


5. Economic Growth and Inflation Outlook

In 2010 Q1, the Thai economy expanded faster than previously anticipated by the MPC. Main driving forces were exports and private investment, which expanded robustly in line with the global recovery. Although the political unrest in early 2010 Q2 adversely affected the tourism sector and, to a lesser degree, private spending, preliminary indicators in the first two months of the second quarter suggest that the overall impact on the broader economy was limited. As a result, year-on-year growth in manufacturing output and private sector spending was still positive, though more moderate compared with the preceding quarter. At the same time the volume of merchandise exports accelerated.

Based on the economic data above, the MPC projects the Thai economy to continue recovering for the rest of 2010 and register sustained growth in 2011 on the back of solid fundamentals, continued growth of the global economy, as well as improvements in consumer and investor sentiments reflecting easing political tensions. Going forward, the MPC expects that the Thai economy will be driven by private domestic demand and exports.

With respect to price developments, core inflation in 2010 Q2 picked up due to the base effect, namely the disappearance of the negative contribution from the free-of-charge education program which had been effective for one year, as well as the termination of the water fee subsidy since April. Stripping out the effects of government subsidies, inflationary pressure did not rise significantly from the previous quarter. This was in part



due to a softening of world oil prices, which helped to mitigate cost pressures, as well as firms' reluctance to raise prices in light of lingering uncertainty about the robustness of domestic demand recovery. As a result, core inflation remained subdued, close to the lower bound of the policy target range. Nevertheless, the MPC expects price pressure to gradually edge up subsequently in line with the continued growth momentum and a narrowing output gap.


In forming economic projections for the next eight quarters, the MPC reviews the key assumptions underlying the Bank of Thailand macroeconomic model. These projections, which incorporate 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 1.50 per cent per annum from 2010 Q3 to 2012 Q2. This policy rate assumption is higher than in the previous *Report*, and is consistent with the MPC's policy decisions on 2 June and on 14 July 2010.

Forecast assumptions

In forming economic and inflation forecasts for the next eight quarters, the MPC conditions the projection on the most plausible assumptions on various external factors, including foreign economic activities and financial conditions, world commodity prices, and fiscal projections. These assumptions are summarized below.

International economic and financial conditions

Overall, with the major industrialized and emerging market economies, except the euro area, showing clear signs of recovery in 2010 Q1, together



with latest economic indicators in 2010 Q2 pointing to continuous improvement, the MPC revises up its assumption on economic growth of trading partners for 2010. Going forward, the MPC views that the prolonged euro area's sovereign debt problem and fiscal austerity in certain industrialized countries are likely to slow down economic activities and consequently revises down the projection of trading partners' economic growth for 2011.

The **US economy** expanded by 2.4 per cent year-on-year in 2010 Q1 owing primarily to impetus from private consumption, private investment and exports. As latest economic indicators, including production, private consumption and investment and labour market conditions, suggest that the US economy is recovering at a slightly faster pace than anticipated in the previous *Report*, the MPC revises up the US growth projection for 2010. However, the US economy is expected to be held down in 2011 by a waning of fiscal stimulus, a slowdown in inventory accumulation and the euro area's sovereign debt crisis. The MPC consequently projects the growth rate of the US economy next year to moderate from this year, staying mostly in line with the assessment in the previous *Report*.

The Federal Open Market Committee (FOMC) decided on 23 June 2010 to maintain the Fed funds rate within the target range of 0 to 0.25 percent in light of continued improvements in economic and financial market conditions. The MPC anticipates the Fed to maintain the policy interest rate throughout the second quarter, change it to 0.25 per cent at the end of the third quarter, and thereafter increase it by 0.25 per cent each quarter until reaching 1.5 per cent in 2011 Q4.

With the US showing clear signs of recovery, the MPC revises the US growth assumption up slightly for 2010.

The MPC anticipates the Fed to start tightening monetary policy towards the end of 2010.

Given the sovereign debt problem in some European economies, the MPC revises down its projection of euro area growth.

The MPC revises up Japan's 2010 growth projection but revises down next year's growth in light of high unemployment and deflation.

Growth projection of Asian economies is revised up for 2010, while next year's growth is kept unchanged from the previous projection.

The **euro area economy** continued to recover at a gradual pace, growing by 0.6 per cent year-on-year in 2010 Q1, slightly lower than expected. Although latest economic indicators point to continuous improvements in production and exports, private consumption becomes weaker. Furthermore, the prolonged sovereign debt problem and fiscal consolidation are expected to dampen overall economic recovery going forward. The MPC thus revises down its growth projection of the euro area for the entire forecast horizon.

The **Japanese economy** expanded by 4.6 per cent year-on-year in 2010 Q1, faster than anticipated in the previous *Report*. This expansion was driven by a recovery in exports and private consumption facilitated by accommodative fiscal and monetary policies. The improvement in demand was also reflected in manufacturing production. Nevertheless, the drag from elevated unemployment and deflation will work to slow down growth next year. In sum, the MPC revises its growth assumption for Japan for 2010 slightly up and for 2011 slightly down compared with the previous projection.

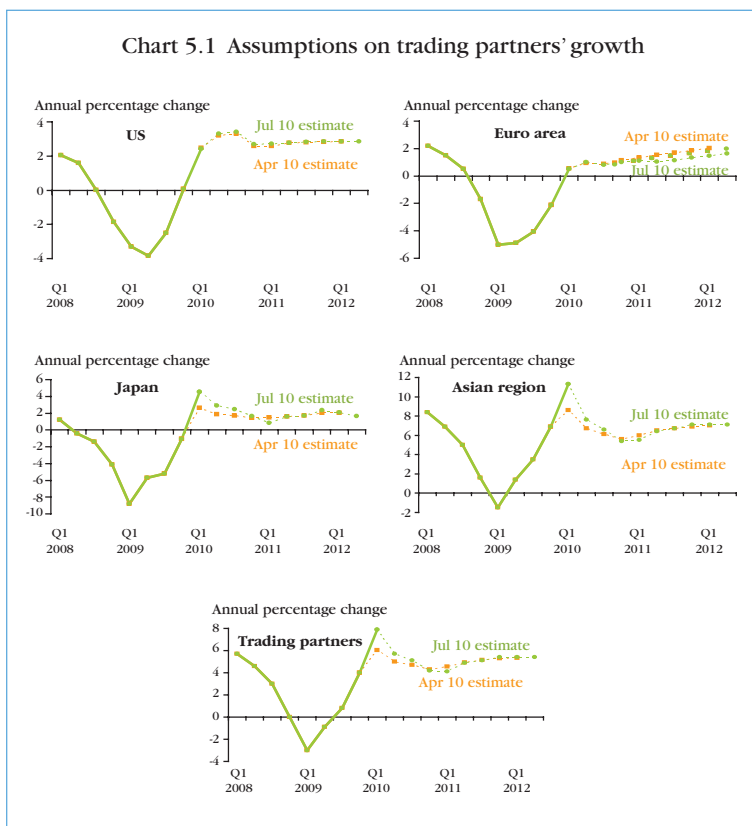
Asian economies have had a good deal of forward momentum. Several economies registered growth rates in 2010 Q1 that were much higher than previously anticipated. The rebound in trading partners' economies, particularly in the US and East Asia, led to a strong pick-up in regional production and exports. In addition, private consumption and investment continued to improve, boosted in part by policy stimulus. Going forward, Asian economies will further expand in line with the global recovery, although somewhat restrained

in 2011 by the softening in the euro area. The MPC thus revises up its growth projection for Asian economies for 2010 while maintaining that of 2011.

Overall, the MPC expects the trading partner economies to grow in 2010 at a rate higher than previously anticipated and growth in 2011 to be slightly lower than in the previous *Report* in light of increasing risks to growth in Europe.

Regional currencies are likely to appreciate more than previously anticipated vis-à-vis the US dollar, as better prospects for economic recovery in Asia draw more capital flows into the regions' stock and bond markets. In addition, China's decision to allow more flexibility in the movements of the renminbi is likely to

Vis-à-vis the US dollar, regional currencies are expected to appreciate more than previously anticipated, given Asia's strong economic outlook and China's decision to allow more flexibility in the movements of the renminbi.



Source: Bank of Thailand projection

lead other regional currencies to appreciate against the US dollar. The MPC consequently expects regional currencies to appreciate against the US dollar more than previously anticipated throughout the projection period.

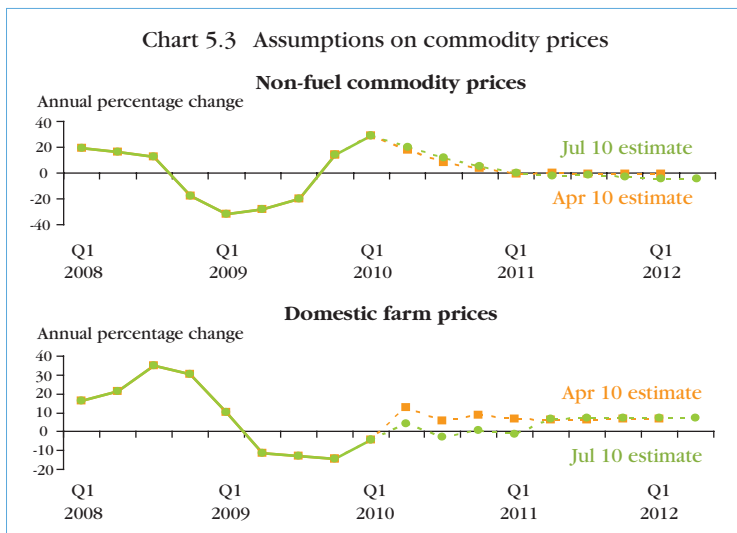
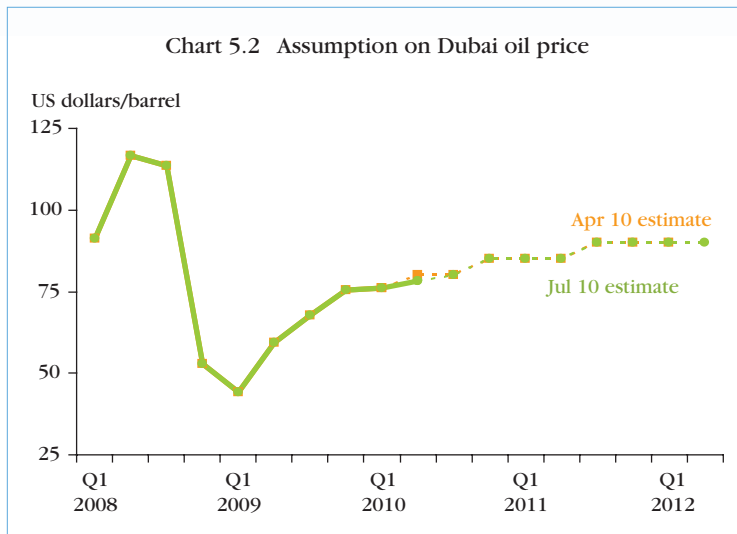
World commodity prices

The projected price of Dubai crude is largely unchanged from the previous assumption.

Oil price assumption remains largely unchanged, as the fundamentals determining oil prices have not altered significantly from the previous *Report*. While global demand for crude oil is approaching the pre-crisis level, supply continues to be accommodating as OPEC spare capacity and crude oil inventory remain high. Therefore, the MPC maintains the projection of the price of Dubai crude over the next eight quarters. With the outturn of the oil price for 2010 Q2 lower than expected, however, the oil price is projected to average at 79.8 US dollar per barrel in 2010, slightly lower than the forecast of 80.2 US dollar per barrel in the previous *Report*. For 2011, the oil price projection remains unchanged at 87.5 US dollar per barrel.

Non-fuel commodity prices in 2010 are projected to pick up the pace faster than previously assumed but slow down more in 2011.

Non-fuel commodity prices in 2010 are revised up from the previous assumption, due mainly to the recent pick-up in prices of agricultural raw materials and metals following the global recovery. The MPC then expects the prices to slow down in 2011 as previously assumed, but to a greater extent. This is consistent with the IMF's forecasts of a substantial drop in prices of agricultural raw materials from this year.



Source: Bank of Thailand projection

Domestic farm prices moderate from the previous assumption in line with the outturns in 2010 Q2, which were lower than expected as the impact of the drought on farm production was not as severe as previously anticipated. Going forward, however, prices will continue on an uptrend, buoyed by the recovery in domestic demand and diminished supply due to unfavourable climate conditions. Accordingly, domestic farm prices are likely to grow in 2011 at a rate higher than in 2010.

Domestic farm prices are revised down in 2010, due to the lower-than-expected impact of the drought on agricultural supply.

Fiscal expenditure

The MPC projects general government consumption and investment in fiscal year 2010 to be 1,270.9 and 616.4 billion baht, respectively.

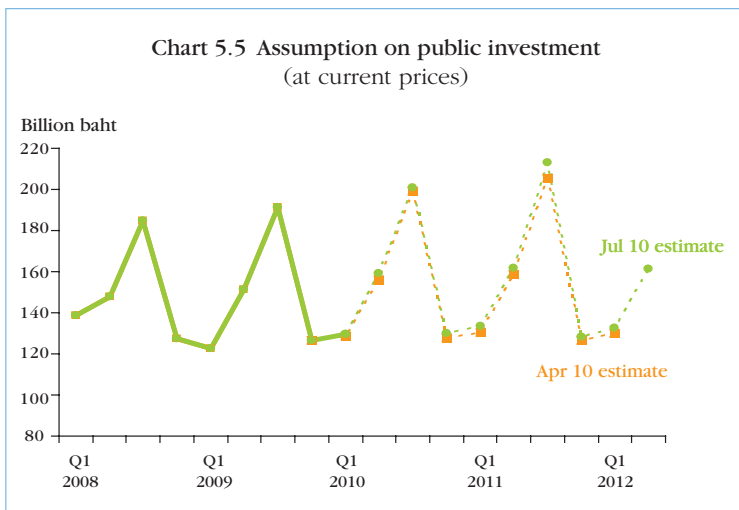
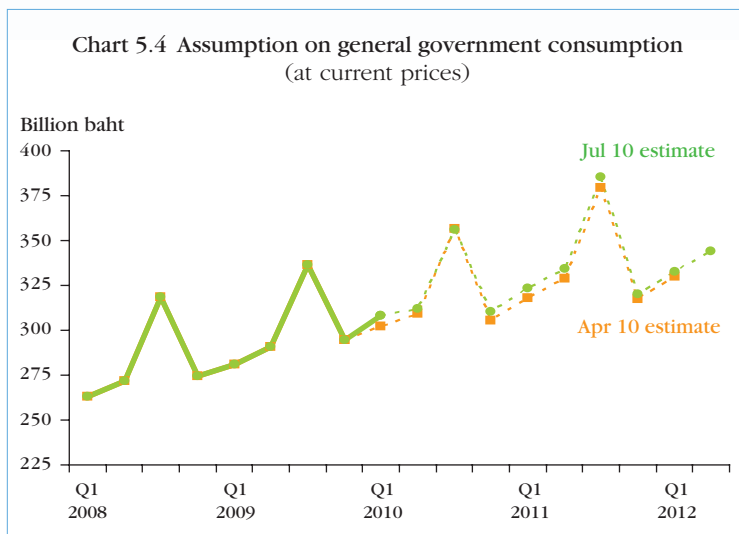
The MPC projects government spending to rise in both fiscal years 2010 and 2011, as central government consumption and investment are revised up in line with the actual data in the first half of 2010 following higher-than-expected disbursement. Accordingly, government consumption in fiscal year 2010 will total 1,270.9 billion baht, up from 1,262.5 billion baht assumed in the previous *Report*. At the same time, government investment will amount to 616.4 billion baht, also up from the previous assumption of 610.2 billion baht, partly due to investment spending from the fiscal stimulus package.

Public consumption and investment in fiscal year 2011 are projected to amount to 1,353.1 and 638.5 billion baht, respectively.

In fiscal year 2011, total government spending is revised up slightly. Although the total budget remains unchanged, the higher-than-targeted government revenues in fiscal year 2010 will allow for more principal repayment, thus leaving a larger share of the budget for stimulating economic activities in the following year. With regard to the fiscal stimulus package, however, higher disbursement in fiscal year 2010 will result in a decrease in carry-over expenditure in fiscal year 2011 compared with the previous assumption.

Minimum wages

The MPC maintains the assumption on minimum wage for the Bangkok Metropolitan Area at 206 baht per day throughout 2010 and 209 baht per day in 2011. This upward trend is in line with the economic recovery and higher inflation going forward.



Source: Bank of Thailand projection

Inventory accumulation

The MPC anticipates that businesses will still accumulate inventory in line with the economic recovery, yet at a level lower than previously assumed due to high export of gold in 2010 Q2. As a result, the year-on-year contribution of inventory accumulation to GDP growth is expected to be lower than assumed in the previous *Report*. The contribution in 2011 is higher than the previous assumption, however, as firms will continue

The MPC maintains the minimum wage assumption throughout the projection period.



to restock after the significant rundown during the global economic crisis.

Output and inflation projections

Output projection

As reflected in the 2010 Q1 data, the Thai economy recovered at a pace faster than previously assessed by the MPC. High export growth, both in value and volume terms, was attributable to the recovery in major trading partners' economies, especially the US, China, and regional countries. In addition, private investment accelerated from the previous quarter, in line with improved economic conditions and business sentiments. The recent rise in capacity utilization prompted some manufacturers to invest in order to expand their production capacity to accommodate higher demand. Meanwhile, buoyant farm and tourism incomes helped to support household spending.

Although the political unrest in early 2010 Q2 adversely affected the tourism sector and private sector sentiment, latest data and indicators suggest that the overall impact on the broader economy was limited, with sustained momentum in private spending and merchandise exports. For the second half of 2010, the MPC expects the average quarter-on-quarter growth rate to moderate from the first half of the year, mostly owing to remaining political tensions and softer global growth due to concerns over the public debt problems in Europe. Accordingly, exports and private spending will slow down after registering strong growth in the first half of the year, limiting private consumption growth to some extent. Nonetheless, on a year-on-year basis, the Thai

economy is projected to expand in 2010 at a rate higher than previously anticipated, mainly due to the strong growth in the first half of the year.

Details of the MPC's forecast are as follows.

Private consumption in 2010 will grow at a pace slower than projected in the previous *Report*, reflecting the effect of political unrest in 2010 Q2 on overall consumer sentiment as well as disruptions to consumer spending particularly in the affected areas, which were mostly major business districts. Tourism-related income is also expected to fall substantially with the large drop in tourist arrivals. However, the MPC expects private consumption to pick up in the second half of the year, in line with easing political tensions and a recovery in consumer sentiment. In addition, the MPC anticipates farm income to remain high and tourism-related income to recover in late 2010, further supporting private consumption. In 2011, the sound fundamentals of the economy, together with continued momentum of private investment and exports from 2010, will help to sustain private consumption growth, though the rate of expansion is likely to be lower than previously projected.

Private consumption will grow at a rate slower than previously projected due to domestic political conditions.

Private investment in 2010 will expand faster than the previous projection mainly due to higher-than-expected growth in the second quarter. Latest economic indicators in the first two months of 2010 Q2 suggest that private investment in 2010 Q2 weathered the domestic political turmoil quite well, partly because many investment projects had been planned long in advance and were not reversible once they had commenced.

Private investment will moderate in 2010 Q3 due to the impact of the political unrest, before recovering from 2010 Q4 onwards in line with the need of firms to increase their production capacity to accommodate growing demand.

Nevertheless, the MPC expects the impact of the political unrest to be most visible in 2010 Q3, as deteriorations in investor sentiment and investment climate may potentially lead to cancellations or suspensions of some investment projects. From 2010 Q4 onwards, private investment is expected to rebound in line with the three-months-ahead business sentiment, which tends to improve along with easing political tensions. The rebound is also attributable to pent-up investment demand over the recent period due to political constraints. High capacity utilization since early-2010, together with robust global recovery and low interest rates, will prompt firms to invest in order to increase their production capacity to accommodate rising domestic and external demand.

Government spending should provide a stronger stimulus in line with both higher government consumption and investment.

Government spending should provide a stronger stimulus in 2010 compared with the previous projection, as central government consumption and investment edge up in line with latest actual data indicating higher-than-expected disbursement. In 2011, fiscal impetus will also increase from the previous projection owing to higher-than-targeted government revenues in 2010, which will make possible a greater amount of principal repayment this year, thereby leaving a larger share of the budget for stimulating economic activities in 2011.

Exports of goods will moderate in the second half of 2010. Exports of services will recover as the tourism sector improves, but not enough to compensate for the weakened momentum of merchandise exports.

Exports of goods and services in 2010 will expand at a pace slightly faster than the previous forecast, mostly due to strong growth in the first half of the year. In the second half of the year, growth of merchandise exports is expected to be more subdued as the growth momentum of Thailand's main trading partners softens, partly due to concerns over the public debt crisis in

Europe. On the other hand, exports of services are expected to recover in late 2010, as the tourism sector rebounds, though not enough to compensate for the slowdown in exports of goods. Provided that the European public debt crisis will be partially resolved by then, firmer global growth in 2011 will help to sustain Thailand's export growth.

Imports of goods and services are poised to grow in 2010 at a pace slower than previously forecasted, reflecting the negative impact of political uncertainty on domestic demand. Nonetheless, import growth will be high in both 2010 and 2011, driven by continued growth in exports and investment.

Import growth momentum remains strong, in line with export and investment growth.

With imports growing more strongly than exports, the MPC projects the current account surplus (including reinvested earnings) to decline gradually.

Inflation projection

Stripping out the effects of government measures, inflationary pressure in 2010 Q2 did not rise from the previous quarter. However, core inflation picked up slightly due to the base effect, namely the disappearance of the negative contribution from the free-of-charge education program, which had been effective for one year, and the termination of the water fee subsidy since April. Meanwhile, headline inflation moderated in line with lower growth of domestic retail oil prices, reflecting the high base in the preceding year when fuel taxes were raised and world oil prices picked up.

The MPC projects inflationary pressure to moderate in the short term as a consequence of: (1) softer oil and commodity prices in line with slower global growth, partly attributable to the public debt crisis

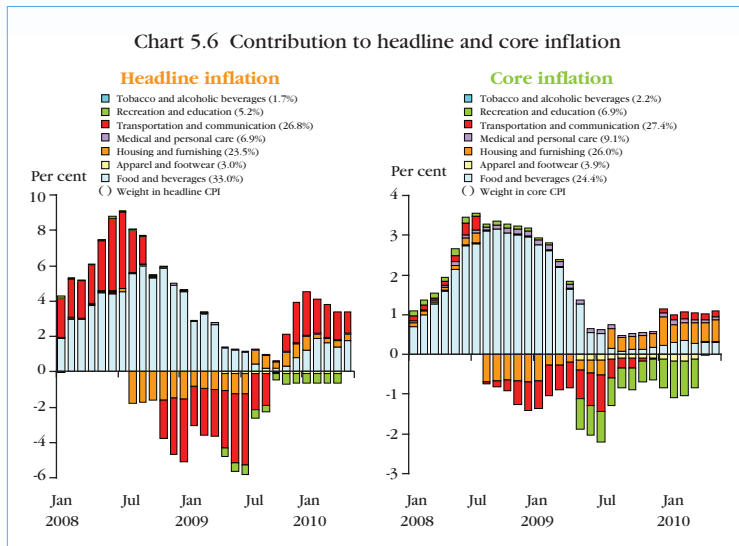
in Europe; (2) willingness of businesses to cooperate with the Ministry of Commerce in maintaining prices at prevailing levels until the end of 2010 Q3, in part due to high accumulated profits in 2010 Q1 and the perceived fragility of domestic demand recovery; and (3) the government's extension of some cost-of-living reduction measures to the end of the year. The extension of these subsidies is the most important factor driving both core and headline inflation in 2010 below the previous projection despite the stronger projection for economic growth.

Inflation will be lower in 2010 than the previous projection, before picking up in 2011 in line with the narrowing output gap and the termination of government's cost-of-living reduction measures.

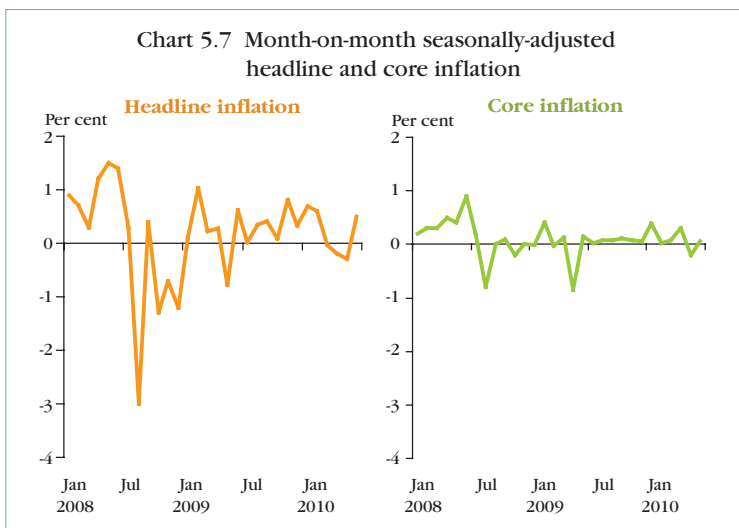
Inflation in 2011 will be slightly higher than projected in the previous *Report*, driven by demand pressure from the economic recovery and the narrowing output gap, which would allow a higher pass-through of rising production costs to retail prices, in part because of higher labour costs following the tightening of the labour market. While the salary adjustment for government officials (approved by the Cabinet on 22 June 2010) might have some effects on wages in the private sector, the effects should be small. Additionally, the expiration of the government's subsidies will contribute positively to inflation in 2011.

Assessment of risks

Projections for output and inflation are conditioned on the most likely forecast assumptions detailed above as well as the assumption that interest rates remain unchanged from the prevailing levels. Nevertheless, the following external and domestic risks can potentially bring about deviations from the baseline projection.



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



Source: Calculations by Bank of Thailand

Risk factors in the output projection

Downside risks that may cause output expansion to be lower than in the baseline scenario include a delayed recovery of foreign economies due to high unemployment in G3 countries and public debt problems in certain European countries. A slower global recovery would hamper Thai exports, causing domestic

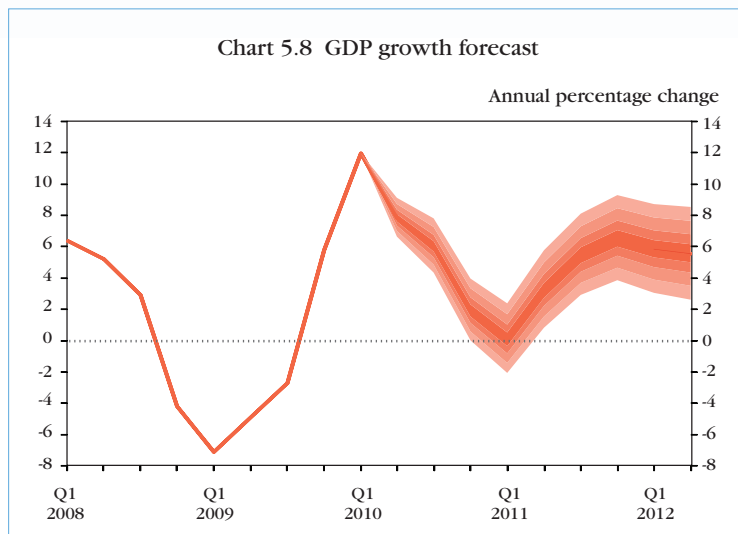


consumption and investment to expand at a pace slower than in the baseline projection.

The MPC also highlights the following domestic risks. First, political tensions, while progressively easing, may undermine consumer and investor sentiment if they intensify once again. Tourism revenue would also be severely affected in such a scenario as tourist sentiment deteriorates. The MPC, however, deems the reoccurrence of political unrest unlikely, and even if such a situation should arise again, the basic functioning of the economy will largely be intact. Second, a prolonged and indeterminate resolution to the Map Ta Phut suspension will affect not only investment and production activities of industrial projects in the area, but also put a strain on broader investor sentiment, employment, as well as related industries.

Upside risks to economic expansion are as follows. First, the public debt problems in Europe may be resolved sooner than expected, which would lend further support to the global recovery and the momentum of exports and domestic demand. Second, political tensions may ease sooner than expected, which would aid a more rapid recovery in private sector and tourist sentiments.

Overall, the MPC views uncertainty surrounding the growth projection to be lower than that in the previous *Report*. In addition, the downside and upside risks become more balanced, mainly because domestic downside risks have diminished as political tensions have been resolved to some degree. Therefore, the fan chart for economic growth is balanced, compared with the downward-skewed fan chart in the previous *Report* that reflected heightened political uncertainty at the time.



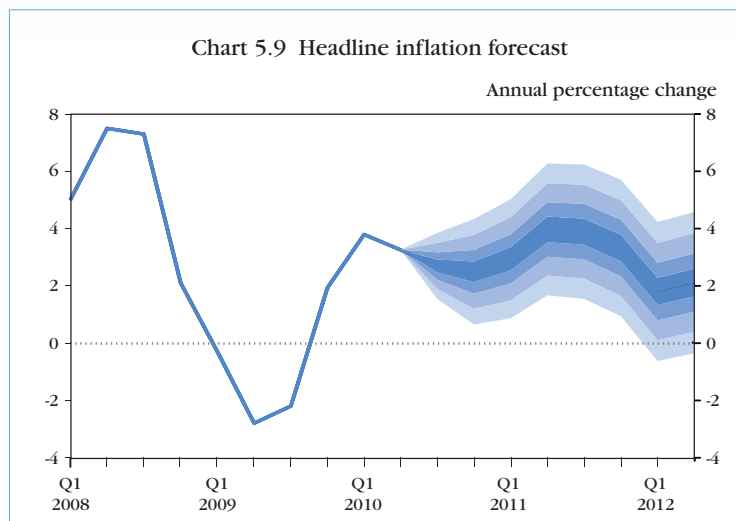
Note: The fan chart covers 90 per cent of the probability distribution

The fan chart for GDP growth is balanced, comparing with the downward-skewed fan chart in the previous Report. This is to reflect diminished downside risks due to easing political tensions.

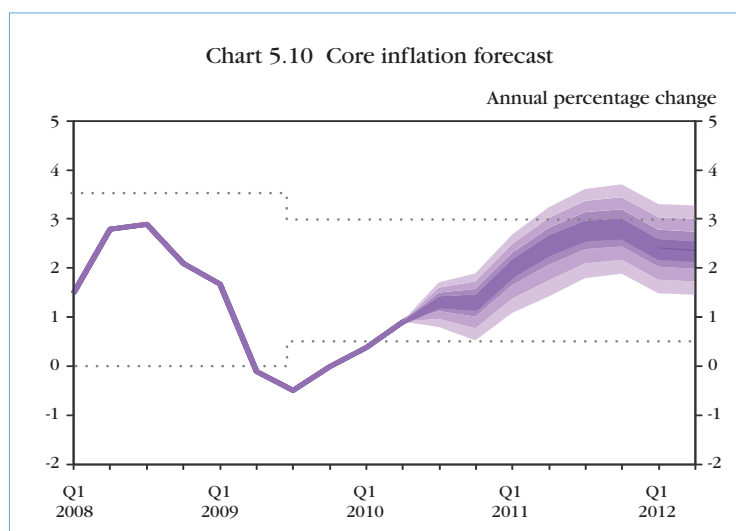
Risk factors in the inflation projection

Upside risks to inflation projection include the following. First, oil prices may be higher than expected, as hurricanes in the Gulf of Mexico and Iran's nuclear threat may adversely affect crude oil supply. Moreover, the depreciation trend of the US dollar going forward may raise oil prices in US dollar terms. Second, the drought may be more severe than expected, resulting in higher prices of agricultural products and thus more supply-induced pressures on inflation. Third, the Thai economy may expand at a rate higher than the baseline projection, in line with stronger-than-expected global growth and diminished domestic risks due to easing political tensions, adding to demand-side pressure.

The fan charts for headline and core inflation are balanced throughout the projection period.



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



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

Downside risks to inflation are mainly from the following factors. First, oil prices may turn out to be lower than anticipated, possibly due to a slower global economic recovery that is weighed down by high unemployment in the G3 countries and public debt problems in certain European countries. Second, prices of agricultural products may be lower than in the baseline scenario, as the drought may turn out to be less severe than assessed. Third, domestic demand recovery may

be constrained due to the risks to growth discussed above, resulting in less demand-side pressure. Fourth, the government may extend part of the cost-of-living reduction measures beyond the scheduled termination at the end of 2010.

Overall, the MPC views upside and downside risks to roughly balance out. Hence, the fan charts for both core and headline inflation are symmetric throughout the projection period.

Projection ranges and probabilities

With regard to the annual probability distribution of the economic growth forecast, obtained by averaging the fan chart's darkest forecast ranges over the four quarters of each year, the MPC projects output growth in 2010 to be in the range of 6.5-7.5 per cent with probability of 74.1 per cent. This new forecast interval is higher than the previous range of 4.3-5.8 per cent. For 2011, output growth is projected be in the range of 3.0-5.0 per cent similar to the previous forecast, with 81.9 per cent probability.

Output growth for 2010 and 2011 is projected to be in the ranges of 6.5-7.5 and 3.0-5.0 per cent, respectively.

Unit: %	2010			2011				2012	
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
> 9	7	0	0	0	0	1	7	4	3
8 - 9	36	3	0	0	0	4	12	7	6
7 - 8	45	15	0	0	1	11	20	15	12
6 - 7	12	33	0	0	3	20	24	21	19
5 - 6	1	33	1	0	9	25	20	22	22
4 - 5	0	13	4	0	19	21	11	17	18
3 - 4	0	2	15	2	26	12	4	9	12
2 - 3	0	0	29	7	23	4	1	4	5
1 - 2	0	0	30	18	13	1	0	1	2
0 - 1	0	0	16	28	5	0	0	0	0
(-1) - 0	0	0	4	26	1	0	0	0	0
< (-1)	0	0	1	20	0	0	0	0	0

Headline inflation for 2010 and 2011 is projected to be in the ranges of 2.5-3.8 and 2.5-4.5 per cent, respectively.

Headline inflation in 2010 is projected to average within the range of 2.5-3.8 per cent with probability of 93.9 per cent, lower than the previous forecast of 3.3-4.8 per cent. In 2011, headline inflation is projected to average within the range of 2.5-4.5 per cent, with probability of 84.7 per cent.

Unit: %	2010		2011				2012	
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
> 7	0	0	0	1	1	1	0	0
6 - 7	0	0	1	6	5	3	0	0
5 - 6	0	1	4	16	15	9	1	2
4 - 5	3	8	15	26	25	20	5	8
3 - 4	30	23	28	27	27	27	14	17
2 - 3	51	34	29	17	17	23	24	25
1 - 2	16	24	17	6	7	13	26	24
0 - 1	1	8	5	1	2	4	18	15
(-1) - 0	0	1	1	0	0	1	8	6
< (-1)	0	0	0	0	0	0	2	2

Core inflation for 2010 and 2011 is projected to be in the ranges of 0.5-1.3 and 2.0-3.0 per cent, respectively.

With respect to core inflation, the MPC's projection range for 2010 is 0.5-1.3 per cent with probability of 99.2 per cent, lower than the previous range of 1.0-2.0 per cent. In 2011, core inflation is projected to average within the range of 2.0-3.0 per cent, with probability of 91.9 per cent.

Unit: %	2010		2011				2012	
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
> 3.0	0	0	1	12	31	36	13	12
2.5 - 3.0	0	0	10	29	34	35	29	28
2.0 - 2.5	0	2	33	31	24	22	34	34
1.5 - 2.0	20	24	34	19	9	7	18	20
1.0 - 1.5	60	42	17	7	2	1	5	5
0.5 - 1.0	19	24	5	2	0	0	1	1
< 0.5	1	7	1	0	0	0	0	0

Forecasts by research houses

Forecasts of output growth for 2010 from various research houses, as polled by Reuters (Thailand) and collected by the Bank of Thailand, have been revised upwards following the announcement of the first-quarter gross domestic product by the National Economic and Social Development Board (NESDB) as well as the easing of political tensions.

Meanwhile, forecasts for headline inflation in 2010 and 2011 are revised up slightly, in line with the stronger growth projection.

	(14 Apr 10) ^{1/}		(14 Jul 10) ^{1/}	
	2010	2011	2010	2011
Capital Nomura	3.8	5.0	6.0	4.8
Kasikorn Research	4.8	4.5	5.0	3.5
Standard Chartered	2.8	4.5	4.1	4.5
ING	4.8	5.2	5.8	5.2
HSBC	5.7	4.4	6.1	4.7
UOB	4.3	4.7	5.5	4.7
Siam City Research	3.8	4.0	6.5	3.8
SCB Economic	4.2	4.4	5.2	4.4
TISCO Securities	3.9	4.4	5.2	4.0
Barclays Capital	5.0	4.5	6.0	4.0
IMF	5.5	5.5	7.0	4.5
Average	4.4	4.6	5.7	4.4
NESDB	(3.5)-(4.5) ^{2/}	n.a.	(3.5)-(4.5) ^{3/}	n.a.

^{1/} Data by Reuters and calculation of average figures by Bank of Thailand.

^{2/} Estimated on 22 February 2010 when GDP figures for 2009 Q4 were released.

^{3/} Estimated on 24 May 2010 when GDP figures for 2010 Q1 were released.

Table 5.5 Headline inflation forecasts by various research houses				
	(14 Apr 10) ^{1/}		(14 Jul 10) ^{1/}	
	2010	2011	2010	2011
Capital Nomura	4.2	3.3	5.1	4.0
Kasikorn Research	3.6	3.1	3.5	3.1
Standard Chartered	3.2	3.7	3.2	3.7
ING	3.0	2.7	3.0	2.7
HSBC	3.4	3.6	3.5	3.7
UOB	3.0	3.5	3.7	3.5
Siam City Research	3.5	4.0	3.5	3.6
SCB Economic	3.2	3.0	3.0	3.0
TISCO Securities	3.3	3.5	3.3	4.0
Barclays Capital	3.5	2.5	3.5	2.5
Average	3.4	3.3	3.5	3.4
NESDB	(3.0)-(4.0) ^{2/}	n.a.	(3.0)-(4.0) ^{3/}	n.a.

^{1/} Data by Reuters and calculation of average figures by Bank of Thailand.

^{2/} Estimated on 22 February 2010 when GDP figures for 2009 Q4 were released.

^{3/} Estimated on 24 May 2010 when GDP figures for 2010 Q1 were released.

Europe's sovereign debt crisis and implications on the Thai economy

Europe's sovereign debt crisis

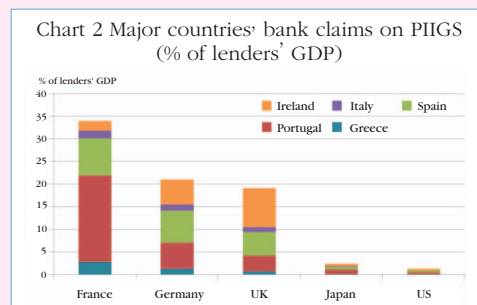
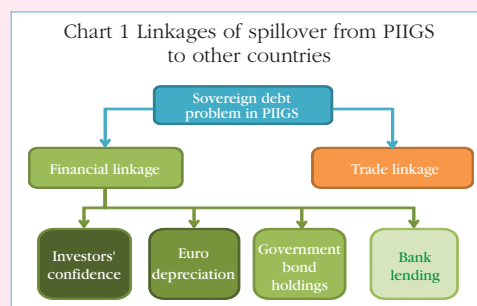
The high and rising levels of public debt in several European countries, especially in PIIGS^{1/}, pose a significant risk to the recovery of Europe as well as to the global economy through two important channels: financial markets and trade.

The key impact that has sent ripples across financial markets so far is a drop in investors' confidence triggered by concerns about debt servicing ability of PIIGS governments. This has led to increasing volatilities in the financial markets, the depreciation of the euro by more than 20 per cent from its peak at end-2009, and a reduction in the value of government bonds in problem countries^{2/}. Nevertheless, losses from bond holdings should be contained within European countries, as 58 per cent^{3/} of total Greek government bonds are held by financial institutions in Europe.

Repercussions through financial markets can also arise from cross-border bank lending, as European firms rely heavily on banks for funding and banks have extensive cross-border lending activities. Major lenders to PIIGS are financial institutions from France and Germany, with outstanding bank loans amounting to 34 and 21 per cent of their respective GDP. Therefore, should financial institutions in PIIGS experience severe problems, the banking sector of these major creditor countries could also be affected, which could create systemic risks to Europe's financial markets going forward.

Through trade, on the other hand, the impact of the sovereign debt crisis is expected to be limited, as PIIGS account for only 7.8 and 13.2 per cent of global and euro-area intra-regional trade, respectively. Nevertheless, the significant depreciation of the euro has the potential to affect other countries' exports to the euro area.

If the problem is contained within PIIGS, the impact of the sovereign debt crisis on Asian economies through financial markets is expected to be limited. Asia has a low financial exposure to PIIGS, and Asia's asset holdings and loans from Europe are concentrated in Germany and France. In addition, Asian countries have significantly



Source: BIS and calculation by Bank of Thailand

^{1/} PIIGS refers to Portugal, Italy, Ireland, Greece and Spain

^{2/} According to the *Financial Stability Report* published in June 2010 by the Bank of England, global mark-to-market losses increased by 3.3 trillion US dollars between March and June 2010.

^{3/} Germany, France, Switzerland, England, Ireland, Austria, Italy, Belgium, the Netherlands, Luxembourg, and Scandinavian countries

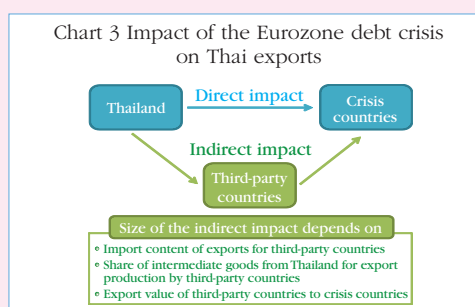
reduced their reliance on external funding from European countries since the 1997 Asian financial crisis. Meanwhile, the impact of the sovereign debt crisis on the real sector is also expected to be limited. Of total exports from the Asian region, exports to PIIGS account for only 2.5 per cent.^{4/} However, should the crisis become widespread and affect Europe's biggest economies, its impact on Asian exports could be substantial, given that the euro area market accounts for 9 per cent of Asia's total exports and in particular 15.6 per cent of China's exports.

The sovereign debt crisis and Thailand

The impact of the euro-area debt crisis on Thailand's financial markets is expected to be limited given that Thai investors, including financial institutions, have low financial exposure to European economies.

The direct impact of the sovereign debt crisis on Thailand through trade depends largely on the extent of the crisis. If the crisis remains contained, its direct impact on Thai exports should be small, since Thailand's exports to PIIGS account for only 1.8 per cent of Thailand's total exports in value terms. In addition, there is an indirect impact through exports of intermediate goods to countries (mostly China, ASEAN-4 and Japan^{5/}) that in turn export to PIIGS. The magnitude of this indirect impact depends on: (1) the import content of those third-party countries' exports; (2) the share in third-party countries' imports of intermediate goods coming from Thailand; and (3) how much the third-party countries export to crisis countries.^{6/} Estimation results show that the indirect impact on Thai exports is just 1.7 per cent, because the share of intermediate goods from Thailand is quite small and because those third-party countries mainly use domestic inputs for production.

However, should the crisis become widespread and affect Europe's major economies^{7/}, the direct impact will significantly increase: 9.3 per cent of total exports will be at risk, especially exports to the United Kingdom, the Netherlands and Germany (which respectively account for 2.1, 2.1 and 1.7 per cent of total Thai exports). The indirect impact is estimated to be 4.7 per cent of total exports, affecting in particular exports to China, ASEAN-4, Japan, the United States, Hong Kong and Vietnam.



Per cent of total exports	Direct impact	Indirect impact	Total impact
PIIGS	1.8	1.7	3.5
EU10	9.3	4.7	14.0

^{4/} Asia refers to Taiwan, Thailand, Korea, Indonesia, the Philippines, Hong Kong and Singapore.

^{5/} ASEAN-4 consists of Malaysia, Indonesia, the Philippines and Singapore.

^{6/} Import content of exports is calculated from input-output databases of the third-party countries. Thailand's shares of imported intermediate goods in third-party countries are calculated based on goods that third-party countries import for use in production of exports. However, limited data availability restricts the calculation of indirect impact to the first-round effect in third-party countries only and does not take into account the income effect of third-party countries, if income falls, in subsequent rounds.

^{7/} This analysis features 10 countries, namely Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, the Netherlands, Sweden, and the United Kingdom.