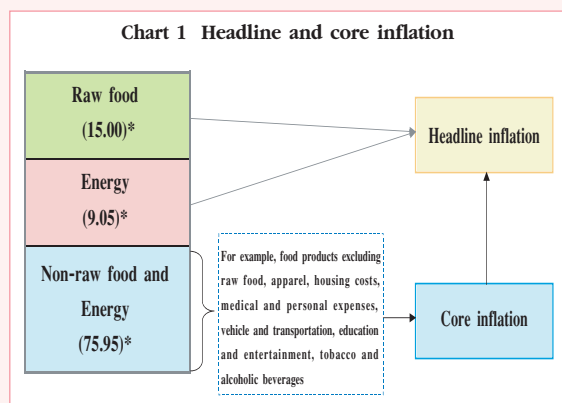


The dynamics of raw food and energy prices and their implications for monetary policy

Thailand adopted an inflation targeting regime in May 2000, with two main objectives; (1) to safeguard the cost of living of the public, and (2) to anchor the public's inflation expectations. At the time, core inflation was chosen as the target. It was computed



Note: * Weight in base year (2002) in the Consumer Price Index basket (Per cent)

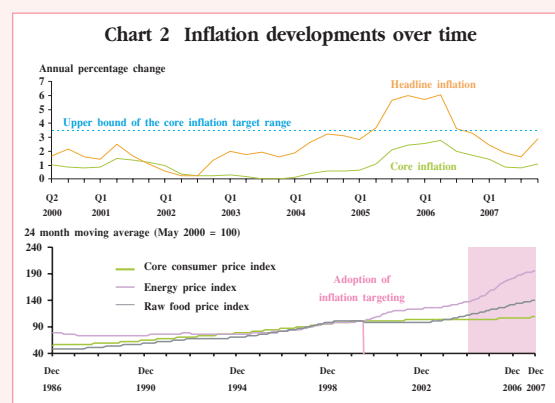
moved in line with one another and shared a similar mean. Therefore, it could be ascertained that monetary policy formulation under core inflation targeting would lead to long-term price stability and safeguard the cost of living normally measured by headline inflation.

Nevertheless, it was noteworthy that, since then, even though core and headline inflation continued to move in the same direction, their statistical relationship changed significantly. To be exact, core inflation remained consistently lower than headline inflation, with no signs of convergence in the near term (Chart 2: upper part and Table 1). This phenomenon was mainly caused by changes in the dynamics of raw food and energy prices compared to their historical records, and also those of other items, especially in the last 3-4 years (Chart 2: lower part).

1. The dynamics of raw food prices

In the last 3-4 years, the trend of raw food prices in Thailand differed significantly from the past, but was in line with the cycle of world commodity prices which accelerated persistently. This was partly a result of the rapid growth of the Chinese and Indian economies, which led to improved standards of living for the populations in both countries, constituting roughly one-third of the global population. As such, world demand for food rose continuously. Meanwhile, global capacity to increase food production remained limited, reflected in the continuous decline in the stock-to-use ratio of many agricultural products (Chart 3). Moreover, the persistent surge in energy prices led to higher demand for agricultural products

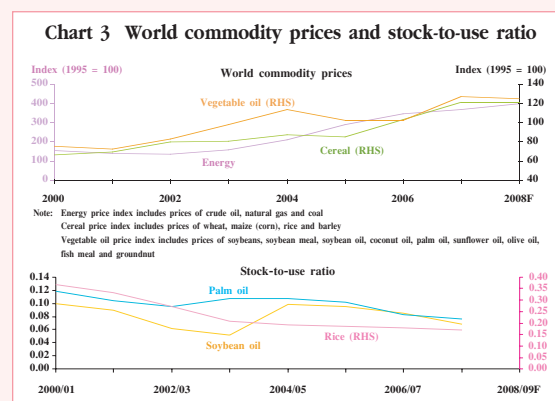
by removing the prices of raw food and energy products, known to be sensitive to temporary supply shocks, from the consumer price basket (Chart 1). By doing so, the target would better reflect the underlying inflation trend and could be more effectively controlled by monetary policy. Importantly, core inflation had a close statistical relationship with headline inflation, namely they



Source: Ministry of Commerce and calculations by Bank of Thailand

Table 1 Headline and core inflation

Per cent	1986:1 - 2000:1		2000:2 - 2007:4	
	CPI	CORE	CPI	CORE
Average (mean)	4.66	4.59	2.52	1.01
Volatility (standard deviation)	2.17	1.68	1.56	0.77



Source: World Economic Outlook, United States Department of Agriculture

for use in the production of bio-fuels, particularly oil palms, soybeans, sugarcane, and maize. This, in turn, led to competition for agricultural supplies for consumption and for production of bio-fuels. As a result, food prices rose more significantly than those of other goods, such as manufactured goods, as well as services (energy products excluded) in recent periods, causing a strong upward trend in raw food prices in Thailand.

2. The dynamics of energy prices

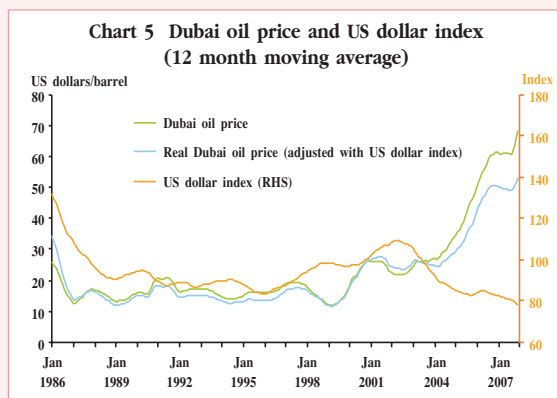
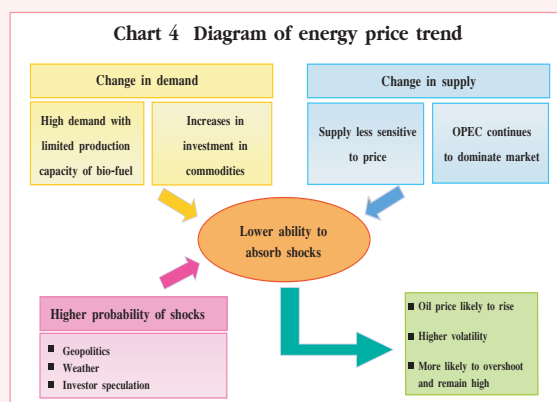
Many factors were responsible for the change in the demand and supply structures of energy - particularly oil - in recent periods. Important factors included the rapid growth in demand for energy from China and India, as well as increased investor interest in commodities. Both factors played a significant role in accelerating the growth of oil demand. At the same time, oil supply became more inelastic to price changes as a result of limitations in finding new reserves, as well as the likelihood that oil production would fall mainly in the hands of national oil companies rather than multinational corporations - as was the case in the past. Moreover, despite rapid growth in the production of bio-fuels, the share of these energy substitutes in overall energy use remained small.

Given the high growth in demand and inelastic supply, OPEC was quite successful in persistently keeping oil prices at a high level, reflected by the fact that every time production quotas were reduced, oil prices tended to accelerate quickly and remained high for a prolonged period. In addition, even though the depreciation of the US dollar contributed to the increase in oil prices, when adjusted by the US dollar index^{1/}, the real price of oil still showed a significant upward trend. These factors, combined with other risks to production that became more probable and frequent, including geopolitical risks, worsening climate changes resulting from more severe environmental problems, and speculation by investors all resulted in more frequent and persistent increases in the price of oil in a way that was different from past dynamics (Charts 4 and 5).

3. Implications for monetary policy

As such, the risks that raw food and energy prices would increase simultaneously and at rates higher than those of other prices were quite high. In addition, the acceleration in raw food and energy prices was likely to continue for some time, in line with the business cycles of China and India, which still showed no signs of moderating in the near future. Moreover, other risks such as geopolitical and environmental risks remained. Therefore, it was likely that average headline inflation would continue to remain above that of core inflation.

Under the outlook that raw food and energy prices would become more important in determining the dynamics of future inflation, the MPC deemed that the risk factors that would affect the dynamics of prices in both commodities should be monitored and evaluated even more closely and in greater depth, particularly developments that could lead to a persistent pass-through and affect the real cost of living. This would allow monetary policy to appropriately respond to such pressures.



Source: Bloomberg

^{1/} The US dollar index is an index that compares the value of the US dollar against the values of its trading partners' currencies. When the oil price in US dollar terms is adjusted with this index, the effect of changes in the value of the US dollar on oil prices is removed. Thus, the result indicates real changes in oil prices.