Evaluation of projections for 2006

Monetary policy influences the economy with a lag. Within a horizon of one year, monetary policy decisions will only influence projections for employment, output and inflation to a limited extent. At the same time, Norges Bank's projections for the next few quarters play an important part in our assessments of developments in the economy and interest rate setting ahead. This box provides an evaluation of projections published by Norges Bank through 2005 and in 2006 for developments in 2006.[1]

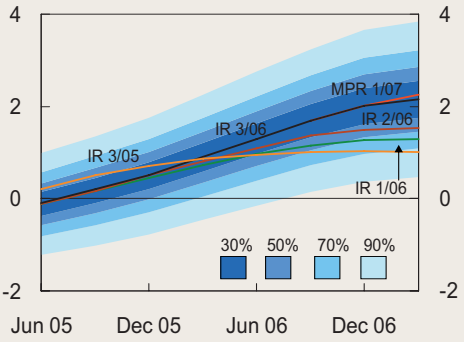
In 2006, growth in output and employment was appreciably stronger than projected. As a result, the estimate for the output gap in 2006 was revised up (see Chart 1). Consumer price inflation was 2.3% in 2006. i.e. somewhat higher than Norges Bank's projections through 2005 and up to *Inflation Report* 2/06 (see Chart 2). Consumer price inflation adjusted for tax changes and excluding energy products was lower than projected (see Chart 3). Developments in the sight deposit rate in 2006 were approximately in line with the interest rate path in *Inflation Report* 3/05.

Output gap higher than expected

Growth in mainland GDP in 2006 was substantially higher than Norges Bank's projections. The projection was revised gradually upwards from end-2005 to 4% in *Inflation Report* 3/06. Preliminary national accounts figures show annual growth of 4.6%. A number of other forecasters also underestimated growth in the mainland economy in 2006 (see Chart 4).[2] This may partly reflect the subsequent upward revision of current national accounts figures on which the projections for 2006 were based.[3]

Compared with the projections in the last *Inflation Report* in 2005, growth in all the main components of mainland GDP in 2006 was higher than expected (see Table 1). This can be partly attributed to effects from stronger-than-expected growth of a number of variables over which monetary policy has little influence, such as investment on the Norwegian continental shelf and GDP among Norway's main trading partners. Unexpectedly strong global growth may have contributed to higher-than-expected exports of traditional goods. Prices for many Norwegian export goods were also

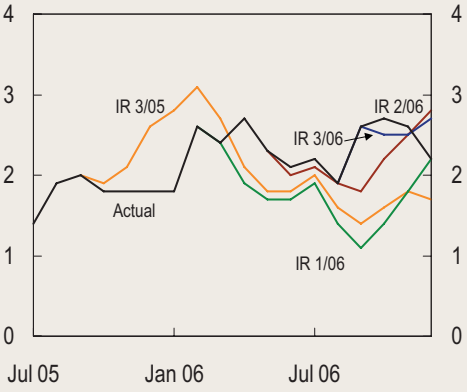
Chart 1 Estimated output gap in the baseline scenario in IR 3/06 with fan chart[1)] and estimated output gap in other reports. Per cent. Quarterly figures. 05 Q2 – 07 Q1



[1)] Uncertainty surrounding the current situation is taken into account in the calculations.

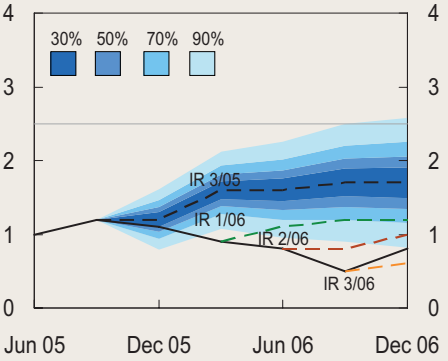
Source: Norges Bank

Chart 2 CPI. Projections in different reports and actual developments. Per cent. 12-month change. Monthly figures. Jul 05 – Dec 06



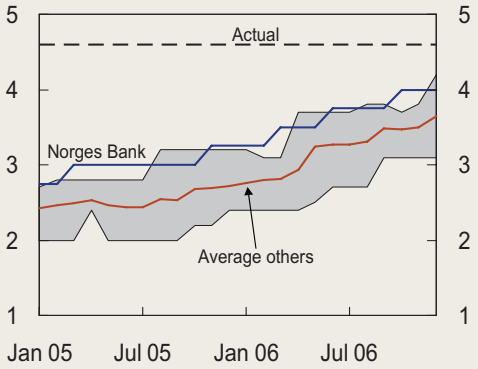
Sources: Statistics Norway and Norges Bank

Chart 3 CPI-ATE. Projections in different reports and actual developments. Fan chart from IR 3/05. Per cent. 4-quarter change. Quarterly figures. 05 Q2 – 06 Q4



Sources: Statistics Norway and Norges Bank

Chart 4 Mainland GDP. Projections for annual growth in 2006 published at different times.[1] Per cent. Monthly figures. Jan 05 – Dec 06



[1] Highest and lowest projections from forecasters other than Norges Bank are shown by the grey shaded area. The red line is an average of the other forecasters' projections.

Sources: Norges Bank and reports from the different forecasters

particularly high. At the same time, the real interest rate has for a long period been lower than what Norges Bank considers to be a normal level, and we may have underestimated the effect this has had on output and employment.

Revisions of national accounts figures have also led to an upward revision of productivity growth in recent years. At the same time, a larger supply of foreign labour has helped to increase the output potential of the economy. The overall effect has been a considerable increase in the potential output level, and potential growth has probably been higher than previously projected. The estimate for the output gap in 2006 has therefore not been revised to the same extent as the unexpectedly high growth of the mainland economy would imply.

The output gap estimate for 2006 may still be changed in the light of further revisions of national accounts figures or new assessments based on other information.

Table 1 Projections and assumptions for main economic aggregates for 2006. From *Inflation Report 1/05* to *Inflation Report 3/06*.

	IR1/05	IR2/05	IR3/05	IR1/06	IR2/06	IR3/06	Prelim. national accounts
Mainland demand	3¾	3¾	3¾	3¾	4¼	4¼	4.5
- Private consumption	3¾	3¾	3½	3¾	3½	4	4.3
- Public consumption	1½	1½	2	2½	3	2¾	2.2
- Fixed investments in mainland Norway[1]	6½	6	6	6	8	7¾	7.5
Petroleum investment	-5	-5	2½	5	5	5	9.1
Traditional exports	3½	3½	3¼	6	6¼	6½	6.5
Imports[1]	3½	3½	4½	6	6¼	6¼	8.5
GDP mainland Norway	3	3	3¼	3½	3¾	4	4.6
Potential growth in mainland Norway	2½	2½	2½	2½	2½	2½	3¼
Output gap in mainland Norway	1¼	1	1	1	1¼	1½	1½
Employment	1½	1½	1½	1¾	2¼	2¾	3.1
Labour force (LFS)	1	1	1	1	1½	1½	1.6
LFS unemployment (rate)	3½	3¾	4	3¾	3¾	3½	3.5
CPI	2	1¾	2	1¾	2¼	2¼	2.3
CPI-ATE	1¾	1½	1¾	1	¾	¾	0.8
Annual wage growth	4½	4¼	4	3¾	3¾	4	4.1
Sight deposit rate	3	2½	2¾	2¾	2¾	2¾	2.7
Exchange rate	93,1	91,1	91,0	92,8	90,3	92,5	92.5
GDP, trading partners	2¼	2¼	2½	2¾	3	3¼	3½
International price impulses	-¼	-½	0	-½	-¼	1	0.4
Oil price	49.5	59.0	60.5	62.1	68.2	64.8	64.7

[1] Excluding imports of a frigate in 2006.

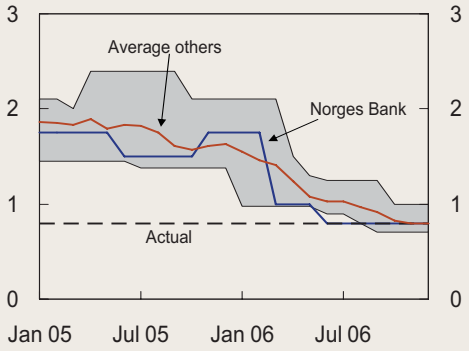
Sources: Statistics Norway, TBU and Norges Bank

Consumer price inflation higher than expected, but low underlying inflation

Consumer price inflation in 2006 was pushed up by an unexpectedly sharp rise in prices for energy products. This was due to a particularly strong rise in prices for electricity as a result of abnormally low inflows to water reservoirs through summer. The rise in prices for imported consumer goods in 2006 was broadly in line with projections. This is because the exchange rate did not deviate appreciably from the assumptions in the Reports, and movements in prices for imported consumer goods, measured in foreign currency, were approximately as projected. On the other hand, the rise in prices for domestic goods and services, adjusted for tax changes and excluding energy products, was appreciably lower than projected, even though wage growth in 2006 was approximately in line with projections. In *Inflation Report* 3/05, Norges Bank projected the rise in prices for domestically produced goods and services at about 2½%, whereas the outcome shows an annual rise in prices for domestically produced goods and services of 1.6%, when adjusting for the estimated effect of the introduction of maximum day-care rates as from 1 January 2006. As a result of the low rise in prices for domestically produced goods and services, inflation measured by the CPI-ATE was also lower than projected. A number of other forecasters overestimated the rise in the CPI-ATE for 2006 (see Chart 5).

The rise in prices adjusted for tax changes and excluding energy products was lower than expected, while growth in output and employment was surprisingly high. This may indicate that there are unforeseen factors on the supply side of the economy which influenced developments. Unexpectedly high inward labour migration eased labour shortages and contributed to growth in potential output. In many industries, unexpectedly high productivity growth also contributed to low inflation. At the same time, the slow rise in prices for imported, processed intermediate goods, and strong competition in some product markets probably curbed the rise in prices for domestically produced goods and services to a greater extent than assumed by Norges Bank.

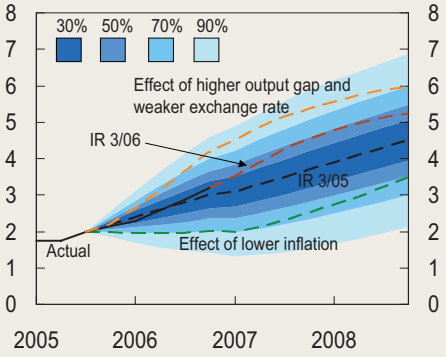
Chart 5 CPI-ATE. Projections for annual rise in 2006 published at different times.[1] Per cent. Monthly figures. Jan 05 – Dec 06



[1] Highest and lowest projections from forecasters other than Norges Bank are shown by the grey shaded area. The red line is an average of the other forecasters' projections.

Sources: Norges Bank and reports from the different forecasters

Chart 6 Key policy rate in the baseline scenario in IR 3/05 with fan chart and baseline scenario in IR 3/06 and isolated effects of higher output gap and a weaker exchange rate and of lower inflation. Per cent. Quarterly figures. 05 Q1 – 08 Q4



Source: Norges Bank