national economies to strain from sustained periods of high oil prices.

#### 6.5 Limitations to the model

Nonetheless, there are three shortcomings to the model. Firstly, more data or observations, instead of the 31 observations as used in this research, would have given more convincing results. This would entail the usage of quarterly data or monthly data.

Secondly, the model may be too simple with only three series being used, being the GDP, oil prices and gold prices. Other variables that can be used to produce a better model includes oil revenues, consumer price index, (CPI) and the value of imports, money supply M3, government current expenditure and government development expenditure.

Thirdly is the shortcoming of the VAR approach itself has as it lacks theoretical subsistence (Cooly and LeRoy 1985 and Leamer 1985). The major criticism of the VAR approach is that the innovations cannot be treated as exogenous policy variables (i.e., uncorrelated), unless a set of innovations is found which is contemporaneously uncorrelated and has a unique relation with the original set of contemporaneously correlated innovations. In response to this criticism, Blanchard and Watson (1986) and Bernanke (1986) developed procedures, called the Structural Vector Autoregression (SVAR) approach, which combine the features of the traditional structural modeling with those of the VAR methodology. This is an improvement in that it takes advantage of economic theory in the estimation of the IRFs and FEVDs and permits the definition of an explicit economic structure.

However, in this paper we shall make-do with the limitations and seek to fulfill the main objective of this paper, that is to gauge the effect of the world oil price and gold price shocks on the economic growth of Malaysia.