


## *5. Economic Growth and Inflation Outlook*

Although contracting on a year-on-year basis as the MPC had previously expected, the Thai economy in 2009 Q3, driven by exports, consumption, and investment, grew from the previous quarter. This forward momentum was well maintained throughout 2009 Q4 supported by public consumption and exports, which worked to shore up private consumption and private investment. Such a pickup in economic activity was also reflected in improvements in consumer confidence and business sentiment indices. Meanwhile, imports accelerated following a rebound in exports and domestic demand. Overall economic activity was expanding in the last quarter of the year at a pace slightly stronger than expected, thereby bringing the growth rate for the entire year, albeit negative, close to the upper bound of the previous forecast range.

The MPC judges that the Thai economy will continue to expand in 2010 on the back of a sustained global recovery. Exports, private consumption, and private investment are expected to grow even though fiscal stimulus will moderate somewhat. The MPC expects the economy to carry momentum into 2011 because of rising private consumption, exports, and private investment – the last of which is conditional on the resumption of industrial projects in Map Ta Phut.

Inflation pressures are expected to rise going forward owing importantly to a firming in domestic demand and a rise in oil and commodity prices that is in line with the global recovery. However, an extension of government measures to alleviate the costs of living



to the end of 2010 Q1 works to lower readings on inflation this year from the forecasts given in the previous *Report*.

In what follows, economic projections for the next eight quarters, based on the Bank of Thailand macroeconomic model, forecast assumptions carefully reviewed by the MPC, and the MPC's off-model judgment, are presented in the form of fan charts. The fan charts reflect uncertainty associated with a range of events and are constructed conditioning on the assumption that the policy interest rate remains at the current level of 1.25 per cent per annum from 2010 Q1 to 2011 Q4. This policy rate assumption is consistent with the decisions in the MPC meetings on 2 December 2009 and on 13 January 2010 to keep the rate unchanged at 1.25 per cent per annum.

### *Forecast assumptions*

In forming economic and inflation forecasts for the next eight quarters, the MPC uses the most plausible baseline assumptions on various exogenous factors such as economic and financial conditions in foreign economies, world commodity prices, and government spending. These assumptions are summarized below.

#### **International economic and financial conditions**

Signs of recovery in major industrial and emerging market economies have become increasingly evident. Private consumption and industrial production improved in 2009 Q3 and appeared poised to continue into 2009 Q4. Such an expansion of economic activity

occurred earlier than previously anticipated. Consequently, the MPC revises up growth projections of trading partner economies over the entire forecast period.

The US economy contracted by 2.6 per cent year on year in 2009 Q3. Indicators for financial markets, real estate activity, and private consumption pointed to earlier and clearer signs of recovering than previously anticipated as a result of fiscal and monetary policy accommodation. Although labour market conditions improved faster than expected, the unemployment rate remains elevated and will likely take time before reverting to the long-term trend. The MPC thus revises up growth projection of the US economy over the entire projection period and judges that the economy will recover only gradually, starting from the first quarter of 2010, and expand at a pace below the long-term potential growth rate.

At the meeting on 16 December 2009, the Federal Open Market Committee (FOMC) kept the target range for the Fed funds rate of 0 to 0.25 per cent. The FOMC also decided to purchase as much Treasury securities, agency debt, and mortgage-backed securities as it previously announced. Nevertheless, the FOMC would gradually slow down the purchases of 1.25 trillion US dollars of mortgage-backed securities and 175 billion US dollars of agency debt.

Even though latest economic indicators showed clearer and faster improvements than previously assessed, there remain risks to economic growth. The MPC projects that the Fed will maintain the funds rate at 0-0.25 per cent until 2010 Q2 and will raise the policy rate to 0.25 per cent in 2010 Q3, and subsequently

*With the US economy showing clearer signs of recovering, the MPC revises up the growth projection of the US throughout the forecast period.*

*The MPC projects that the Fed will begin to tighten monetary policy gradually toward the end of 2010.*

increase it by 0.25 per cent in each quarter until reaching 1.5 per cent in 2011 Q4.

*The MPC revises up over the whole forecast period the growth projection for the Euro area.*

**The Euro area economy** contracted by 4.1 percent in 2009 Q3 year on year, shrinking less than the previous forecast. Together with latest economic indicators for exports, business sentiment, and consumer confidence that have improved noticeably, the MPC consequently revises up the growth projection of the Euro area over the forecast horizon. It is expected that growth will turn positive in 2010 Q1 on a year-on-year basis – faster than anticipated in the previous *Report*. Nevertheless, the recovery is likely to be only gradual owing to elevated unemployment as in the case of the US.

*The MPC revises up slightly the output growth projection for Japan throughout the forecast period.*

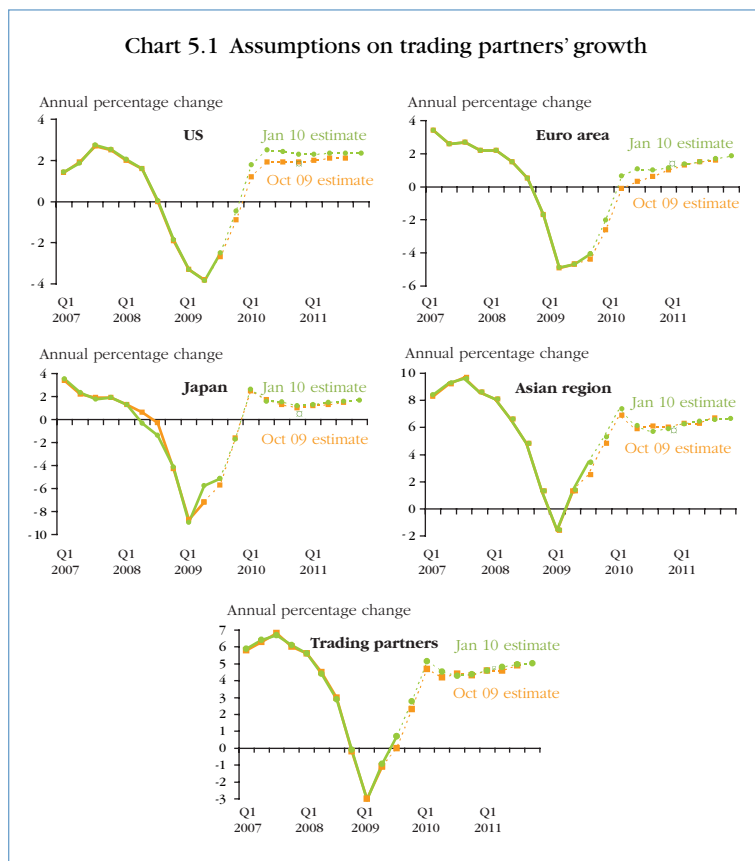
**The Japanese economy** contracted by 5.1 per cent year on year in 2009 Q3, less than previously expected. Latest economic indicators, including those for industrial production and exports, also started to gain some traction. In the fourth quarter, however, production appeared to have slowed from its rapid pace. This, together with deflation prospects as a result of subdued confidence and weak employment, prompted the government to introduce additional stimulus to boost consumption. In light of the fiscal impetus, the MPC thus slightly revises up the growth projection of the Japanese economy over the entire forecast period and expects growth to resume in the first quarter of 2010.

*The MPC revises up slightly the output growth projection for East Asian economies throughout the forecast period.*

Economic activities in **Asian economies** increased owing importantly to improvements in exports and domestic demand. The pace of expansion was slightly faster in 2009 Q3 than previously anticipated. Even though growth in 2010 and 2011 is not likely to attain

the pre-crisis pace given a fragile global demand, economic indicators show signs of further improvement going forward. The MPC thus revises up the growth projection of Asian economies throughout the forecast horizon.

Overall, the MPC projects that trading partner economies will grow at a rate slightly higher than anticipated in the previous *Report* throughout 2010 and 2011.

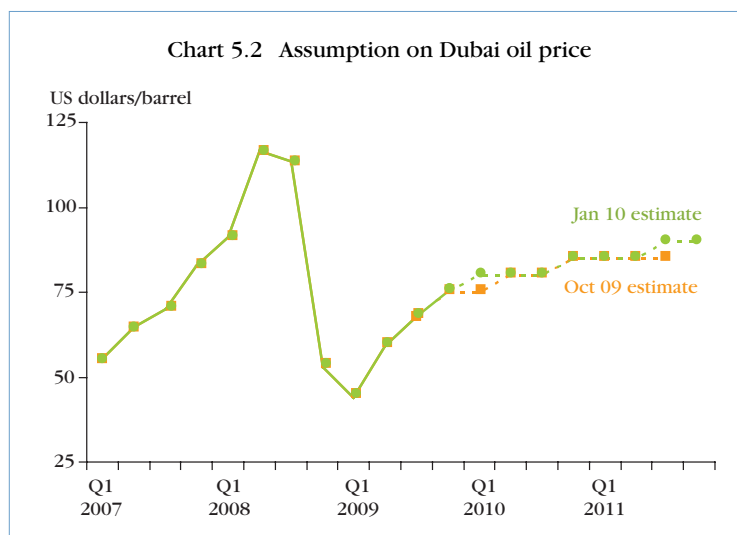


Regional currencies are projected to appreciate vis-à-vis the US dollar. Given increasing global risk appetite and flows of capital into the region, particularly into stock markets, as a result of better prospects of the global economy, the MPC projects that regional currencies will appreciate throughout the forecast horizon faster than previously anticipated.

### World commodity prices

*The MPC revises up the projection on the Dubai oil price for 2010 and 2011.*

The MPC projects global demand for crude oil in 2010 and 2011 to increase slightly from the previous projection in accordance with the global economic recovery as well as a continuous decline in the crude stock. Consequently, the projection for the Dubai oil price is revised up, averaging at 81.3 and 87.5 US dollars per barrel in 2010 and 2011, respectively.



Source: Bank of Thailand projection

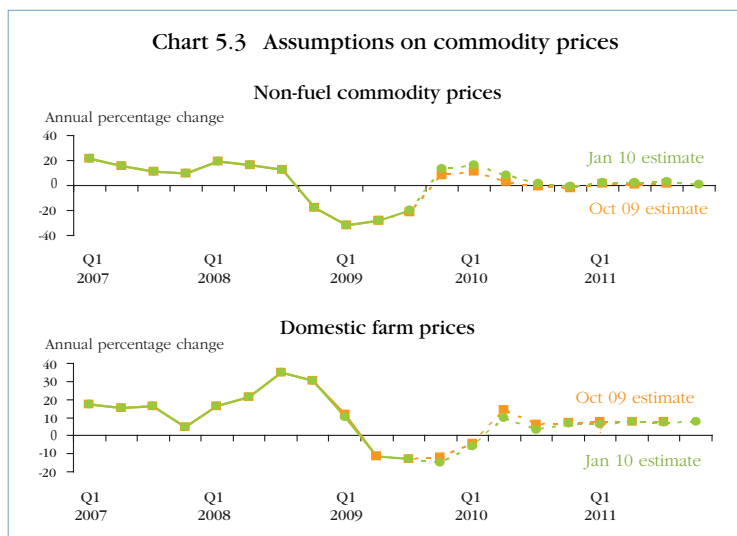
*Non-fuel commodity prices are projected to be higher than previously expected.*

With regard to non-fuel commodity prices in 2010, the MPC revises up the previous projection given a recent uptrend in metal and food prices. Non-fuel

commodity prices are expected to edge up slightly in 2011.

Domestic farm prices in 2010 are revised down, as lower-than-expected prices of fruits and vegetables more than offset rising prices of rice and flour following a weather-induced decline in world supply of rice. Nonetheless, farm prices will likely rise in 2011 on account of a pickup in global demand ahead.

*Domestic farm prices projection is revised down.*



Source: Bank of Thailand projection

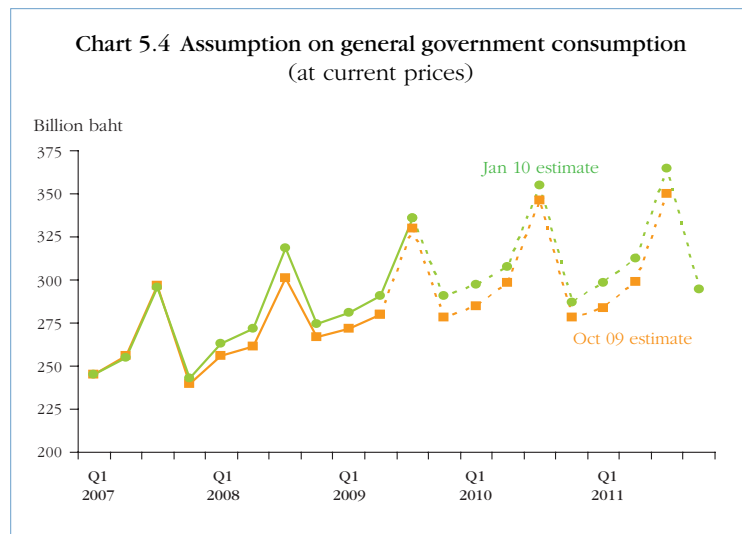
### Fiscal Expenditure

The MPC projects government consumption expenditure in fiscal year 2010 to be 1,250.2 billion baht, higher than previously projected, as parts of outlays for investment in the second stimulus package are now earmarked for consumption expenditure. This budget reclassification in effect reduces public investment outlays in fiscal year 2011 to 622.4 billion baht – lower than expected – 358.9 billion of which is designated as central government investment and 263.5 billion as state-owned enterprise investment.

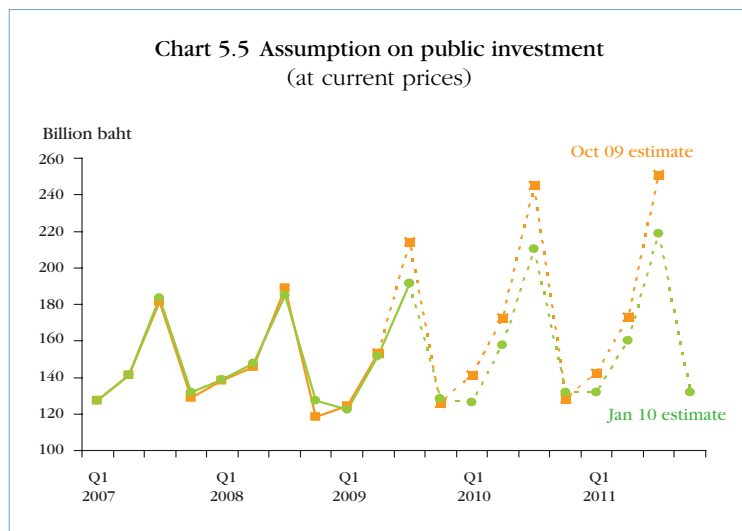
*The MPC projects general government consumption and investment over fiscal year 2010 to be 1,250.2 and 622.4 billion baht, respectively.*

*Public consumption and investment for fiscal year 2011 are estimated at 1,263.0 and 642.5 billion baht, respectively.*

For fiscal year 2011, the MPC estimates that government consumption expenditure will total 1,263.0 billion baht while public investment outlays will come to 642.5 billion baht. The latter consists of central government investment worth 401.4 billion baht and state-owned enterprise investment worth 241.1 billion baht.



Source: Bank of Thailand projection



Source: Bank of Thailand projection

### Minimum wages

The MPC revises up the assumption on this year's daily minimum wage for the Bangkok Metropolitan Area from 203 baht to 206 baht in line with the new minimum wage recently set by the Central Wage Committee in December 2009. In addition, the minimum wage for 2011 is revised up slightly on account of the uptrend in inflation and a pickup in economic activity.

*The MPC slightly revises up the minimum wage forecast assumption over the entire forecast horizon.*


### Inventory accumulation

The MPC judges that inventory will slowly accumulate following an economic recovery, turning the contribution to GDP growth to positive in both 2010 and 2011 after being negative throughout 2009.

## *Output and inflation projections*

### Output projection

The Thai economy expanded in 2009 Q4 at a pace faster than previously expected, driven mainly by exports as well as private and public domestic demand. Imports also accelerated during this period. The sustained recovery is primarily due to recovering global demand, rising domestic farm income following higher agricultural prices, improved employment conditions, and accommodative interest rate, all of which bolstered consumer confidence. While private investment still contracted in 2009 Q4 year on year, the pace of contraction slowed down owing to improved business sentiment. Meanwhile, although the effects of fiscal stimulus ebbed somewhat compared with the same period of the previous year, the acceleration in



disbursement of funds still enabled the public sector to provide a forward momentum to the economy. Overall, in 2009 the Thai economy is expected to contract from the previous year by 2.7 per cent owing importantly to the global recession, which led to contractions in almost all GDP components except government consumption and public investment that still expanded and acted as an engine of growth in 2009.

Under the assumption that the policy interest rate remains unchanged at 1.25 per cent over the next eight quarters, together with clearer signs of recovery, increasing domestic demand, and accommodative monetary policy, the MPC projects GDP growth for 2010 to be close to the previous projection. However, a tenuous global economic recovery, a holdup in investment activities in Map Ta Phut, and a possible delay in government budget disbursement represent the major risks to output growth. Economic activity is expected to be well maintained in 2011, driven by private consumption and exports, despite the waning effects of fiscal stimulus. At the same time private investment is expected to resume a stronger pace of expansion, provided that the Map Ta Phut injunction is resolved.

Details of forecasts of GDP components are as follows.

*Private consumption will grow in 2010 at a faster rate than previously estimated and will carry momentum into 2011.*

**Private consumption** will grow in 2010 slightly more than the previous estimate in accordance with improved employment prospects and stronger consumer confidence. Moreover, government transfers to households, which are part of the fiscal stimulus package, and accommodative monetary policy will also

lend support to consumption growth in this year and the next.

**Private investment** is poised to rise at a more solid pace in 2010 compared with the previous year and relative to the previous forecast. This is in line with a recovery in the export sector, a gradual rise in industrial capacity utilization, improvement in business sentiment following better prospects of economic recovery, and low levels of interest rates.

*Private investment continues to recover in 2010 and 2011.*

**Government spending** should provide a softened stimulus in 2010, as parts of the funds previously earmarked for public investment in the second stimulus package have now been reclassified as public consumption expenditure and transfers to municipal authorities (which do not necessarily result in immediate outlays). Nonetheless, the total direct government outlays are likely to rise in 2011 in line with an increase in revenues following economic recovery.

*Impetus from fiscal policy is reduced in 2010 but expected to be stronger in 2011.*

**Exports of goods and services** will continue to grow in 2010 and 2011 as a result of recovering overseas demand. Both exports of goods – in particular, electronics and automobiles and parts – and the tourism industry will continue to recover.

*Exports of goods and services will expand in 2010 and 2011 at a higher rate than the pre-crisis period.*

**Imports of goods and services** will expand at a solid pace in 2010 and 2011 in tandem with a pickup in exports and private domestic demand. However, rising oil and non-fuel commodity prices will work to soften the pace to some extent in 2011.

*Imports of goods and services will accelerate in 2010 and 2011.*

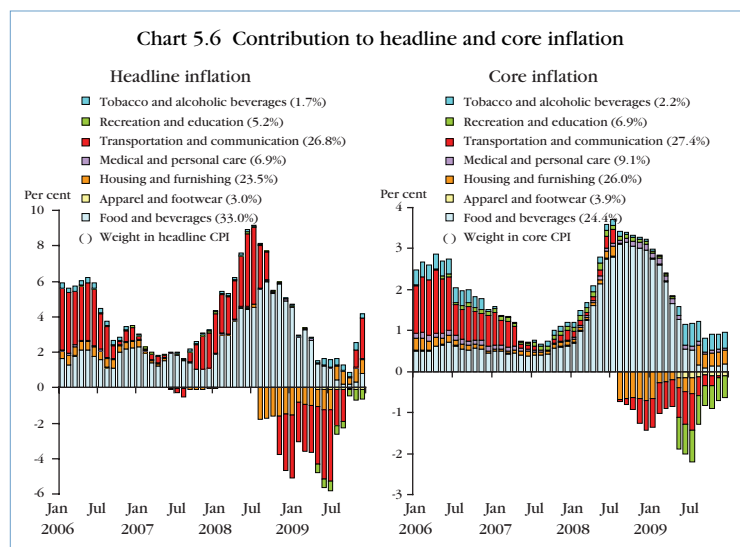
With imports accelerating more sharply than exports in 2010 and 2011, the MPC projects the current account surplus (including reinvested earnings) to decline slightly from the level seen in 2009.

## Inflation projection

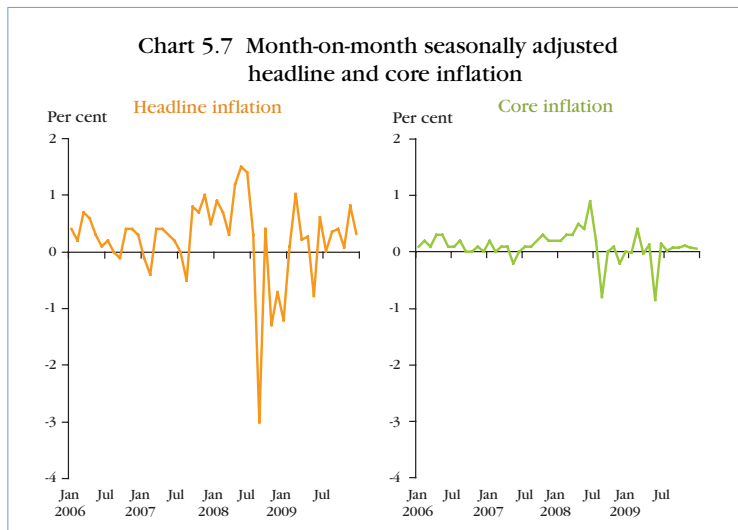
Headline and core inflation outturns for 2009 Q4 were as anticipated. While core inflation rose slightly from the previous quarter, headline inflation jumped owing importantly to a surge in crude oil prices and also in line with a rise in core inflation.

*Core and headline inflation will be lower than the previous projection throughout the entire forecast horizon.*

Readings on core and headline inflation in 2010 will be somewhat lower than previously projected. The extension of the government's cost-of-living reduction measures until the end of March 2010 and of the Ministry of Energy's fuel price administration until August 2010, together with lower-than-expected agricultural prices, contribute to a decline in inflation. Core and headline inflation will rise slightly in 2011 in conjunction with increasing domestic demand and higher oil and agricultural prices following a global economic recovery. However, inflation pressures will be reduced partly by the appreciation of the baht against the US dollar that is in line with movements in regional currencies.



Source: Trade and Economic Index Bureau, Ministry of Commerce, calculation by the Bank of Thailand



Source: Calculations by the Bank of Thailand

### *Assessment of risks*

The MPC judges that output and inflation projections based on the above forecast assumptions and the constant interest rate assumption are most likely. However, there remain risks which can bring about deviations from the baseline projection. Important risk factors are as follows.

#### *Risk factors in the output projection*

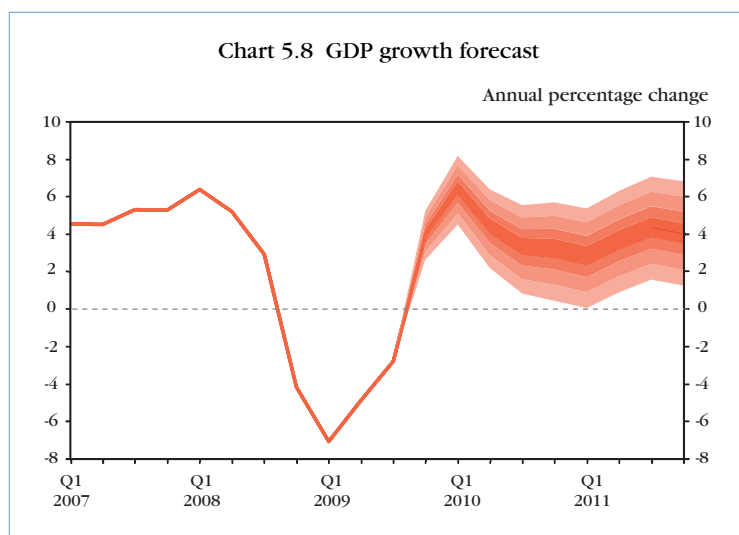
A major external risk factor that can affect output expansion is a delayed recovery of trading partner economies as the effects of fiscal stimulus in the US and Europe start to wane, while demand has yet to fully recover as a result of elevated unemployment. A sluggish global recovery will affect Thai exports which in turn have repercussions for domestic consumption and investment.

Domestic adverse risk factors are twofold. A possible delay to budget disbursement has the potential to reduce impetus behind the ongoing

economic recovery. In addition, a prolonged resolution of the Map Ta Phut suspension not only affects investment and production activities of industrial projects in the area but also indirectly puts a strain on broader investor sentiment, employment, related industries, as well as macroeconomic and financial stability.

An important upside risk to the baseline forecast is that trading partner economies may recover faster than expected given continuous and effective stimulus measures in various countries, which will help Thai exports to expand more briskly than expected.

*The fan chart for GDP growth is skewed downward but to a lesser extent relative to the previous Report.*



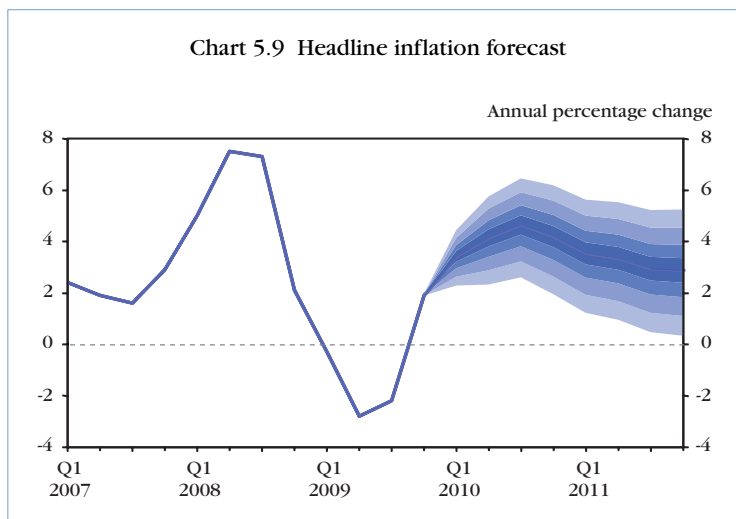
Note: The fan chart covers 90 per cent of the probability distribution

Overall, the MPC judges that uncertainty surrounding the forecasts remains high. Although the balance of risks is tilted to the downside, compared with the forecast in the previous *Report*, negative risks have now moderated. Consequently, over the entire forecast horizon, the fan chart for economic growth is skewed downward but to a lesser extent relative to the previous forecast.

### Risk factors in the inflation projection

A major risk factor that can cause inflation to deviate from the baseline projection is oil prices. In a high case the MPC assumes that the Dubai oil price, when averaged over the forecast horizon, will be above the base case scenario by half a standard deviation of implied volatilities reflected in prices of traded option contracts, corresponding to 92.5 and 105.6 US dollars per barrel for 2010 and 2011, respectively. The low-case oil price is below the base case by half a standard deviation, amounting to 70.0 and 69.4 US dollars per barrel in 2010 and 2011, respectively.

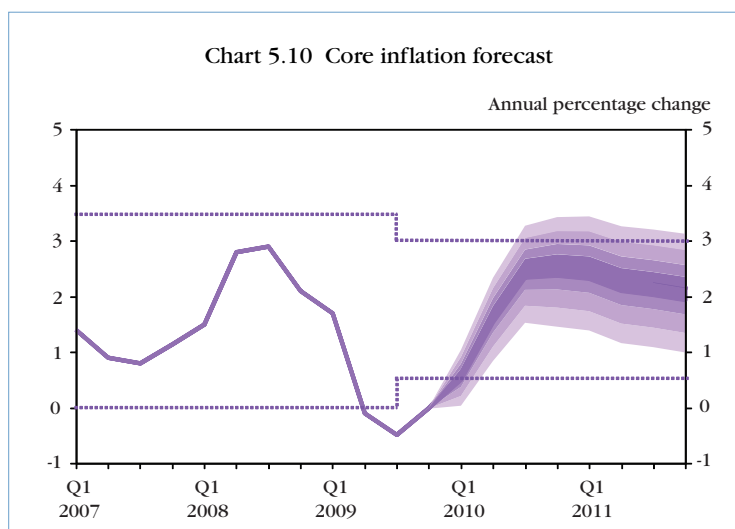
Other factors that may cause inflation to be below the baseline projection include a further extension of certain cost-of-living subsidies beyond March 2010, which will depress readings on CPI inflation in 2010. In addition, demand pressures may be held down during the nascent stage of economic recovery.



Note: The fan chart covers 90 per cent of the probability distribution

*The fan charts for headline and core inflation are skewed downward slightly throughout the projection period.*

Chart 5.10 Core inflation forecast



Note: The fan chart covers 90 per cent of the probability distribution

Overall, the MPC judges that the downside risks to inflation dominate the upside risks. The fan charts for headline and core inflation thus are skewed downward over the entire forecast horizon and are consistent with the fan chart for output growth.

Table 5.1 Probability distribution of GDP forecast

Unit %	2009	2010				2011			
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
> 8	0	7	0	0	0	0	0	1	1
7 - 8	0	22	1	0	0	0	1	4	3
6 - 7	0	34	7	2	2	2	5	10	8
5 - 6	8	25	21	8	8	6	13	19	16
4 - 5	38	10	30	19	17	14	21	23	22
3 - 4	40	2	24	27	24	22	24	21	22
2 - 3	12	0	12	23	22	24	19	13	16
1 - 2	1	0	4	14	15	18	11	6	8
0 - 1	0	0	1	5	7	10	4	2	3
(-1) - 0	0	0	0	1	3	4	1	0	1
< (-1)	0	0	0	0	1	1	0	0	0

With regard to the probability distribution of the forecast for each of the two years, which is obtained by averaging the fan chart's darkest forecast ranges over the four quarters, the MPC projects output growth to be in the ranges of 3.3-5.3 per cent, unchanged from the previous *Report*, with probability of 84.3 per cent. For 2011, output growth is projected be in the range of 2.8-4.8 per cent, with probability of 76.4 per cent.

*Output growth for 2010 and 2011 is projected to be in the ranges of 3.3-5.3 and 2.8-4.8 per cent, respectively.*

Headline inflation in 2010 is projected to average within the range of 3.0-5.0 per cent, lower than the previous *Report's* projection of 3.5-5.5 per cent, with probability of 93.2 per cent. In 2011 headline inflation is to average within the range of 2.0-4.0 per cent with probability of 82.9 per cent.

*Headline inflation for 2010 and 2011 is projected to be in the ranges of 3.0-5.0 and 2.0-4.0 per cent, respectively.*

Unit %	2010				2011			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
> 7	0	0	2	1	0	0	0	0
6 - 7	0	3	9	5	2	2	1	1
5 - 6	1	15	25	17	9	8	5	5
4 - 5	16	34	32	29	22	19	15	14
3 - 4	54	31	22	26	29	28	25	24
2 - 3	27	14	8	15	22	24	26	25
1 - 2	3	3	2	5	11	13	17	18
0 - 1	0	0	0	1	3	5	8	9
< 0	0	0	0	0	1	1	3	3

The MPC assesses core inflation in 2010 to be in the range of 1.3-2.3 per cent, slightly lower than the previous projection, with probability of 94.1 per cent. For 2011 core inflation is projected to average within the range of 1.8-2.8 per cent with probability of 86.7 per cent.

*Core inflation for 2010 and 2011 is projected to be in the ranges of 1.3-2.3 and 1.8-2.8 per cent, respectively.*

Unit %	2010				2011			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
> 3.5	0	0	2	4	4	2	2	1
3.0 - 3.5	0	0	12	15	14	9	8	6
2.5 - 3.0	0	2	32	30	28	23	21	19
2.0 - 2.5	0	18	32	28	28	30	30	29
1.5 - 2.0	0	40	17	16	17	22	23	25
1.0 - 1.5	7	29	5	6	6	10	12	14
0.5 - 1.0	51	10	1	1	2	3	4	5
0.0 - 0.5	38	1	0	0	0	1	1	1
< 0.0	5	0	0	0	0	0	0	0

### Forecasts by research houses

Forecasts of output growth for 2010 from various research houses average at 3.7 per cent, higher than the previous average forecast. For 2011, the Thai economy is expected to expand at 4.7 per cent.

	(13 Oct 09) <sup>1/</sup>		(12 Jan 10) <sup>2/</sup>	
	2009	2010	2010	2011
Capital Nomura	-3.7	3.5	3.0	5.0
Kasikorn Research	-3.7	3.0	3.0	4.0
Standard Chartered	-3.5	2.8	2.8	4.5
ING	-3.5	4.0	4.0	5.0
Citigroup	-4.6	2.7	4.2	5.0
DBS Bank	-3.2	4.0	4.2	4.4
HSBC	-2.8	4.5	4.6	4.7
Average	-3.6	3.5	3.7	4.7
NESDB	(-3.5)-(-3.0) <sup>3/</sup>	n.a.	(3.0)-(4.0) <sup>4/</sup>	n.a.

<sup>1/</sup> Data by Reuters; calculation of average figures by the Bank of Thailand.

<sup>2/</sup> Data and calculation of average figures by the Bank of Thailand.

<sup>3/</sup> Estimated on 24 August 2009 when GDP figures for 2009 Q2 were released.

<sup>4/</sup> Estimated on 23 November 2009 when GDP figures for 2009 Q3 were released

Headline inflation for 2010 is projected to be 2.9 per cent, higher than the previous average forecast at 2.7 percent. Projected headline inflation for 2011 is 3.1 per cent.

Table 5.5 Headline inflation forecasts by various research houses				
	(13 Oct 09) <sup>1/</sup>		(12 Jan 10) <sup>2/</sup>	
	2009	2010	2010	2011
Capital Nomura	-0.9	2.7	2.7	3.3
Kasikorn Research	-0.8	4.0	3.5	3.3
Standard Chartered	0.2	3.2	3.2	3.7
ING	-1.1	1.5	2.5	3.0
Citigroup	-0.9	2.7	2.5	3.5
DBS Bank	-1.1	2.1	2.9	1.5
HSBC	-1.0	2.6	3.0	3.3
Average	-0.8	2.7	2.9	3.1
NESDB	(-1.0)-(-0.5) <sup>3/</sup>	n.a.	(2.5)-(3.5) <sup>4/</sup>	n.a.

<sup>1/</sup> Data by Reuters; calculation of average figures by the Bank of Thailand.

<sup>2/</sup> Data and calculation of average figures by the Bank of Thailand.

<sup>3/</sup> Estimated on 24 August 2009 when GDP figures for 2009 Q2 were released.

<sup>4/</sup> Estimated on 23 November 2009 when GDP figures for 2009 Q3 were released.