Projections and expectations

Norges Bank has announced that in future the Bank will normally make an extensive evaluation of monetary policy once a month. The Bank has published the dates for the Executive Board's main monetary policy meetings. The Bank will, as far as possible, clarify which factors we consider when decisions are taken. The purpose is to reduce the risk for market participants and avoid unnecessary speculation.

Norges Bank sets the interest rates on banks' loans and deposits in the central bank and thereby influences the level of interest rates in Norway. The objective of monetary policy, as stipulated by the authorities, is stability in the krone exchange rate against European currencies. Since the beginning of the year Norges Bank has interpreted the concept "European currencies" as the euro. However, the Bank does not have instruments to fine-tune the exchange rate. In the orientation of instruments, the Bank emphasises the fundamental conditions for exchange rate stability. Price and cost inflation must, therefore, be brought down to the corresponding aim in the euro area. At the same time, monetary policy is oriented with a view to avoiding deflationary recessions, as this would undermine confidence in the krone.

Norges Bank presents its evaluations of economic developments in the Inflation Report. We use a technical assumption concerning future interest rate developments, which is primarily based on market expectations, as indicated by forward rates. The projections indicate a path for the Norwegian economy given that interest rates move in line with these expectations. If the projections show balanced economic developments, they may support current interest rate expectations.

However, if the projections show an abrupt turnaround in the economy, with low and falling price and cost inflation, market participants may have grounds for revising their interest rate expectations. In such a situation, it would be natural for Norges Bank to reduce interest rates more rapidly than assumed in the projections. Similarly, a reduction in interest rates may be postponed if the projections show relatively high price and cost inflation in the years ahead.

Norges Bank seeks to avoid undue uncertainty concerning interest rate determination by presenting its evaluations and projections in inflation reports and other documents. The Bank's analysis is based on assumptions concerning the exchange rate, fiscal policy, international developments, oil prices and a number of other variables. Any significant deviations from these assumptions will lead to developments that differ from our current projections. The same may apply if it should become clear that the historical relationships underlying the analysis have changed. In its conduct of monetary policy, Norges Bank must take into account the effects of any deviations from the assumptions. This may in turn lead to interest rate developments that are not in line with market expectations.

Market participants' expectations form the basis for their activity in money and foreign exchange markets. However, Norges Bank cannot be bound by market expectations, but must base monetary policy measures on its professional assessment of the outlook for the economy. In its analyses and statements, the Bank will seek to explain the background for its decisions.

Svein Gjedrem

Norges Bank's inflation report

Pursuant to the Norges Bank Act, the central bank shall be the executive and advisory body for monetary, credit and exchange rate policy. The projections in the Inflation Report provide a basis for the Bank's conduct of monetary policy. The monetary policy conducted by Norges Bank shall be aimed at maintaining a stable krone exchange rate against European currencies. There are two fundamental conditions that must be fulfilled to achieve this. First, price and cost inflation must over time not exceed the corresponding aim for inflation in the euro area. Second, monetary policy must not generate deflation through a recession.

The Inflation Report provides a survey of developments in prices and factors that influence price and cost inflation. It contains an assessment of the outlook for the Norwegian economy and Norges Bank's evaluation of the outlook for price inflation for the next two years. The December Inflation Report includes a longer time horizon and highlights the challenges to the Norwegian economy over a period of 4-5 years. The Governor summarises Norges Bank's assessment in the leader.

1 SUMMARY

2 RECENT DEVELOPMENTS
2.1 Price and wage developments
2.2 Interest rates, the exchange rate and monetary conditions
2.3 The cyclical situation

3 NORGES BANK'S INFLATION PROJECTIONS
3.1 The inflation outlook the next two years
3.2 Inflation expectations
3.3 The risks to the inflation outlook

Boxes:
- *The effect of higher oil prices on consumer price inflation*
- *Reduced uncertainty concerning the exchange rate*

4 ECONOMIC DEVELOPMENTS
4.1 Main features
4.2 The international environment and the balance of payments
4.3 Domestic demand
4.4 The labour market

Box:
- *House prices*

The cut-off date for the Inflation Report was 16 June 1999

1 Summary

Norges Bank projects that consumer price inflation will gradually slow and in the course of next year approach the inflation rate aimed at by the euro area. The annual rise in consumer prices is projected at 2¼% in 1999, 2% in 2000, and 1¾% in 2001. The projections for 2000 and 2001 have been revised upwards by a quarter percentage point compared with the March Inflation Report, reflecting a moderate upward adjustment of wage growth the next two years and slightly higher import prices. The underlying rise in prices, excluding changes in electricity prices and indirect taxes, is expected to increase by 0.1 percentage point more than the consumer price index this year. For subsequent years, underlying price inflation is expected to shadow the overall rise in consumer prices.

Growth in the Norwegian economy is now slowing, with clear evidence of a contraction in business fixed investment, primarily in manufacturing and the petroleum sector. Low product prices, high pay increases and weak productivity growth have squeezed profits in many enterprises. Mainland business investment is expected to continue to fall, and employment in manufacturing and the construction industry is declining.

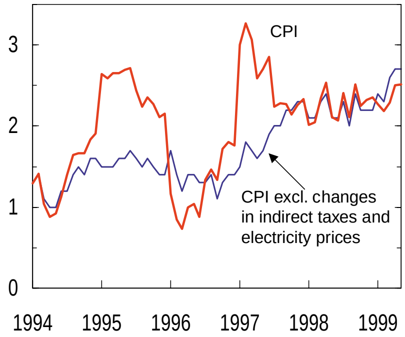
So far this year, however, house prices and household consumption have exhibited a sharp rise. Furthermore, there are signs of continued growth in the local government sector. Pressures in sectors that are not exposed to international competition are still substantial. On balance, the estimates for growth in domestic demand have been revised upwards somewhat compared with the March report. Mainland GDP growth is estimated at ¾% in 1999, ¼% in 2000 and 1¼% in 2001. The turnaround in the labour market is expected to be moderate, with unemployment projected to approach the 1996 level in 2001.

The scale of the turnaround in the economy is uncertain. Continued high growth in domestic demand may intensify pressures in parts of the labour market. This may result in stronger inflationary impulses and higher wage growth than indicated by our current estimates. Import prices may also rise by a greater margin than expected if the world economy rapidly picks up again. On the other hand, the turnaround in the business sector may be more pronounced than expected. If prices for Norwegian export goods remain low, continued weak profitability in the enterprise sector may amplify the decline in investment and increase labour shedding.

As in previous reports, the projections in this report are based on the technical assumption that interest rates remain unchanged over the next six months and then decline in line with market expectations, as measured by forward rates. It is assumed that the krone exchange rate will remain stable against European currencies.

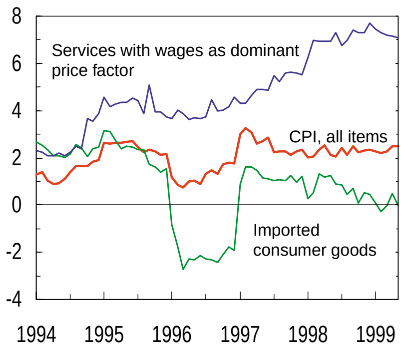
2 RECENT DEVELOPMENTS

Chart 2.1 *Consumer prices (CPI). Total and excluding indirect taxes and electricity prices. 12-month rise. Per cent*



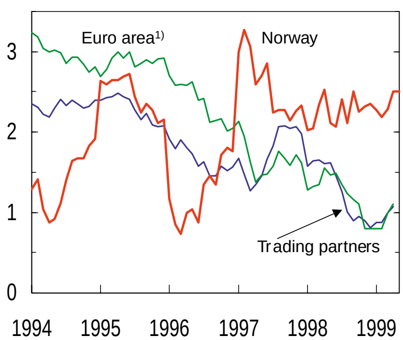
Sources: Statistics Norway and Norges Bank

Chart 2.2 *Consumer prices, all items and by supplier sector. 12-month rise. Per cent*



Source: Statistics Norway

Chart 2.3 *Consumer prices in Norway and abroad. 12-month rise. Per cent*



1) Price rise in euro countries measured by the harmonised index of consumer prices.

Sources: Statistics Norway, Eurostat and the OECD

2.1 Price and wage developments

Price inflation in line with projections

In recent months price inflation has edged up, approximately in line with projections in the March Inflation Report. In May, the year-on-year rise in the consumer price index was 2.5%, see Chart 2.1. Electricity prices have continued to fall. The underlying rise in prices, excluding changes in electricity prices and indirect taxes, has been higher than the rise in the consumer price index since the beginning of the year. In May, the underlying rise in prices was 2.7%.

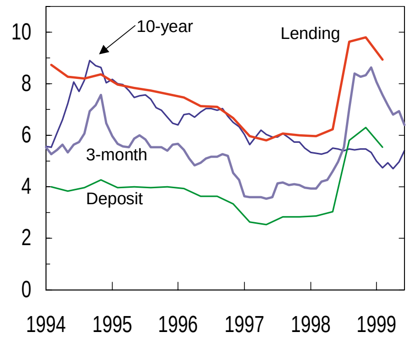
Service prices continue to push up price inflation, primarily reflecting the fairly sharp rise in the sub-index for house rents in March. Other service prices are still increasing, albeit at a slightly slower pace in recent months, see Chart 2.2.

The contribution from domestically produced goods has also been slightly higher since April. Petrol prices have risen at a faster pace than the rise in oil prices would imply, reflecting higher margins. The year-on-year rise in prices for imported consumer goods remained unchanged in May.

The rise in prices among Norway's traditional trading partners was 1.1% in April, see Chart 2.3, and the rise in prices in euro countries was also 1.1% in April, measured by the Harmonised Index of Consumer Prices (HICP). Price inflation in euro countries has edged up through the spring, primarily as a result of higher energy prices. The HICP showed a rise in prices in Norway of 2.2% in May. The planned common broadening of the coverage of the HICP is expected to bring price inflation in Norway, measured by this index, to the level of the normal CPI. The broadening of the coverage will probably not influence HICP inflation in euro countries.

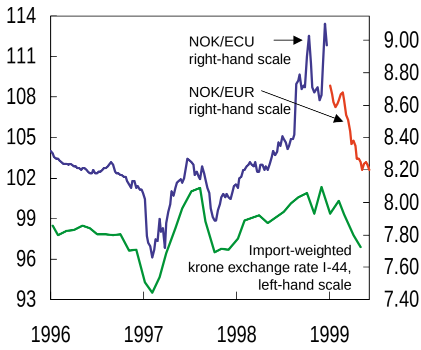
The wage settlements appear to have resulted in lower wage growth than projected in the March Inflation Report. The negotiations between the main employees' and employers' organisations gave a pay increase of NOK 1.20 to employees with an income of less than 95% of the average industrial worker's pay. This will contribute about 0.3 percentage point to total annual wage growth, which comes in addition to a carry-over of about 3%. In distributive trades, the contribution from the pay increases to annual wage growth is about 1 percentage point. This sector had a wage carry-over into 1999 of about 2%. Negotiations in the public sector also resulted in moderate pay increases. The pay increase in the local government sector will not be effective until December of this year, and will thus have little effect on wage growth in 1999. The

Chart 2.4 *Interest rate movements in Norway. Banks' average deposit and lending rates. 3-month Euro-krone interest rate and 10-year government bond yield*



Source: Norges Bank

Chart 2.5 *The NOK/ECU and NOK/EUR exchange rates and import-weighted krone exchange rate against 44 countries (January 1995=100)*



Sources: Norges Bank and Datastream

substantial carry-over of 4½% implies, however, relatively high annual wage growth in the local government sector.

2.2 Interest rates, the exchange rate and monetary conditions

Short rates down and stronger krone exchange rate

Since the March Inflation Report Norges Bank has reduced its key rates by 1 percentage point. Since the beginning of the year Norges Bank has reduced key rates on four occasions by a total of 2 percentage points. The European Central Bank has lowered its interest rate on the main refinancing operations by half a percentage point in this period.

The three-month money market rate has fallen by 0.4 percentage point since the March report, see Chart 2.4, with the nominal rate down to 6.4% on 16 June. Developments in the market for FRAs (forward rate agreements) indicate that market expectations of a sharp drop in interest rates this year have subsided compared with three months ago. Implied forward rates are also higher than in March.

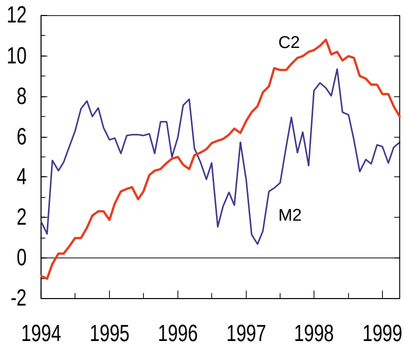
The differential between three-month rates for NOK and the euro was 3.7 percentage points on 16 June. It appears that market participants do not expect the interest rate differential against euro countries to narrow as quickly as expected in March.

In the bond market, yields fell in the first half of April. The yield on ten-year government bonds was 4.7% in mid-April. Since the beginning of May bond yields have risen substantially, and the ten-year yield was 5.4% on 16 June. The increase since May reflects higher bond yields internationally, but the differential between yields on Norwegian and German ten-year government bonds has widened somewhat and is now about 1.0 percentage point. However, this differential is influenced by the considerably higher level of short-term rates in Norway compared with Germany. The differential between forward rates ten years ahead, which are not influenced by this, is about half a percentage point. The price expectations implied by the forward rate curve are discussed further in section 3.2.

The krone exchange rate against the euro has appreciated further since the March report, from about NOK 8.50 in mid-March to a little less than 8.20 in mid-June, see Chart 2.5. The appreciation of the krone reflects the depreciation of the euro against USD and the rise in oil prices of USD 3 in the same period.

Whereas the krone appreciated against the euro and the Swedish krona since the March report, it has remained virtually unchanged against pound sterling. The krone has depreciated somewhat against the US dollar and Asian currencies. Measured by the effective import-weighted exchange rate against 44 countries, the krone was 2.5% stronger in May than

Chart 2.6 *M2 and C2. 12-month rise. Per cent*



Source: Norges Bank

in March. Euro countries have a weighting of 38% of this broadened index.

Credit growth continues to slow

Twelve-month growth in domestic credit (C2) has slowed over the last year, from a peak of almost 11% in March 1998 to 7% in April this year, see Chart 2.6. The high credit growth in 1998 primarily reflected the sharp expansion in fixed investment. The growth in corporate borrowing has been substantially higher than that of households. In recent months, however, this difference has narrowed, which underlines the contraction in investment and continued robust growth in household consumption. Foreign currency loans from domestic sources showed a sharp rise in the second half of 1998. The shift towards foreign currency loans must be seen in connection with Norges Bank's interest rate increases of a total of 4.5 percentage points last year, which made such loans more attractive. In recent months, however, the growth in foreign currency loans has levelled off. Foreign currency loans were primarily raised by enterprises.

Twelve-month growth in the money supply (M2) was about 8% in the first half of 1998, but fell markedly over the summer. Since October 1998, twelve-month growth has hovered around 5%.

2.3 The cyclical situation

High consumption growth, but stagnation in manufacturing

Activity in the Norwegian economy is now slackening. However, the picture is mixed. While there is clear evidence of a turnaround in business investment, private and public consumption are still expanding.

Household consumption has picked up after exhibiting a sluggish trend towards the end of last year. Retail sales rose by 4.3% in volume terms in the first four months of this year compared with the same period one year earlier. New car sales have been low so far this year, probably reflecting relatively high interest rates and the substantial replacement of the vehicle stock in recent years. Household purchases of cars, as measured in the quarterly national accounts, increased appreciably in the first quarter, however. This follows from the technical assumption in the national accounts that passenger cars are sold by enterprises to households after three years. The increase therefore reflects the high level of car sales in 1996. This assumption implies, in isolation, a contribution of 0.4 percentage point to private consumption growth. In the accounts, the transfer of cars to households is matched by a comparable decline in enterprises' gross investment.

Households seem to be fairly optimistic with regard to their own personal finances and the country's economy. In May, Økonomisk Rapport's consumer confidence indicator increased sharply and is now close to the level prevailing before the increases in interest rates last summer.

House prices rose sharply in the first quarter after falling in the last half of 1998. According to ECON's figures, prices for resale homes rose by 6% compared with the same quarter one year earlier, whereas figures from Statistics Norway showed a rise of close to 8% in the same period. Figures from Exact and OBOS show that house prices in Oslo continued to rise in April and May. Developments in house prices are discussed in a separate box.

The main factor behind the turnaround in the economy is the contraction in investment. The second-quarter investment intentions survey for manufacturing industry indicates a sharp fall in investment in 1999 and next year. Substantial inventories in a number of manufacturing sectors and slumping new orders further underline the weak trend in manufacturing investment this year. This is supported by the pronounced fall in imports of inputs and machinery.

Housing starts appeared to be very low in January and February. It is difficult to interpret these figures, however, as there is a substantial lag between actual and registered starts. Statistics Norway has suspended publication of these statistics until further notice

Manufacturing production began to increase again in February after falling during most of the second half of 1998. The manufacturing production index increased by a seasonally adjusted 0.8% up to end-April. According to Statistics Norway's general business tendency survey for the first quarter, an increasing number of business leaders report that weaker demand and stronger competition on the domestic market are the primary factors behind the poorer production outlook.

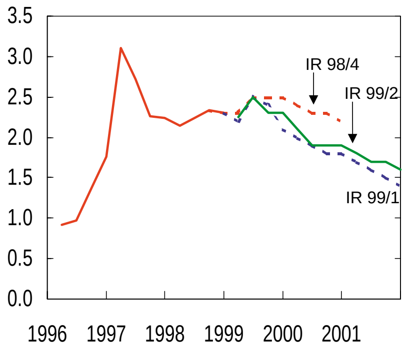
The quarterly national accounts show that traditional merchandise exports remained virtually unchanged between the fourth quarter of 1998 and the first quarter of 1999. Export prices have shown a pronounced fall so far this year, but there have been some signs of an increase in spot prices for metals in recent months.

Statistics Norway's Labour Force Survey (LFS) for the first quarter confirms that employment is stagnating. Adjusted for seasonal variations, employment fell by 6 000 between the fourth quarter of 1998 and the first quarter of 1999, primarily in the manufacturing sector. On the other hand, the health and social sector has recorded a considerable increase in employment.

Registered unemployment, adjusted for seasonal variations, has remained fairly stable so far this year. According to the Directorate of Labour, the increase in placements in short-term positions in the health and education sector has contributed to keeping unemployment at a low level. In mid-June the number of registered unemployed stood at a little more than 55 000, ie at about the same level as one year earlier. New notifications of vacancies are falling for most occupational groups, particularly in manufacturing and construction, while there is still substantial demand for labour in the public sector.

3 Norges Bank's inflation projections

Chart 3.1 *Current and earlier projections for consumer price inflation. 12-month rise. Per cent*



Sources: Statistics Norway and Norges Bank

3.1 The inflation outlook the next two years

Norges Bank projects price inflation at 2¼% in 1999, 2% in 2000, and 1¾% in 2001. The price projections for 2000 and 2001 have been revised upwards by a quarter percentage point compared with the March report, see Chart 3.1.

The upward revision is partly due to the somewhat higher forecast for aggregate demand in 1999 and the two following years. Furthermore, import prices have contributed to the higher projection for consumer prices in the period ahead. In the March Inflation Report, the krone was expected to appreciate towards the end of the year, contributing to a marked fall in import prices next year. The appreciation has occurred earlier than assumed, which in isolation pushes up the projection for consumer price inflation next year. In addition, international producer prices are now expected to pick up at a somewhat faster pace.

The underlying rise in prices, excluding electricity prices and indirect taxes, is projected to be 0.1 percentage point higher than total consumer price inflation this year. For subsequent years, the underlying rise in consumer prices is expected to shadow the rise in the total CPI.

Table 3.1 *Technical assumptions*

	1999	2000	2001
3-month money market interest rate (annual average)1)	6.6	5.0	4.9
Exchange rate measured against euro2)	8.4	8.3	8.3
Real rise in gov't spending	1¾	2	2
Oil price NOK/barrel3)	105	113	113

1) Interest rates are assumed to remain unchanged for six months and then fall in line with market expectations as reflected in forward rates.
2) The exchange rate is assumed to be NOK 8.3 per euro from Q3. This corresponds to approx. the average for the past three months
3)The oil price is assumed to be USD 14.50 per barrel from Q3.

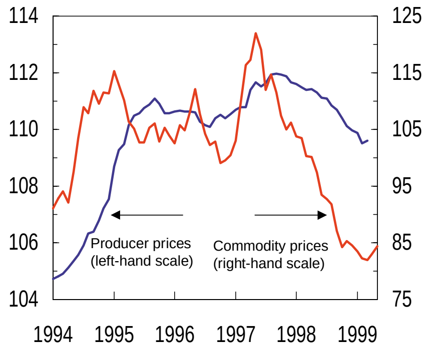
Interest rate and exchange rate assumptions

Table 3.1 shows the key technical assumptions concerning monetary and fiscal policy. Short-term interest rates are assumed to remain unchanged for a six-month period and then move in line with market expectations, as reflected in forward rates in June. This implies a narrowing of the differential against European rates from the current level of about 4 percentage points to about 1 percentage point at the end of 2001. The krone exchange rate is assumed to be NOK 8.30 against the euro, which approximately corresponds to the average exchange rate over the last three months. Measured by the effective import-weighted exchange rate, the exchange rate assumption implies an appreciation of 1¼% in 1999 and ½% in 2000.

Rise in international producer prices next year

Oil prices have shown a sharp recovery in recent months and are now at about the same level as at the beginning of last year. The rise in oil prices is primarily ascribable to the increased willingness of OPEC countries to observe produc-

Chart 3.2 *Commodity prices, all items, measured in SDRs, and trading partners' producer prices. 1990 = 100*



Sources: OECD, *The Economist* and Norges Bank

Table 3.2 *Consumer prices. Percentage change from previous year*

	1998	1999	2000
US	1.6	2	2¼
Japan	0.6	-½	-¼
Germany	0.9	¾	1½
France	0.7	¾	1¼
UK	2.7	2¼	2½
Sweden	0.4	½	1¼
Finland	1.4	1	1¾
Denmark	1.8	2	2
Norway's trading partners[1)]	1.3	1¼	1½
Euro area[2)]	1.2	1	1½

1) Weighted by competitiveness weights
2) Eurostat weights (country's share of euro area's consumption)

Sources: OECD and Norges Bank

tion quotas compared with the previous agreement, and some reduction in oil stocks since the end of last year.

Spot prices for aluminium also showed a sharp rise in the period, but have since edged back. The international economic environment points to a subdued rise in total demand for commodities and energy this year. It is therefore assumed that commodity prices, excluding oil, will stabilise in the short run and edge up next year. The price for crude oil is put at USD 14.50 a barrel, which is about the same as the average of the last three months.

Producer prices among trading partners have continued to fall, see Chart 3.2. In the first quarter prices were 1.6% below the level one year earlier, and the effect of the fall in commodity prices has probably not been fully exhausted. Producer prices are therefore expected to decline by ¾% in 1999 and increase by ¾% next year. The rise in consumer prices is also likely to be somewhat higher as the effect of higher oil prices feeds through. Consumer price inflation among trading partners is still expected to remain below 2% throughout the projection period, see Table 3.2.

Import prices are projected to fall by ¾% in 1999 and rise by ¼% next year. The estimate for import prices in NOK has been adjusted downwards for 1999 and upwards for 2000 compared with the March report. This must be seen against the background of the faster-than-expected appreciation of the krone compared with the technical assumption in March.

Gradual moderation in wage growth the next few years

Annual wage growth is projected at 4¾% in 1999, ie lower than the March estimate. The main reason for the downward adjustment is that the wage settlements resulted in somewhat lower pay increases than expected. There is some uncertainty associated with wage drift through the year. The projection for annual wage growth this year is based on wage drift in line with the level last year. Wage drift may remain high if the labour market continues to be tight, particularly in the sheltered sector of the economy.

Wage growth is still expected to edge down in 2000 and 2001, although the estimates have been revised upwards somewhat compared with the March report. The projections for wage growth in the period ahead are based on the histori-cal information on wage formation as embodied in the RIMINI model. Labour market pressures are a significant factor for wage growth. It appears that the model overpredicts wage growth this year. Experience shows that low pay increases one year will to some extent be compensated for in subsequent years. On the basis of a neutral use of the RIMINI model, wage growth is estimated at 4% in 2000 and 3¾% in 2001.

The effect of higher oil prices on consumer price inflation

Since 1997 falling oil prices have contributed to lower price inflation among trading partners. Oil prices have increased by 50% since the beginning of 1999. Earlier, higher oil prices have often been followed by rising consumer price inflation.

Higher oil prices have a direct impact on consumer prices as a result of increased prices for petroleum products that are included in the CPI. The feed-through from higher crude oil prices to petroleum product prices varies across countries. In countries with proportional or low taxes on petroleum products, the effect will generally be greater than in countries with high volume taxes. Developments in profit margins for the production and distribution of petroleum products will also have an impact. In addition, the weighting of petroleum products in the CPI varies among countries.

An increase in oil prices will also have indirect effects on consumer prices. Oil and petroleum products represent important factor inputs in the production of different goods. Rising price inflation as a result of an increase in oil prices may also prove to be self-reinforcing.

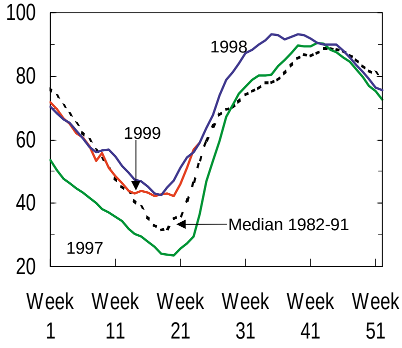
In Norway and Sweden petroleum products account for about 4% of the CPI. The increase in petroleum product prices therefore has to be fairly substantial before the total CPI shows a significant increase. In the US and the euro area this component accounts for a larger share. For example, evidence suggests that electricity prices in the US and several euro countries are heavily influenced by oil prices.

The level of taxes on petroleum products weakens the relationship between oil prices and the CPI. It is only in the US that these taxes do not constitute a substantial element in the consumer price. In European countries volume taxes account for a large share of the retail petrol price, which is the most important oil component in the CPI. As a result, the effect of changes in oil prices on the retail price is fairly modest. Total taxes account for about 75-90% of the retail price. This implies that the petrol price from the refinery must increase by 40-100% for the retail price to increase by 10%.

The rise in crude oil prices this year primarily reflects expectations that OPEC’s supply-side measures will be effective, and at the same time prices for other commodities have not risen by the same margin. The Bank of England estimates that the 20% rise in oil prices in March will only have a limited impact in the UK. In the US, JP Morgan estimates that a rise in oil prices of USD 1 a barrel contributes to a 1% increase in energy prices. The rise in oil prices this spring will then have contributed to increasing the CPI in the US by about G%.

Petrol prices in Norway have increased by about 3.9% so far this year. This alone has pushed up consumer price inflation by 0.16 percentage point. The increase partly reflects higher oil prices, but is probably also influenced by the end to the petrol price war of last year. As taxes account for about 80% of the current petrol price, a rise in the price of crude oil is likely to have a moderate effect on consumer price inflation in Norway. The effects on consumer price inflation will therefore primarily operate through indirect channels, such as a possible increase in prices for imported goods.

Chart 3.3 *Water reservoir levels. Weekly figures*



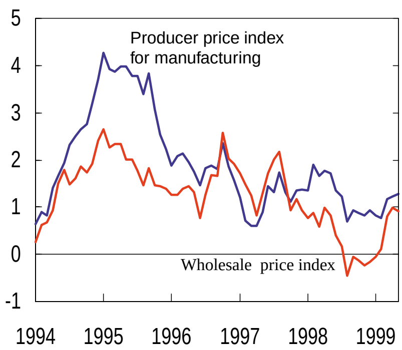
Source: Statistics Norway

Table 3.3 *Various institutions' projections for consumer price inflation in Norway in 1999 and 2000* [1]. *Percentage change from previous year*

	1999	2000
Ministry of Finance	2.4	2.0
Statistics Norway	2.5	2.1
OECD [2]	2.6	2.3
IMF	2.3	2.5
Consensus Forecasts[3]		
Highest estimate	2.5	2.4
Average	2.4	2.1
Lowest estimate	2.3	2.0

1) Latest official projections from the various institutions.
2) Consumption deflator
3) June 1999

Chart 3.4 *Wholesale and producer prices. 12-month rise. Per cent*



Source: Statistics Norway

House rents push up inflation this year

The sub-index for house rents increased by 2.1% in March compared with the previous three-month period. This was the highest quarterly rise recorded since the beginning of the 1990s. The house rent index, which accounts for 13% of the CPI, was 3.1% higher in March than one year earlier. According to Statistics Norway, the main reasons behind this sharp rise in the index are higher interest expenses and the marked increase in local government taxes. Fees for local government household services rose by 9.4% in the year to January 1999. The fees increase must be seen in the light of the sharp growth in wages in the local government sector last year. In view of the marked increase in the first quarter, house rents are now expected to rise at a somewhat faster pace than the CPI this year, thereby pushing up price inflation. In the years ahead, house rents may have a dampening impact on the CPI as interest rates are assumed to fall.

Electricity prices will contribute to reducing inflation again this year

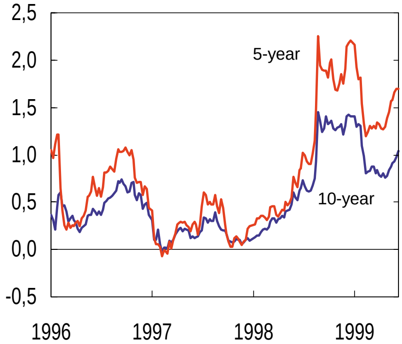
Electricity prices have fallen by a slightly greater margin than assumed in the March report. The drop in electricity prices has been fairly substantial in spite of virtually unchanged reservoir levels compared with one year earlier, see Chart 3.3. It appears that the price effects of increased competition in the power market have been stronger than expected. Electricity prices will probably contribute to reducing consumer price inflation by an estimated 0.1 percentage point this year, but the contribution is slightly weaker than last year. Towards the end of 1999 and later in the projection period electricity prices are not projected to make any substantial contribution to the CPI.

3.2 Inflation expectations

Consensus Forecast's May projections for the Norwegian economy show that a selection of market observers expect consumer prices to rise by an average 2.4% in 1999 and 2.1% in 2000, see Table 3.3. The forecasts have been revised downwards since March, but are still slightly higher than Norges Bank's projections. The same observers expect a somewhat less pronounced turnaround in the economy than indicated by our projections. The average estimate for GDP growth in the mainland economy is 0.9% in 2000.

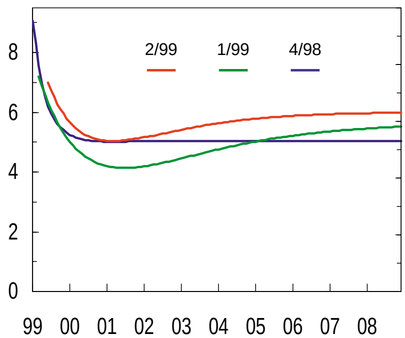
Producer and wholesale price developments can provide an indication of the future rise in consumer prices. Producer prices reflect the low level of commodity prices. Producer prices in manufacturing rose by 1.3% in May compared with one year earlier, see Chart 3.4. The wholesale price index has edged up in recent months, albeit moderately. In May these prices were 0.9% higher than in the same month one year earlier.

Chart 3.5 *Yield differential, NOK - DEM, for 5- and 10-year government bonds. Effective yields. Weekly figures (Week 1 1996 - Week 22 1999)*



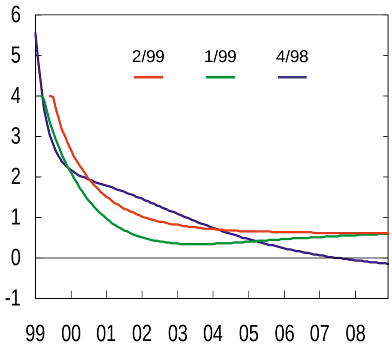
Source: Norges Bank

Chart 3.6 *Implied Norwegian forward rates. Expected short-term rates. Per cent*



Source: Norges Bank

Chart 3.7 *Differential between expected short-term rate in Norway and Germany. Percentage points*



Source: Norges Bank

Information about market participants' price and interest rate expectations is also provided by the yield curve in money and bond markets. Observed interest rates cannot, however, be directly interpreted as expected interest rates because the yield on a ten-year bond depends on expected short rates during the entire ten-year period until the bond matures. Chart 3.5 shows the yield differential between Norwegian and German ten-year government bonds. The relatively wide differential the past year primarily reflects the substantial difference between short rates in Norway and Germany.

This effect is eliminated by calculating implied forward rates. The forward rate curve in Chart 3.6 is to some extent an estimate of expected developments in short-term rates. The chart shows that forward rates have risen since the March report. The increase in forward rates the next few years probably reflects expectations of further interest rate reductions at a later stage than previously assumed. This may point to market expectations of slightly improved prospects for the Norwegian economy in the years ahead compared with three months ago.

Chart 3.7 shows that the change in Norwegian forward rates is also reflected in a change in the forward rate differential against German rates. Compared with the March report, the interest rate differential is expected to remain higher in the years ahead. It is unlikely that a higher risk premium is behind the wider forward rate differential. The estimated volatility of the exchange rate indicates that the krone is expected to show smaller fluctuations against the euro than in the March report, see separate box. In isolation, this implies a lower risk premium on NOK.

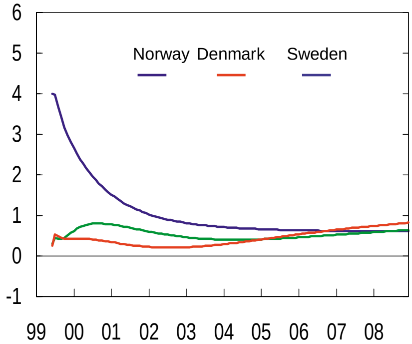
The forward rate differential against Germany is approaching the level in March in the long term. Chart 3.7 shows that the estimated forward rate differential ten years ahead is unchanged at about 0.5 percentage point. Adjusted for risk premia, this may suggest that market participants expect about the same rise in prices in Norway as in euro countries in the long term.

Chart 3.8 shows a comparison of Scandinavian forward rate differentials against Germany. The chart illustrates that interest rates in Sweden and Denmark are now lower than in Norway, but that this difference will narrow over time. In the long term Norway has about the same forward rate differential as Sweden and Denmark.

3.3 The risks to the inflation outlook

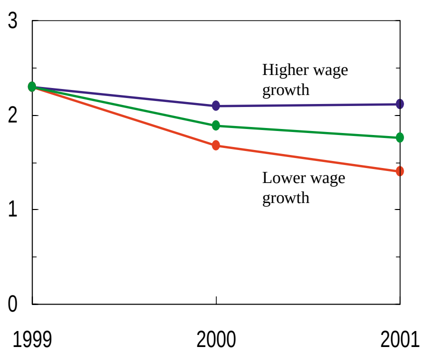
The projections in this report indicate that consumer price inflation will be reduced to 2% next year and gradually approach the inflation rate aimed at by euro countries. The estimates are deemed to represent the most likely path, given key assumptions concerning interest rates, the exchange rate and fiscal policy. However, there is considerable uncertainty associated with the estimates. Normally, the risks to the outlook

Chart 3.8 *Forward rate differentials against Germany. 16 June 1999. Percentage points*



Source: Norges Bank

Chart 3.9 *Average annual consumer price inflation with wage growth in 2000 and 2001 one percentage point higher and lower than in the baseline scenario.*



Source: Norges Bank

are fairly symmetrical. This implies that the probability of a significantly different outcome is almost evenly distributed on the upside and downside. In some cases, however, the risks may be asymmetrical. This section takes a closer look at the risks that are considered to be of particular importance to price developments.

Uncertainty associated with domestic price components

The domestic components of the consumer price index are heavily influenced by wage developments. In the baseline scenario, wage growth slows through 1999 and next year, primarily reflecting reduced profitability in parts of the business sector and declining demand for labour. The scale and the timing of the turnaround are uncertain, however.

The uncertainty associated with the wage estimate is partly related to developments in domestic demand. The household saving ratio is expected to fall this year. Demographic conditions and the experience of the end-1980s suggest an unchanged or rising saving ratio. On the other hand, in recent years the household sector has accumulated considerable financial reserves that can be used to sustain some growth in consumption in spite of lower income growth. This may result in a steeper fall in the saving ratio than projected.

It has previously proved difficult to capture changes in corporate investment behaviour in response to cyclical turnarounds. Although, historically, investment has often shown sudden and substantial shifts, this is rarely fully reflected in the estimates based on econometric models.

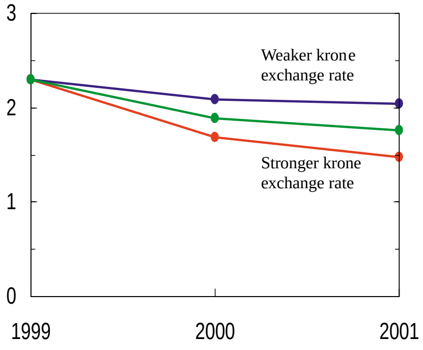
Developments in public expenditure are of significance to developments in the labour market and thereby wage growth. The estimates are based on the assumption of a neutral fiscal stance in the years ahead.

Chart 3.9 illustrates the effect of a 1 percentage point change in wage growth on consumer price inflation in 2000 and 2001 compared with the baseline scenario. The chart shows that this will result in a change in price inflation of 0.2 percentage point in 2000 and 0.4 percentage point in 2001.

Uncertainty associated with import prices

In recent reports we have emphasised that the rise in prices for imported consumer goods has generally been lower than expected the last two years, and this has had a dampening effect on overall price inflation. Prices for a number of commodities are now near the trough recorded in 1986 and 1992-1993. The experience of these periods indicates that commodity prices and international producer prices may rise quickly and by a fairly substantial margin if growth in the world economy rapidly picks up again. If this occurs, the rise in Norwegian import prices

Chart 3.10 *Average annual consumer price inflation with exchange rate from Q1 2000 2.5% stronger and weaker than in the baseline scenario*



Source: Norges Bank

may be higher than we have assumed. We have already seen a sharp rise in oil prices and some rise in metal prices.

On the other hand, an increase in the global supply may be an important factor behind the drop in commodity prices rather than sluggish demand in the wake of the Asian crisis. The supply has increased as a result of technological advances. This may have resulted in a sustained fall in commodity prices. A turnaround in the US economy would probably also have a negative effect on commodity prices. On balance, however, the probability of a sharp rise in commodity prices, excluding oil, is considered to be greater than a comparable fall.

The appreciation of the krone in recent months will contribute to pushing down the rise in prices for imported goods in NOK through the remainder of the year. Over the last year the exchange rate has fluctuated more widely than earlier in the 1990s. This has contributed to changes in imported price inflation from one year to the next. Chart 3.10 illustrates the price effects of a 2.5% change in the exchange rate from the first quarter of 2000. A change of 2.5% in the exchange rate will change price inflation by 0.2 percentage point in 2000 and 0.3 percentage point in 2001.

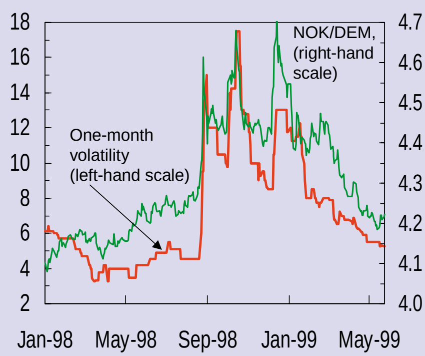
It is possible that models based on historical relationships overestimate the effect of changes in the exchange rate on import prices. When importers take into account that the exchange rate has fluctuated more widely than previously, they may allow fluctuations in the exchange rate to affect margins in the short term. In that case, short-term fluctuations in the exchange rate may have a smaller impact on consumer prices than previously.

Reduced uncertainty concerning the exchange rate

Analyses of currency option prices allow us to quantify how market participants evaluate the uncertainty associated with future exchange rate changes and any asymmetry in the uncertainty.

Both put and call options are found in the foreign exchange market. A call option in currency is a contract that confers on one party the right, but not the obligation, to buy the currency at a fixed price or at a designated future date. As payment for this right, a price must be paid to the option writer. The option writer is under the obligation to sell the currency if the buyer wishes to exercise his right to buy. A put option in currency is a contract whereby the buyer of the option has the contractual right, but not the obligation, to

Chart 1. *Percentage change in one-month implied velocity and changes in NOK/DEM. A higher value denotes a weaker krone exchange rate*



Sources: Citibank and Norges Bank

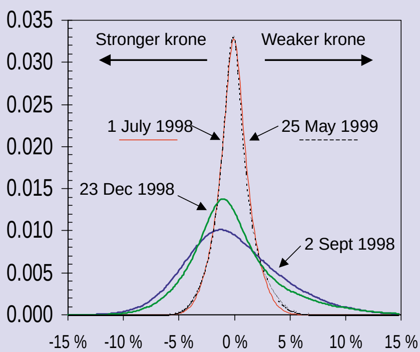
sell the currency at a fixed price.

The price of a currency option increases in step with the uncertainty concerning future exchange rate movements. In the market, the price of currency options is quoted in terms of their implied volatility, which reflects market participants' estimates of the uncertainty (measured by standard deviation) of the exchange rate. Chart 1 shows developments in one-month implied volatility and changes in the krone exchange rate against DEM. One-month implied volatility reflects market uncertainty concerning the exchange rate one month ahead.

As illustrated, the exchange rate covaries with implied volatility. One-month implied volatility rose sharply towards the end of August 1998, coinciding with the onset of international financial turbulence following the financial collapse in Russia. The uncertainty peaked in the second half of October 1998. Up to the end of May this year the implied volatility of the krone exchange rate showed a marked decrease.

By combining various currency options, market operators can hedge against different types of outcomes. For example, if market participants perceive a sharp depreciation of the exchange rate to be more likely than a comparable appreciation, the call option tends to have a higher price than a corresponding put option. On the basis of the prices for various currency options, we can calculate the implied probability distribution for the krone exchange rate.

Chart 2. *Implied probability functions for NOK/DEM*



The horizontal scale measures change in exercise price relative to forward rate. Positive values denote depreciation of the krone exchange rate as an annualised percentage.

Sources: Citibank and Norges Bank

Chart 2 shows the estimated probability distributions for the Norwegian krone on various days in 1998 and in 1999. The vertical axis in the chart measures the density of the probability distribution. The horizontal axis measures the changes in the exchange rate in relation to the forward rate. As illustrated in the chart, the probability distribution at the beginning of July 1998 was relatively narrow and symmetrical. This indicates that market participants perceived the uncertainty as fairly limited, and the probability of an appreciation or a depreciation was considered to be virtually the same.

During the autumn of last year there was considerable turbulence in the foreign exchange market. The chart shows that the uncertainty concerning the exchange rate intensified, with the probability distribution becoming flatter. This means that market participants considered significant changes in the exchange rate to be increasingly probable. Furthermore, the probability distribution became skewed, with a long tail towards the right. This means that on 2 September and 23 December market participants believed that the probability of a substantial depreciation of the krone was greater than a comparable appreciation, measured in relation to the forward rate for NOK. This may be one of the reasons why the foreign exchange market demanded a high risk premium, measured by the interest rate differential against DEM, in order to maintain their krone positions.

So far this year, both the volatility and skewness of expectations concerning future changes in the krone exchange rate have declined substantially. We see that the probability distribution on 25 May 1999 is virtually the same as the distribution on 1 July last year. The uncertainty concerning the krone exchange rate was therefore about the same as it was before the depreciation of the krone in autumn 1998.

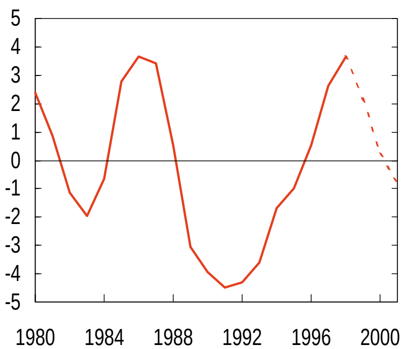
4 Economic developments

Table 4.1 *Key aggregates for Norway, 1999-2001. Percentage change from previous year unless otherwise indicated*

	1999	2000	2001
Mainland demand	¾	1	1½
Private	3	2	½
consumption	1¾	2¼	2
Public	-7	-3¾	2
consumption			-¼
Fixed investment			
Traditional	1¾	3¾	6½
exports	-¼	0	4
Traditional imports GDP	1¼	3	1½
Mainland GDP	¾	¼	1¼
Employment	¼	-¾	-½
Unemployment, LFS	3½	4	4½
Consumer prices	2¼	2	3¼
Annual wages	4¾	4	3¾

Source: Norges Bank

Chart 4.1 *Output gap. Differential between actual and trend GDP for mainland Norway. Per cent*



Source: Norges Bank

4.1 Main features

Following six years of expansion the Norwegian economy is now experiencing a period of sluggish growth. Mainland GDP is forecast to increase by ¾% in 1999, ¼% in 2000, and 1¼% in 2001. Since the March report, the estimate for GDP growth has been adjusted upwards by half a percentage point for these three years. In 1998, mainland GDP growth was substantially higher than the trend rate of growth, as was the case towards the end of the previous upturn in the 1980s, see Chart 4.1. Slower growth rates this year and next will bring the economy closely in line with the trend level. However, we do not expect a deep recession with substantial slack as was the case around 1990.

Continued solid growth in household consumption will contribute to moderating the cyclical turnaround this year. The brisk rise in house prices is contributing to sustaining the increase in housing wealth, and experience indicates that this results in higher consumption. Moreover, it would appear that households are fairly optimistic with regard to the outlook for their own financial situation, partly reflecting expectations of lower interest rates the next few years. Consumption is projected to expand by about 2% annually, in pace with the growth in household income. The saving ratio will thus remain relatively stable from 1999 to 2001 after moving down this year.

The main factor behind lower economic growth is the contraction in fixed investment, which is being driven by weaker profitability in the business sector. A sharp rise in domestic costs and low international commodity prices are having a negative impact on profitability in many manufacturing enterprises. This will be amplified by a sharp fall in petroleum investment, which is having negative spillover effects on mainland suppliers. Mainland business fixed investment is expected to fall by 8½ % in 1999 and by a further 7½% in 2000.

Employment growth has stagnated this year, although there are wide variations among industries. Employment in manufacturing and construction has started to fall, and is expected to continue declining next year. Growth in public and private consumption, on the other hand, will probably continue to push up the demand for labour in the local government sector, service industries and distributive trades.

During the expansion in the 1990s the supply of labour has shown substantial growth, with labour force participation rates at an historically high level at the end of 1998. Of the increase in employment, around two of three persons have come from the labour force. The flexibility in the supply of labour is expected to be high even when economic activity slows. For example, it is likely that many workers from Finland and Sweden will return to their home country as growth picks up in these countries. The experience of the recession around 1990 also suggests that enrolment in higher education varies in response to cyclical conditions. A moderate decline in employment in the years ahead will therefore result in a levelling off in the labour force, which will restrain the rise in unemployment. Unemployment is projected to rise moderately, from 3½% in 1999 to 4½% in 2001.

During the last years of the cyclical upturn, productivity growth has been low, particularly in manufacturing. This primarily reflected the high level of activity. Productivity growth is also assumed to be fairly low this year. In line with previous experience, productivity is expected to pick up to a more normal level again in the years ahead, which will contribute to restraining the rise in production costs and consumer prices.

4.2 The international environment and the balance of payments

The outlook for the international economy remains broadly unchanged in relation to the March report. There is evidence of some growth in production in several of the crisis-hit countries in Asia. GDP growth in the US is set to remain at the same level as last year, reflecting the brisk growth in domestic demand in the first six months. Domestic demand growth is expected to slow in the second half of 1999, which will lead to considerably slower GDP growth next year. However, there is substantial uncertainty associated with these developments. The US economy has continued to expand over the last 3-4 years without signs of higher price and cost inflation. This situation may continue although capacity constraints or lower private demand could result in a sharper reduction in growth than we have assumed.

The situation in Europe is mixed. Countries such as Ireland, Spain, Portugal and Finland are experiencing a sharp expansion, whereas sluggish trends in exports and domestic demand in Germany and Italy are restraining growth in the region this year. Domestic demand is expected to pick up in these countries next year. In spite of unexpectedly high growth in the first quarter in Japan, GDP is estimated to fall both in 1999 and 2000. Overall growth among trading partners is estimated to slow in 1999, but pick up next year.

[Chart 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8]

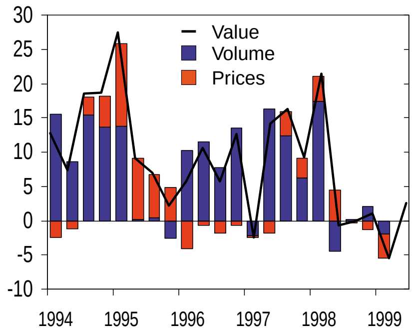
Table 4.2 *GDP estimates. Percentage change from previous year*

	1998	1999	2000
US	3.9	3¾	2¼
Japan	-2.8	-¼	-¾
Germany	2.3	1½	2½
France	3.2	2¼	2½
UK	2.1	¾	1 ¾
Sweden	2.6	2½	3
Finland	4.7	3¼	3½
Denmark	2.9	1½	2
Norway's trading partners[1]	2.7	2	2¼
Euro area[2]	2.8	2	2½

[1] Weighted by export weights
[2] Weighted by the IMF's GDP weights corrected for purchasing power

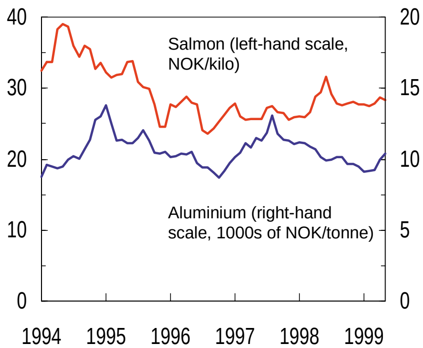
Sources: OECD and Norges Bank

Chart 4.2 *Traditional merchandise exports according to* External Trade Statistics. *Volume, price and value. % rise on same quarter previous year*



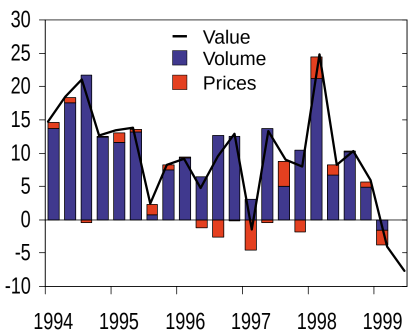
The last observation for rise in value is average value so far in Q2 compared with the same period last year.
Source: Statistics Norway

Chart 4.3 *Prices for aluminium and salmon. In NOK*



Sources: Statistics Norway and the *Financial Times*

Chart 4.4 *Traditional merchandise imports according to* External Trade Statistics. *Volume, price and value. % rise on same quarter previous year*



The last observation for rise in value is average value so far in Q2 compared with the same period last year.
Source: Statistics Norway

Developments in recent months indicate that profitability in the Norwegian export industry is feeling the pressure of high domestic costs and low prices as a result of the contagion effects of the Asian crisis. In the year to the first quarter of 1999 the volume of traditional merchandise exports declined by 2.0%, see Chart 4.2. According to Statistics Norway's general business tendency survey, new foreign orders are expected to show some improvement after a weaker-than-expected trend in the first quarter. With the prospect of slower growth among our trading partners, traditional merchandise exports will move on a sluggish trend in 1999 and 2000, with slightly weaker growth this year than projected in the March report. As international growth picks up and domestic cost inflation edges down, traditional merchandise exports are expected to show stronger growth.

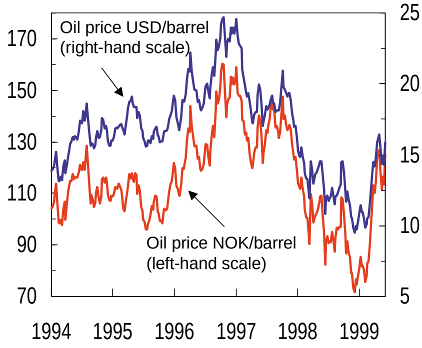
According to the quarterly national accounts, prices for traditional export goods fell by 3.5% in the year to the first quarter of 1999. The drop in prices partly reflects the sharp decline in commodity prices since August 1997. Some lag for commodity prices will influence export prices for the raw material component of exports from the mainland also in 1999. However, prices for a number of important export goods, such as aluminium, have increased since March, see Chart 4.3. In view of the developments in production capacity and demand, prices are not expected to show a further rise this year, but to stabilise at the current level. The annual average for commodity prices will be slightly lower than last year. Processed export goods are therefore set to show a very moderate price rise.

On balance, prices for traditional export goods are expected to decline by 2½% in 1999, ie a slightly sharper fall in prices than projected in the March report. The levelling off in commodity prices, excluding oil, and signs of a rebound nevertheless indicate that the trough has been passed. The outlook for these prices has therefore been revised upwards in this report. Commodity prices, excluding oil, are expected to edge up next year, resulting in a more positive trend for export prices.

The value of traditional merchandise imports fell by 5.5% in the first five months of 1999 compared with the same period one year earlier. Imports of consumer goods, excluding passenger cars, continue to expand, whereas imports of typical capital goods, such as machinery and inputs, have fallen. For the year as a whole, the volume of traditional merchandise imports is expected to decline by ¼%. Imports are projected to remain virtually unchanged next year, partly reflecting the continued fall in investment. Import growth is expected to pick up from 2001.

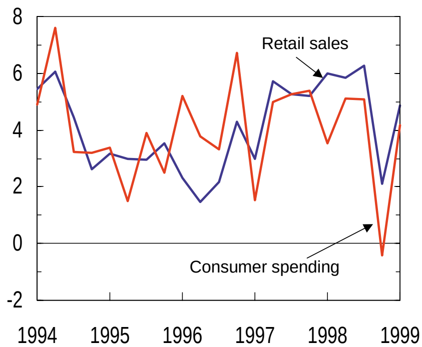
Oil prices are assumed to be USD 14.50 a barrel from the second half of this year to the end of the projection period. Norwegian production is estimated to rise by about 5% in

Chart 4.5 *Oil prices in NOK and USD*



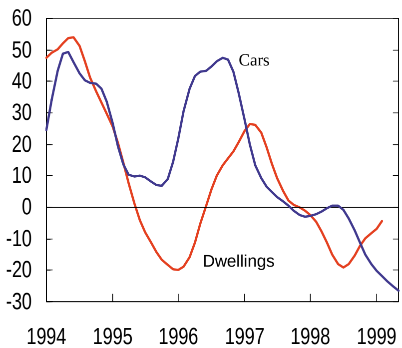
Source: Norges Bank

Chart 4.6 *Consumer spending and retail sales. Per cent*



Source: Statistics Norway

Chart 4.7 *New car registrations and housing starts. Smoothed. 12-month growth. Per cent*



Source: Statistics Norway

1999 and at a much faster pace next year. The sharp increase next year reflects the start-up of production in several large fields in the second half of 1999, which will then be producing at full capacity. The higher oil price estimate implies that the current account will show a small surplus this year. In subsequent years the rise in oil production will contribute to a further increase in the current account surplus.

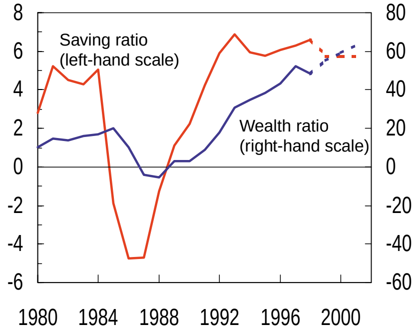
4.3 Domestic demand

Consumption contributes to moderating the cyclical downturn

Retail sales rose substantially in the first quarter after falling at the end of 1998. In the period to end-April retail sales were 4.3% higher than in the same period in 1998. However, in the first five months of 1999 new car sales declined by over 15% compared with the same period one year earlier, see Chart 4.7. The low car sales probably reflect relatively high interest rates, since car purchases are often financed with short-term credit. At the same time, sales of private cars have been high in recent years, reducing the need for households to replace cars. According to the national accounts, however, household spending on cars increased sharply in the first quarter. This is because of the technical assumption in the national accounts that cars registered in the business sector are sold to households after three years. The rise in the first quarter reflects the sharp increase in sales of new cars in 1996. This accounting practice has the effect of pushing up growth in consumption by about 0.4 percentage point in 1999, with a corresponding reduction in enterprises' investment.

Household income growth appears to be somewhat lower in 1999 than previously estimated, mainly as a result of lower wage growth. In isolation, this will reduce growth in consumption. On the other hand, the estimate for house prices has been revised upwards. Experience indicates that higher house prices will push up household consumption. Growth in household financial wealth was relatively weak in 1998. Turbulence in international financial markets and interest rate increases in autumn 1998 led to a substantial fall in the market value of securities. As a percentage of disposable income, net assets declined from over 54% at end-1997 to just over 50% at end-1998. So far in 1999, the Oslo Stock Exchange all-share index has risen by over 25%, indicating that households may again record valuation gains in 1999. The consumer confidence indicator in Økonomisk Rapport shows that households are very optimistic about the outlook for their own financial situation. Against this background, the estimate for growth in private consumption has been revised upwards to 3% for the current year. The household saving ratio is estimated to fall from 6.6% in 1998 to 5¾% in 1999, see Chart 4.8.

Chart 4.8 *Household saving and net financial assets. Percentage of disposable income*



Sources: Statistics Norway and Norges Bank

Household income growth is projected to be moderate in 2000 and 2001. Lower wage growth and a decline in employment will depress growth in disposable income. The effect on disposable income, however, will be curbed by a decline in net debt expenses as a result of lower interest rates. Households had net interest-bearing debt, when insurance claims are excluded, of around NOK 300 billion at end-1998. Lower interest rates will thus have a positive direct effect on household income. Growth in consumption is projected at around 2% in 2000 and 2001, in line with real growth in household income. The household saving ratio is therefore expected to remain stable during these two years.

Prices for resale homes pick up again

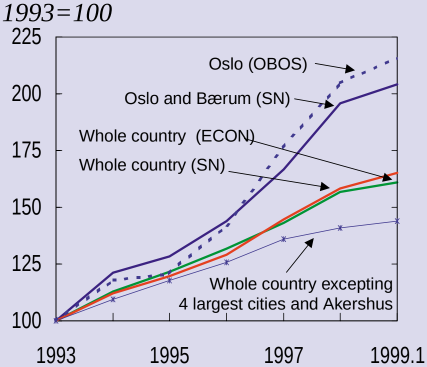
In the first quarter of 1999, resale home prices rose again after falling through the second half of 1998. The increase has been higher than expected. Figures from ECON and the Norwegian Association of Real Estate Agents indicate a 6% rise compared with the first quarter of 1998, whereas figures from Statistics Norway showed a rise of almost 8% in the same period. House price statistics for Oslo in the period to end-May show a continued rise in prices. House prices are expected to continue to rise in the second quarter, with prices increasing by an average 8% from 1998 to 1999. The reasons for the sharp rise in house prices are discussed in a separate box.

In 2000, the rise in house prices is expected to be curbed by lower household income growth. A further drop in interest rates will have the opposite effect. House prices are projected to increase by just over 2% next year and ¼% in 2001. At the end of 2001, house prices, adjusted for consumer price

House prices

Prices for resale homes have risen sharply since 1993. Following the pronounced increase in bank lending rates through 1998, resale home prices edged down in the second half of the year but have since moved up again. Preliminary figures from Statistics Norway indicate wide regional variations. Whereas house prices rose by an average 2.7% from the fourth quarter of 1998 to the first quarter of 1999, house prices increased by 4.6% in Stavanger, Bergen and Trondheim, and 3.8% in Oslo and Bærum. The price index for OBOS cooperative dwellings in Oslo showed an average rise of as much as 8% on the previous quarter. In the year to the first quarter of 1999, resale home prices rose by a total of 7.8%

Chart 1. *Price indices for existing dwellings. Annual figures and Q1 1999. 1993=100*



Sources: Statistics Norway, ECON, OBOS and Norges Bank according to Statistics Norway's index, and by 6% according to ECON's price index.

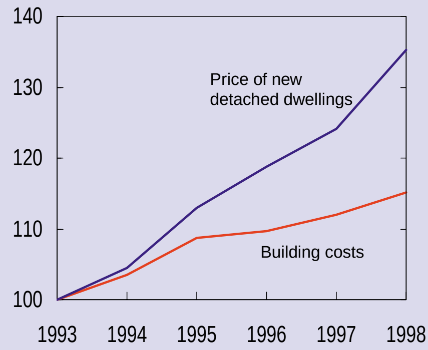
The sharp rise in house prices in recent years largely reflects developments in the real economy, especially high household income growth. The wide variations in the rise in house prices in Oslo and other parts of the country indicate that migration patterns and supply-side conditions in the housing market can help to explain part of the rise in prices in the largest urban areas. The figures available do not indicate that the rise in prices is due to excessive lending growth. Household borrowing has been in line with income growth.

- Growth in household income has been high as a result of several years of sharp employment growth and substantial increases in real wages. The financial position of households is solid after many years with high savings in financial assets. As a result, the household sector is less vulnerable to interest rate increases. The strong income growth may also explain most of the growth in loans to households. The total growth in credit to the household sector was nearly on a par with the growth in disposable income both in 1997 and 1998. Total household debt as a percentage of disposable income is still at a very low level compared with the early 1990s. It would therefore appear that the rise in house prices has not been fuelled by developments in the credit market.

- In recent years migration to the largest urban areas has been substantial, increasing the demand for housing in the largest cities. Between 1993 and the first quarter of 1999 net in-migration to Oslo came to about 20 000. Net in-migration to Akershus was approximately the same during this period. Migration to the largest urban areas is probably the main factor behind the wide differences in the rise in house prices in Oslo and other parts of the country.

- Supply-side factors in the housing market account for a share of the rise in house prices. In the 1990s residential construction has been fairly subdued compared with previous years. This may be ascribable to the substantial pressures in the construction industry, partly as a result of the large public works projects. This is also reflected in the price index for new detached dwellings, which shows a rise of 35% between 1993 and 1998. This has increased the construction costs for new dwellings, with prices for new houses remaining substantially higher than resale home prices. The building cost index has shown a smaller rise, which may indicate higher profit margins in the construction industry. This is probably ascribable to the very low level of profit margins in the early 1990s. A shortage of sites may be one reason for the low level of housing construction, particularly in Oslo. In addition, the new Building and Planning Act has sharpened building requirements and led to delays in processing building applications. This may have amplified the pressure in the resale home market.

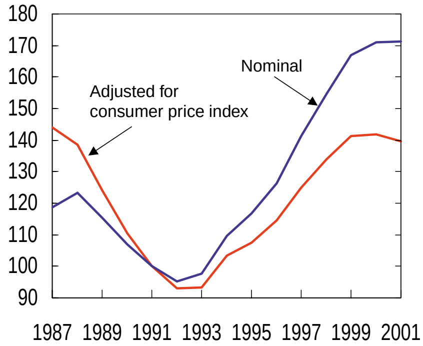
Chart 2. *Price index for new detached dwellings and building cost index for detached dwellings. 1993=100*



Sources: Statistics Norway and Norges Bank

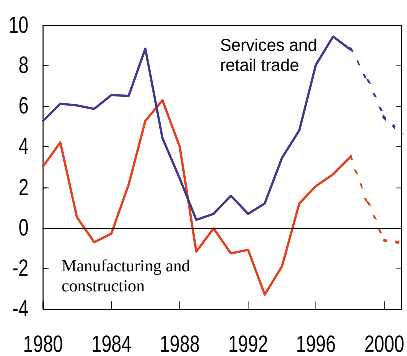
- The increase in interest rates last year did not curb the rise in house prices to the extent we had expected. This may be because households perceived the rise in rates in the second half of last year to be transitory. As house purchases represent a long-term investment, expectations of future interest rates will probably have a greater influence than actual interest rates. On the other hand, the estimates in this report suggest expectations of lower income growth in the years ahead, which should have a dampening impact on the rise in house prices.

Chart 4.9 *Resale home prices. Nominal and adjusted for the consumer price index. 1991=100*



Sources: Statistics Norway, ECON and Norges Bank

Chart 4.10 *Net fixed investment rate. Investment less capital consumption as a percentage of value added*



Sources: Statistics Norway and Norges Bank

inflation, will be approximately 2½% below the peak level in 1987, see Chart 4.9.

Housing investment expected to increase in the years ahead

Housing investment dropped by 6% compared with the first quarter of 1998 and housing starts were at a very low level in the first two months of 1999. There is a large and growing lag between actual and registered starts. It is likely, however, that the low number of housing starts reflects the interest rate increases last autumn. The order backlog for dwellings increased markedly at the end of 1998, and is expected to be followed by higher starts later in 1999. Total housing investment is projected to fall by about 5% this year, with housing starts estimated at about 18 500.

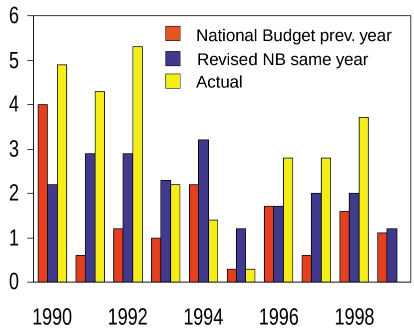
One reason for the low level of residential construction in recent years may have been limited available capacity in the construction industry. The completion of large public building projects will free up resources in the period ahead. Residential construction is also likely to be stimulated by the sharp rise in resale home prices. Housing construction is expected to pick up in the years ahead, rising to just under 20 000 dwellings in 2001. This is on a par with the average for the 1990s.

Sharp fall in business investment in 1999

Enterprises are expected to face lower earnings and higher costs in 1999 and 2000, contributing to a sharp fall in mainland fixed investment. The projected decline in investment must be viewed in connection with the strong growth in investment in the early 1990s. The investment intentions survey for the second quarter indicates a decline of over 20% in manufacturing investment. According to Statistics Norway's general business tendency survey for the first quarter, an increasing number of business leaders now report that weaker demand and intensified competition in the domestic market are the main factors for the poorer production outlook. The need for further capacity expansion has thus been eliminated. Commercial building starts have already declined, and in the first two months of the year were some 18% lower than in the same period in 1998.

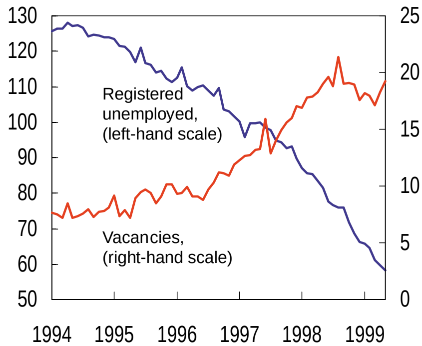
Mainland business fixed investment is estimated to fall by about 8½% this year and 7½% in 2000. This means that fixed investment as a share of value added in manufacturing and construction will be reduced to the level at the end of the 1980s, see Chart 4.10. The investment rate in distributive trades and services is expected to move down towards the average for the last 20 years. The uncertainty associated with developments in the Norwegian economy over the next few years makes it difficult to estimate the scale of the decline in investment.

Chart 4.11 *Public consumption. Estimated and actual growth. Real percentage growth*



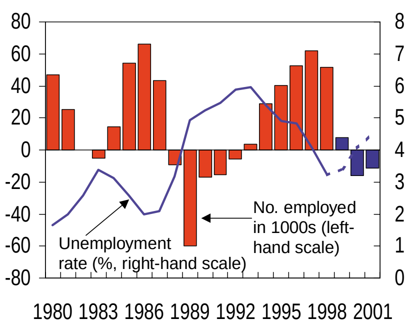
Source: Ministry of Finance

Chart 4.12 *Number of registered unemployed and vacancies, in 1000s. Seasonally adjusted*



Source: Directorate of Labour

Chart 4.13 *Change in numbers employed from previous year. LFS unemployment rate*



Sources : Statistics Norway and Norges Bank

Higher public consumption in 1999

Real underlying growth in central government budget expenditure was just under 2% in 1998, which was higher than estimated in the budget adopted in autumn 1997. Local government expenditure was also higher than estimated at the end of 1997. The high pay increases in the spring 1998 wage settlement resulted in both strong growth in direct wage expenditure and substantially higher local government pension premiums.

The Revised National Budget for 1999 entails a fiscal policy that is less tight than previously assumed. The tightening is now estimated at 0.4% of mainland GDP, measured by the non-oil, cyclically adjusted indicator net of interest payments, compared with 0.8% in the budget adopted in autumn 1998. About 0.1 percentage point of the change is due to a change in the method of calculation. Real spending growth in the budget has been revised upwards from 1¼% to 1½%.

In recent years there has been a tendency to underestimate growth in public consumption, even well into the year. In 1998, for example, growth in public consumption was revised to 3.7%, while as recently as in the National Budget for 1999 last autumn, this growth was estimated at 2.4%. Chart 4.11 compares estimates of public consumption at various times with the actual figures. Public consumption for the current year is also likely to be revised upwards. New notifications of vacancies in the health and education sector indicate strong demand for labour in the local government sector this year. If the local government sector is planning to meet the demand for municipal services based on expectations of continued strong growth in revenues, this trend may continue.

In the baseline scenario, the estimate for general government consumption in 1999 has been revised upwards to 1¾% at constant prices, while general government gross fixed investment is expected to decline by 4% from 1998 to 1999. Overall growth in general government expenditure has been revised upwards to about 1¾% in this report.

General government expenditure is projected to expand by about 2% over the next few years, on a par with trend mainland GDP growth.

4.4 The labour market

Reduced pressure in the labour market

Registered unemployment - adjusted for seasonal variations - has been relatively stable so far this year. In mid-June over 55 000 unemployed, corresponding to 2.4% of the labour force, were registered at employment offices. The public sector has accounted for a substantial share of the increase in employment this spring. According to the Directorate of Labour, this is partly attributable to increased placements in short-term positions, particularly in the health and education sectors.

Seasonally adjusted LFS unemployment increased slightly from the fourth quarter of 1998 to the first quarter of 1999. Fewer new notifications of vacancies, particularly in technical occupations, construction and manufacturing also indicate that unemployment may increase somewhat through the year. Against this background, LFS unemployment is projected at 3½%, ie the same as in the March report. Experience shows that the labour force varies in response to cyclical conditions. A levelling off of the labour force is expected to restrain the rise in unemployment to some extent in the years ahead. Unemployment is projected to reach around 4% in 2000 and 4½% in 2001.

It was pointed out in the March report that developments in the labour market this year and next will be characterised by lower demand for labour. It now looks as though the strong growth in employment we have seen in recent years is coming to a halt. LFS figures from Statistics Norway for the first quarter show that there are signs of a slight decline in employment. Seasonally adjusted employment fell by 6 000, or 0.3%, from the fourth quarter of 1998 to the first quarter of 1999.

There are wide variations between different labour market segments, however. Whereas employment in manufacturing and construction is declining, demand for labour in service industries, particularly in health and education, remains buoyant. Overall, employment is projected to expand by ¼% in 1999. Since the level of employment at the beginning of the year was higher than in 1998, this estimate implies approximately unchanged overall employment through the year. Next year, employment is expected to fall by close to ¾%, ie the same estimate as in the previous report.

The strong growth in the labour force is tapering off. Adjusted for seasonal variations, the labour force remained roughly unchanged from the fourth quarter of 1998 to the first quarter of 1999. Following several years of strong growth in the labour force, there is probably little potential for a further increase in the supply of labour. Labour market reforms such as early retirement schemes, the competence reform and cash grants to families with small children are factors that may, in isolation, point to a reduced labour supply in the years ahead. In addition, declining demand for labour may contribute to a levelling off of the labour force over the next two years. There are many workers from other Nordic countries in the construction sector, service industries and the health sector. Lower employment growth in Norway may prompt a number of these workers to return to their home countries. All in all, we expect the labour force to increase by ½ % in 1999, or approximately 10 000, but to remain unchanged in 2000.

MAIN MACROECONOMIC AGGREGATES

	NOKbn (1996 prices)	*Percentage change from previous year, unless otherwise indicated*			
	1998	1998	1999	2000	2001
Real economy					
Private consumption	524.2	3.1	3	2	2
Public consumption	220.5	3.7	1¾	2¼	2
Total gross investment	269.0	8.1	-7½	-9¼	-¼
- Petroleum activities	74.6	25.7	-12	-25	0
- Mainland Norway	183.5	2.4	-7	-3¾	-¼
Enterprises	115.6	2.8	-8½	-7½	-2½
Dwellings	29.3	-0.6	-5¼	2¼	4¼
Gen. government	38.7	3.4	-4	2	2
Mainland demand[1)]	928.1	3.1	¾	1	1½
Exports	440.2	0.5	3	9	4
- Crude oil and natural gas	153.9	-3.8	4¾	18½	2¼
- Traditional goods	174.0	3.4	1¾	3¾	6½
Imports	399.9	9.1	-¼	0	4
- Traditional goods	264.3	9.6	-¼	0	4
GDP	1082.5	2.1	1¼	3	1½
- Mainland Norway	898.3	3.3	¾	¼	1¼
Labour market					
Employment		2.3	¼	-¾	-½
Labour force, LFS		1.4	¼	0	0
Unemployment, LFS		3.2	3½	4	4½
Prices and wages					
Consumer prices		2.3	2¼	2	1¾
Annual wages		6.3	4¾	4	3¾
Import prices, traditional goods		1.3	-¾	¼	1
Export prices, traditional goods		1.0	-2½	2¾	2½
Crude oil price, NOK (constant 1999 prices)		96	105	113	113
External account[2)]					
Trade surplus, NOKbn (level)		2.5	18	67	76
Current account surplus, NOKbn (level)		-16.3	1	51	62
Current account surplus, % of GDP		-1.5	0	4¼	5
Memorandum					
Household saving ratio		6.6	5¾	5¾	5¾

1) Private and public consumption and mainland gross fixed investment
2) Current prices

Sources: Statistics Norway, the Technical Reporting Committee on Income Settlements and Norges Bank