EXPECTATIONS AND RISK

The Norwegian economy is experiencing a prolonged cyclical upturn. For the fourth consecutive year growth in production and employment is buoyant, capacity utilisation is rising, labour force participation rates are increasing and unemployment is falling. Following some moderation in growth through 1995, the economy has shown stronger and broader growth this year than earlier in the upturn. The rise in the number of persons employed appears to be higher this year than at any time during the postwar period.

Norges Bank's *Inflation Report* for this quarter also contains economic projections for the period to the year 2000. The projections show slightly lower growth in the final years of the 1990s, albeit with a considerable rise in capacity utilisation and a gradual decline in unemployment to close to 3% in the year 2000. Our projections also show a gradual rise in price and wage inflation, with price inflation estimated at an annual 3% and wage growth at $5^{1/2}$ % at the end of the projection period.

If these projections prove accurate, hourly wage costs in the business sector will rise by about 6% more than among our trading partners during the last half of the 1990s. This would give rise to major challenges in the traditional exposed sector in Norway.

The estimates are based on historical price and wage formation as embodied in Norges Bank's model for the Norwegian economy. However, wage and price formation patterns may have changed somewhat during the 1990s. Wage moderation has resulted in low nominal pay increases, particularly in the first part of this decade, although real wage growth has been quite high. Intensified international and domestic competition may also have contributed to downward pressure on product prices, entailing that changes in the economy no longer feed through to price inflation to the same extent as earlier. Should this result in lower price and wage inflation than projected by Norges Bank, it will make it easier to maintain industry's external competitiveness and allow the economy to continue to grow without the same pressures.

There are a number of imponderables which may indicate another scenario. There is a sub-

stantial risk of more pronounced cyclical fluctuations, with higher growth in demand in the next few years followed by a sharper downturn in the economy as a result of even higher price and wage inflation and the need for household and corporate debt consolidation.

In spite of the upside and downside risks, for planning purposes it is important to be aware of the fact that the risks involved are not symmetrical. The costs arising as a result of overestimating the risk of pressures in the economy are probably minor in the current situation: If the pressures prove to be overestimated, it is relatively simple to adjust economic policy swiftly to developments. If, however, the pressures prove to be underestimated, the result may be wide swings in the economy in the years ahead.

The experience of Norway and other countries shows that such fluctuations may have very costly and lasting consequences, for example in the form of competitive losses, unsound investments, and persistently higher unemployment.

The upturn in the 1980s was obviously influenced by unrealistic expectations about future income and wealth. It would otherwise be difficult to explain why household and corporate debt could reach such high levels, particularly as regards the housing market. In a situation with pressures in the market and historically high house prices, many households still decided to invest in housing. One explanation may be that many people expected house prices to continue to rise, or at least not decline substantially.

Moreover, economic policy was based on a far higher level of oil prices - and thereby petroleum revenues - than what proved to be reality after the fall in oil prices in 1986.

The 1980s provide ample testimony to the importance of taking sufficient account of the risk of future swings in the economy when formulating economic policy. In this connection it is also essential that economic policy does not in itself generate fluctuations or unrealistic expectations about growth in future income and wealth.

NORGES BANK'S INFLATION REPORT

Norges Bank's *Inflation Report* provides projections for price inflation in the forthcoming 12-18 months. This report also includes the outlook for the period to the turn of the century.

The main thrust of the report is developments in price and wage inflation based on an analysis of the real economy. In the leader above, the Governor provides a summary of Norges Bank's assessment of the situation.

INFLATION REPORT PROJECTIONS TO THE YEAR 2000

FOURTH QUARTER 1996

INFLATION OUTLOOK

- 1.1 The economic news
 - 1.2 Outlook for price and cost trends
- 1.3 Inflation expectations

2 Projections for the Norwegian Economy in the years to 2000

- 2.1 Main features
- 2.2 The international environment
- 2.3 Domestic demand
- 2.4 The balance of payments
- 2.5 Production and the labour market
- 2.6 Wage growth and competitiveness

Boxes:

The basis for the projections Effects of more pronounced cyclical fluctuations Developments in the labour force

The cut-off date for the *Inflation Report* was 12 December 1996

ECONOMIC BULLETIN - 4/96 259

INFLATION OUTLOOK

Growth in the Norwegian economy has gathered further momentum in 1996 following three years of expansion. The projections in this report indicate that activity in the economy may remain at a high level up to the turn of the century, although growth is expected to slow somewhat. Mainland GDP growth is projected at $3^{1}/_{2}$ % in 1996, 3% next year and about $1^{3}/_{4}$ % at the turn of the century. Unemployment may be reduced to $3^{1}/_{4}$ % at the end of the 1990s.

Wage growth in the years ahead may be higher than experienced earlier in the 1990s and is projected to edge up from $4^{1/4}$ % in 1996 to $4^{3/4}$ % next year. Wage growth may be even slightly higher than this level in the years 1998-2000. Higher wage growth contributes to pushing up price inflation, but a continued moderate rise in prices internationally may have a dampening effect. Consumer price inflation is projected at $1^{1/4}$ % in 1996 and $2^{1/2}$ % next year and in 1998. It appears that consumer price inflation will hover around 3% in 1999 and 2000.

1.1 The economic news

In the last *Inflation Report* we pointed out that activity in the economy had gathered further momentum during 1996 following three years of growth. Employment growth also appeared to be slightly higher than assumed earlier. We also projected that underlying wage and price inflation would accelerate in 1997 following high wage growth in 1996.

The quarterly national accounts (QNA) for the third quarter and recent short-term indicators confirm this picture:

- Both gross product and mainland demand showed sharp growth between the second and third quarter. In the first three quarters of 1996, mainland GDP was 3.3% higher than the level one year earlier. Excluding the effects of low electricity production, underlying growth was about $3^{3}/4\%$.
 - Employment grew by 3¹/₂% over the last year and labour force participation rates are now higher than ever. According to the Directorate of Labour, a shortage of labour in a number of occupational groups may occur next year.
- Consumption growth remains buoyant, and household purchases of durable consumer goods have expanded by a greater margin than in many years.
- Share prices on the Oslo Stock Exchange have advanced by 28% so far this year and house prices have risen by 8%.

Chart 1.1 *Employed persons. Change from previous year. In thousands of persons*

60 40 20 1994 1995 1996 Source: Statistics Norway, LFS

Chart 1.2 Asset prices

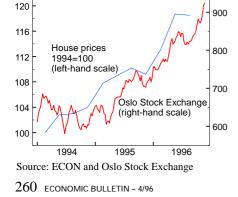
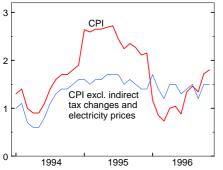




Chart 1.3 *Consumer price index* (*CPI*). *Total and excluding indirect tax changes and electricity prices*. 12-month rise in per cent



Source: Statistics Norway and Norges Bank

As projected, consumer price inflation edged up during the autumn, partly reflecting higher electricity prices. Electricity prices were almost 15% higher in November than one year earlier. The year-on-year rise in consumer prices has moved up from 1.3% in September to 1.8% in November. Prices of services have generally risen at a faster pace than the prices of goods this year, and were 2.4% higher in November than one year earlier. Excluding the rise in electricity prices and changes in indirect taxes this year, the CPI rose by 1.5% in November.

Some adjustments have been made to economic policy since our last *Inflation Report*:

- According to the Final Budget Bill, the tightening effects of fiscal policy next year will be about the same as the level in the original budget proposal presented in October. Slightly higher expenditure in some areas has been offset by a reduction in spending in other areas and somewhat higher direct and indirect taxes. If the Storting approves the budget programme, fiscal policy will in isolation contribute to a tightening in demand corresponding to 1% of mainland GDP.
- Norges Bank lowered its key rates by 0.5 percentage point on 5 November. This was followed by a fall of about ³/₄ percentage point in money market rates, and a decline in the Euro-krone rate to about 4¹/₄%. A number of banks have reduced their lending rates by about half a percentage point.

1.2 Outlook for price and cost trends

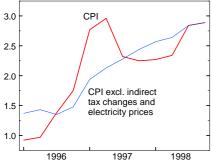
Wage growth this year appears to be more or less the same as projected in the last report. Wage growth in manufacturing industry will be about $4^{1/2}$ %, whereas wage growth in the public sector and in other industries appears to be slightly lower. Annual wage growth is expected to reach $4^{1/4}$ % this year, which is half a percentage point higher than projected a year ago, and the same as in the previous *Inflation Report*.

The estimates indicate that a somewhat tighter labour market, continued solid earnings in the business sector and higher consumer price inflation will result in higher wage growth next year. Our estimate for wage growth is now $4^{3}/4\%$ in 1997 compared with 5% in the last *Inflation Report*. The background for this is that the quarterly national accounts indicate a slightly weaker trend in manufacturing profitability in 1996 than previously estimated.

In spite of some moderation in growth in the Norwegian economy in the remainder of the projection period, capacity utilisation will remain high and unemployment will edge down. Based on historical information about wage formation, as embodied in Norges Bank's macroeconomic model, wage growth is estimated to rise to about $5^{1/4}$ % as an annual

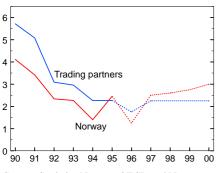
ECONOMIC BULLETIN - 4/96 261

Chart 1.4 Consumer price inflation. Projections for CPI, total and excluding indirect taxes and electricity prices. 12-month rise in per cent



Source: Statistics Norway and Norges Bank

Chart 1.5 Consumer prices. Per cent



Source: Statistics Norway, OECD and Norges Bank

262 ECONOMIC BULLETIN - 4/96

average in the period 1998-2000. This would entail that wage growth in Norway in the period 1996 to 2000 as a whole may be about 6% higher than among trading partners.

In the projections, rising wage growth will push up consumer price inflation, while continued moderate price inflation internationally may have a dampening effect. As in the previous *Inflation Report*, the rise in consumer prices is estimated at $1^{1/4}$ % this year and $2^{1/2}$ % next year. Excluding changes in electricity prices and indirect taxes, core inflation is estimated to increase from an average $1^{1/2}$ % in 1996 to $2^{3/4}$ % in 1998. Price inflation is projected at about 3% in the last two years of the projection period and would then be nearly 1 percentage point higher than among trading partners.

In the first half of 1997, the 12-month rise in consumer prices may reach 3%, partly reflecting the rise in electricity prices in the autumn of this year and the elimination of the effect of the reduction in car taxes from January 1996. We assume that electricity prices will fall through 1997, resulting in lower price inflation from the third quarter of 1997. The elimination of VAT compensation in 1996 will no longer make a contribution to the 12-month rise in prices from July 1997.

The plans for indirect taxes presented in the Final Budget Bill are estimated to contribute 0.1 percentage point to the CPI in 1997. Our projections are also based on slightly higher prices for oil products than in the last *Inflation Report*. As a technical assumption, we assume that indirect taxes are adjusted for inflation in the remainder of the projection period.

Norwegian import prices have shown a moderate rise over several years, contributing to curbing domestic price inflation. This partly reflected low international price inflation and a slight appreciation of the import-weighted krone exchange rate last year. In addition, low domestic price inflation has probably contributed to limiting the rise in prices for imports competing with Norwegian production. Import prices for traditional goods are expected to remain approximately unchanged this year. International price inflation is expected to edge up next year, while wage growth in Norway is also expected to be higher. We assume that this will lead to higher import prices. Import prices are projected to rise by 1% next year, edging up to 2% later in the projection period.

Our projections are also based on the assumption that corporate *profit margins* will not make any substantial contribution to consumer price inflation. Domestic demand is now at a high level, and continued brisk growth may provide enterprises with an opportunity to increase their mark-ups, thereby fuelling price inflation. The high level of capacity utilisation in many enterprises points in the same direction. Experience also indicates that foreign exporters and Norwegian importers increase their margins during an upturn. On the other hand, intensified domestic competition and foreign competition will limit the possibilities of increasing margins to some extent.

The estimates for price and wage inflation in the years

 Table 1.1 Various institutions' pro jections for consumer price inflation in Norway in 1996, 1997 and 19981). Percentage change from previous year

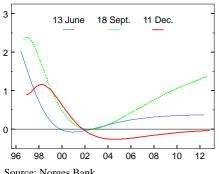
	1996	1997	1998
Ministry of Finance	$1^{1/4}$	$2^{1/2}$	_
Statistics Norway	1.3	2.3	1.8
OECD ²)	1.7	2.4	_
IMF	2.0	2.5	_
Norges Bank	$1^{1/4}$	$2^{1/2}$	$2^{1/2}$
Private institutions ³⁾	1		
highest estimate	1.6	3.5	3.3
lowest estimate	1.2	2.2	2.2
average	1.3	2.6	2.6

1) Latest official projections from the respective institutions.

2) Consumption deflator.

³⁾ Based on projections for 1996 and 1997 from 13 institutions and from 8 institutions for 1998.

Chart 1.6 Differential between expected short-term rates in Norway and Germany in percentage points



Source: Norges Bank

ahead, particularly continued high real wage growth of about 21/2% annually in the period 1996-2000, are heavily dependent on the historical information about wage formation incorporated in the RIMINI model. If underlying wage formation is continuously influenced by wage moderation, wage growth may be lower than assumed in these projections.

On the other hand, there is also a risk of more pronounced cyclical movements than described in this report. Such a scenario could be triggered by stronger demand growth in the period ahead and higher-than-projected price and wage inflation.

1.3 Inflation expectations

Statistics Norway's general business tendency survey (previously referred to as the cyclical barometer) for the second and third quarters shows that a clear majority of enterprises expect higher prices for their products over the next 12 months. This applies both to products sold at home and export products. At the beginning of this year the number of enterprises that expected a rise in prices in the period ahead was approximately the same as those that expected prices to decline. It therefore seems that enterprises now have expectations of a sharper rise in product prices than at the beginning of 1996.

The forward rate curve can provide information about inflation expectations in the financial markets. However, caution should be exercised in drawing any definitive conclusions on the basis of Norwegian forward rates alone because changes in Norwegian rates must also be seen in connection with foreign rates. As illustrated in Chart 1.6, the forward rate differential against Germany has narrowed since mid-September, moving down to about zero for the next five years and in subsequent years. This may indicate that Norwegian rates will converge with German rates in the long term. To the extent that nominal rate differences reflect inflation differentials, Chart 1.6 can be interpreted as an indication that no major differences in price inflation between Norway and Germany are expected in the long term.

Norges Bank collects information from 13 private institutions about their price inflation projections for the years ahead. The institutions expect a rise in prices of 2.6% in 1997, which is in line with our own inflation projections. The price estimates vary between 2.2% and 3.5%. Eight institutions have also provided inflation estimates for 1998, with the projections ranging between 2.2 and 3.3%, with 2.6% as the average.

Public institutions in Norway and international institutions also expect higher price inflation next year. Statistics Norway is the only institution that has provided projections for 1998, forecasting that price inflation will be slightly lower that year.

ECONOMIC BULLETIN - 4/96 263

2 Projections for the Norwegian ECONOMY IN THE YEARS TO 2000

Table 2.1 Supply and use of goodsand services. Percentage change involume from previous year

	1996	1997	1998 -2000 ¹⁾
Mainland demand	4 $4^{1/2}$	$\frac{3^{1/4}}{3^{1/2}}$	$\frac{2}{2^{1/4}}$
Private consumption General governmen		1	$1^{3/4}$
consumption Mainland fixed	2	1	15/4
investment	$4^{1/2}$	$5^{1/2}$	$1^{1/2}$
Accrued oil investmer	it 0	8	$-16^{1/4}$
Exports	$9^{1/2}$	6	$3^{1/2}$
Of which:			
Oil, gas and			
pipeline transport	$18^{1/2}$	$6^{1/2}$	31/4
Traditional goods	9 ³ /4	$6^{3/4}$	$4^{1/2}$
Imports	$3^{1/4}$	$6^{1/2}$	1
Traditional goods	6	5	2
GDP	$5^{1/2}$	$3^{1/2}$	$2^{1/4}$
Mainland GDP	$3^{1/2}$	3	2

1) Average annual growth.

Source: Norges Bank

2.1 Main features

The projections in this report point to continued high activity in the economy to the end of this decade, although mainland GDP growth may slow to an average 2% in the period 1998-2000, after expanding by $3^{1/2}$ % this year and 3% next year. The weaker cyclical trend in 1998-2000 reflects a slight rise in the household saving ratio coupled with a levelling off in investment and moderating export growth. It also appears that petroleum investment will decline by a considerable margin in the last two years of the period.

After rising by a good 60 000 this year, employment growth will decline to around 30 000 next year and 20 000 as an annual average in 1998-2000. A substantial share of the growth in employment in recent years has been offset by higher labour force participation rates. We assume that labour force participation rates will continue to rise in the period ahead, but that unemployment¹ will still decline from around $4^{1/4}$ % this year to a little less than 4% next year. Towards the end of the projection period LFS unemployment may fall to $3^{1/4}$ %. The number of unemployed registered at employment offices may fall to below 3% in the year 2000.

The current-account surplus is projected to rise from $7^{3/4}$ % of GDP in 1996 to more than 11% in 2000. This mainly reflects higher oil revenues and a substantial contribution from the interest income deriving from the large surpluses. Norway's foreign assets are projected to rise from $9^{1/2}$ % of GDP at the end of 1996 to more than 40% in the year 2000.

Domestic demand rose by about 10% in the period 1992-1995. This year domestic demand is expected to expand by a further 4%, which is the highest growth recorded since 1985-1986. Growth is projected to slow to $3^{1}/4\%$ in 1997 and to about 2% towards the end of the decade.

The main impetus to growth in domestic demand is now private consumption. The high level of consumption growth is ascribable to sharp growth in employment and high real wage growth, which combined will result in a $4^{1/4}$ % growth in real disposable income in 1996. The high growth in income, combined with relatively low real interest rates, will also contribute to boosting housing investment in coming years, estimated to grow by a little less than 10% in 1997. Growth in household consumption and housing investment is projected to slow towards the end of the decade to an annual rate of about $2^{1/4}$ % and $2^{3/4}$ %, respectively.

¹ Adjusted LFS figures which are comparable to old definitions.

The basis for the projections

The projections are based on two main elements. The first consists of current economic data, which are essential for evaluating the situation in the economy and form the starting point for our projections. Second, the projections are based on historical information embodied in Norges Bank's macroeconomic model RIMINI.

In the mid-1980s, conflicting information and shortcomings in current data entailed that indicators which pointed to an overheating of the economy were not taken into account in time. For example, it took a long time before the sharp fall in household saving was revealed. In the National Budget presented in October 1994, private consumption was originally projected to rise by 2.5% in 1985. In the National Budget the following year, the estimate for 1985 was raised to 6%, and consumption was projected to grow by 3.5% in 1986. The final national accounts figures showed a growth of 9.9% in 1985 and 5.6% in 1986.

Considerable improvements have been made in the statistics since the mid-1980s, and in our projections we assume that current data provide a reasonable picture of underlying developments in the Norwegian economy. Even now, however, there is some uncertainty as to whether the current statistics provide an accurate picture. One important uncertain factor is the revision of the Labour Force Survey (LFS) from the first quarter of 1996, entailing that the figures for 1995 and 1996 are not directly comparable. Statistics Norway has made its first adjustments of the figures, but it is still not inconceivable that LFS figures underestimate or overestimate the actual growth in employment and changes in the labour force.

The quarterly national accounts are calculated on a less detailed level than the annual national accounts figures. This is partly because the underlying data are less complete on a quarterly basis than on an annual basis, but also reflects the need for such figures to be published at these intervals. Revisions may, however, be made at a later time. In the publication of the figures for the third quarter, for example, mainland GDP growth in the year to the first half of 1996 was revised upwards from 3.3% to 3.7%.

The quarterly national accounts figures indicate inventory decumulation in the Norwegian economy thus far in 1996. In isolation, destocking may be an early indication of a further rise in output or of high capacity utilisation and growing pressures in the economy. No current statistics on stocks are available, however, to confirm this. In the national accounts, inventory investment is measured as the difference between production and imports on the one hand and product inputs, exports, consumption and investment on the other. One possible explanation for the preliminary accounts figures may be that they underestimate production and imports or overestimate demand. This uncertainty makes it more difficult to determine how strong the upturn is this year, in the same way as - but probably to a lesser extent than - in the 1980s.

The historical information embodied in Norges Bank's macroeconomic model RIMINI is partly based on the quarterly national accounts figures from the 1970s up to 1993. The main revision of the national accounts in 1995 entails that at the moment new quarterly accounts figures further back than from 1993 are not available. Nor have the old national accounts figures been revised and extended to 1996. The result is that the projections now being presented are based on information derived from the old national accounts up to 1993. The information incorporated in RIMINI thus does not cover the last few years in which changes may have occurred in wage formation. This increases the uncertainty of the estimates.

ECONOMIC BULLETIN - 4/96 265

The brisk growth in demand and low real interest rates, coupled with continued relatively high profitability, are also expected to contribute to a high level of business fixed investment during the period, following a growth in total investment averaging 5% annually in 1996 and 1997. Towards the end of the period a fall in petroleum investment is expected to curb the demand stimulus in the Norwegian economy. A fairly tight fiscal policy in line with the estimates presented in the National Budget for 1997 will have the same effect.

The uncertainty attached to macroeconomic projections will always be substantial, and will increase the longer the time horizon is for the estimates. In addition, there is some uncertainty attached to our general picture of the economy, see box on the basis for projections. The projections in this report are based on the historical information incorporated in Norges Bank's macroeconomic model RIMINI, including information about wage formation. Cooperation between the social partners and an acceptance of the wage moderation approach may result in lower-than-projected wage growth. The rise in wage growth this year, however, indicates that a tighter labour market will make it more difficult to achieve moderate growth in the future.

The assumptions concerning the supply of labour are also essential in terms of wage trends. It is not inconceivable that the current high labour force participation rates will reduce the flexibility of the labour supply so that continued high employment growth will intensify labour market pressures and thereby result in higher-than-projected wage growth. Variations in the labour market situation, with demand pressures in some regions and for some occupational groups may also increase the risk of higher wage and price inflation.

If employment shows a sharp rise and unemployment a substantial decline, a shortage of some types of labour may arise even if unemployment remains high. The Directorate of Labour² has also indicated that a shortage of labour could occur for some occupational groups in the course of 1997, including parts of the public sector, manufacturing and construction.

There is also considerable uncertainty attached to demand and cyclical trends in the period ahead. For example, growth in demand may prove to be higher if fiscal policy is more expansionary in 1997 than assumed.

Furthermore, there is a definite possibility that household demand will show more pronounced movements than indicated in our reference path. In the short term, the conditions are in place for higher consumption growth, and households will be inclined to have confidence in their own financial si-

² Quarterly report on the labour market No. 4/96.

tuation and the country's economic situation. The rise in house prices has resulted in substantial wealth gains in the household sector, and with unchanged nominal interest rates real after-tax interest rates for households will drop to about 2% next year. A considerably higher growth in consumption in the beginning of the period than projected in our report may be followed by the need to consolidate and lead to an increase in the saving ratio towards the end of the period. The situation may be exacerbated inasmuch as slower consumption growth results in a reduced level of activity, lower employment (and wages) and thereby lower household income.

Moreover, the level of investment is relatively high, and signs of weaker trends in the domestic market or a decline in profitability may result in a sharp fall in investment.

More pronounced cyclical fluctuations may result in higher price and wage inflation in the beginning of the period, followed by a more pronounced contraction towards the end of the projection period, with lower growth in the economy and a risk of rising unemployment, see box on the effects of more pronounced cyclical fluctuations.

The shrinkage in petroleum investment in 1999 and 2000 implies a need for substantial adjustments in activities related to the oil sector during the projection period. We have assumed that a moderate shift towards exports will take place. These adjustments may be impeded if price and wage inflation proves to be higher than projected as a result of more pronounced cyclical fluctuations. The negative impact of a fall in petroleum investment on activity may then be more severe than estimated.

2.2 The international environment

Growth among our main trading partners is expected to increase from $1^{3}/4\%$ this year to $2^{1}/2\%$ in 1997. The higher growth is expected as a result of a continued economic recovery in Japan and Europe next year. In the remainder of the projection period (1998-2000) growth among trading partners is expected to hover around the long-term growth potential of $2^{1}/2\%$ in these countries.

In the short term the main uncertainty relates to the effect of fiscal retrenchment in many of these countries following many years of large budget deficits. Fiscal tightening is now being implemented also in countries where economic activity has been sluggish. This has resulted in an easing of monetary policy. In many countries where deficits have been particularly large, fiscal retrenchment has also contributed to a fall in long-term rates.

In Europe, the planned implementation of EMU represents a separate uncertain factor for cyclical trends. An increasing number of countries have presented budgets for 1997 with a general government budget deficit that does not exceed 3%

ECONOMIC BULLETIN - 4/96 267

Table 2.2 Projections for GDP. Per-centage growth from previous year

1994	1995	1996	1997	1998
3.5	2.0	21/2	21/4	2
0.6	0.9	$3^{1/2}$	$1^{1/2}$	33/4
2.9	1.9	$1^{1/4}$	$2^{1/4}$	$2^{1/2}$
2.9	2.2	1	$2^{1/4}$	$2^{1/2}$
3.8	2.4	$2^{1/4}$	3	3
3.3	3.6	$1^{1/2}$	2	2
4.4	4.2	$2^{1/2}$	$3^{1/2}$	31/2
4.4	$3^{1/4}$	$1^{3/4}$	$2^{1/2}$	3
3.1	2.5	$1^{3/4}$	$2^{1/2}$	$2^{1/2}$
	3.5 0.6 2.9 2.9 3.8 3.3 4.4 4.4	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

¹⁾ Projections are based on the new method for calculating GDP.

Source: Norges Bank, OECD and Concensus Forecasts

Effects of more pronounced cyclical fluctuations

There are many similarities, but also some differences, between the current period of expansion in Norway and the strong cyclical upturns recorded in the mid-1980s and mid-1970s. Both of the upturns experienced earlier were followed by a decline in economic activity, slower employment growth and higher unemployment. The recession following the last upturn was substantially deeper and more prolonged than after the upturn in the mid-1970s. Over time, GDP and employment growth during the current upturn has been approximately the same, see Charts 1 and 2 below.

The projections presented in this report show a cyclical path where employment remains high and unemployment continues to decline at the beginning of the next century. The experience of the last two decades shows that the economy will be vulnerable to shocks in a situation with high capacity utilisation and pressures in parts of the labour market. There is also a risk that the cyclical upturn now under way may be stronger than assumed or result in greater fluctuations in economic activity than indicated by the current projections. Such shocks are by definition difficult to take into account in model-based projections, which must be based on known relationships in the economy and reasonable assumptions concerning the formulation of economic policy.

We will focus on the uncertainty in domestic demand to illustrate the effects of more pronounced cyclical fluctuations. Charts 3 and 4 show a trend involving greater changes in household saving and business fixed investment than assumed in the projections (the «reference path» in the chart).

The likelihood of this trend taking place after making these adjustments has not been evaluated. The calculations are intended to serve as an illustration where fluctuations in domestic demand are substantially wider than our projections (and other institutions' projections) indicate. The effects on behaviour that are embodied in this illustration are also within the levels seen in connection with cyclical movements in the 1980s.

The calculations do not incorporate changes in economic policy as a result of a divergent cyclical path, and the international framework conditions are the same as in the model-based projections (reference path). Compared with the projections, some of the growth in private consumption and business fixed investment is moved forward in time, albeit in such a way that total saving and investment behaviour

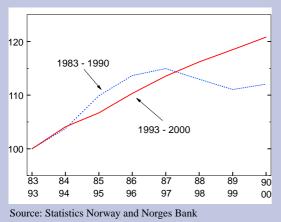
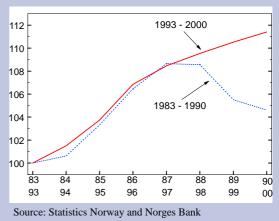


Chart 1 *Mainland GDP in the periods 1983-*1990 and 1993-2000. Index 1983/1993 = 100

268 ECONOMIC BULLETIN - 4/96

Chart 2 *Employment in the periods 1983-*1990 and 1993-2000. Index 1983/1993 = 100



does not change during the period as a whole:

- The household saving ratio is adjusted downwards by 2 percentage points in 1997 and 1 percentage point in 1998 and adjusted upwards by 1 percentage point in 1999 and 2 percentage points in 2000.

- Investment as a share of value added in mainland enterprises is adjusted upwards by 2 percentage points in 1997 and 1 percentage point in 1998, and adjusted downwards by 1 percentage point in 1999 and 2 percentage points in 2000.

In this illustration, domestic demand and output rise markedly compared with the reference path in 1997, with mainland GDP growth reaching 4.8%. In 1998, the level of demand and production remains higher than in the reference path, whereas the growth rate is lower. In the following two years demand declines, while production and employment stagnate. At the end of the period both output and total demand are lower than in the reference path, whereas employment is back to the level in the reference path. The level of wages and prices is also about 1% higher than in the reference path at the end of the period. Wage growth may reach nearly 6%.

We also see indications that this path leads to a downturn at the end of the period, with unemployment starting to rise in 2000. At the end of the 1990s, the economy, based on the path shown in the illustrations, will enter a period of stagnation in economic activity where rising unemployment is accompanied by wage and price inflation that is higher than among our trading partners. The costs of such developments in the form of eg persistently higher unemployment will not be noticeable until after the turn of the century. The need for continued debt consolidation in households and enterprises, coupled with a high level of costs, may amplify this downturn.

Chart 3 *Mainland GDP. The reference path and more pronounced cyclical fluctuations. Index 1993 = 100*

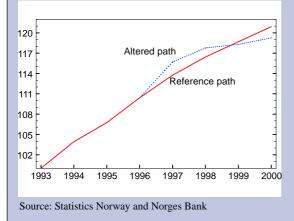
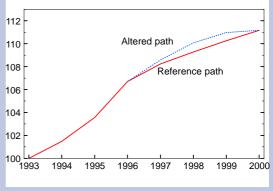


Chart 4*Employment. The reference path and more pronounced cyclical fluctuations. Index* 1993 = 100



Source: Statistics Norway and Norges Bank

ECONOMIC BULLETIN - 4/96 269

Table 2.3 Consumer prices. NorgesBank's projections. Percentagechange from previous year. Concensussus Forecasts in brackets¹

	1	996	19	97	1998
USA	3	(2.9)	3	(3.0)	$2^{3/4}$
Japan Germany	$\frac{1}{4}$ $1^{1}/2$	(0.1) (1.5)	1 ¹ /4 1 ³ /4	(1.2) (1.8)	1 ¹ /2 1 ³ /4
UK Sweden	$\frac{2^{1/4}}{3/4}$	(2.4) (1.0)	31/4 13/4	(2.9) (1.8)	$\frac{2^{1/4}}{2^{1/2}}$
Finland	3/4 3/4	(1.0) (0.8)	1 ³ /4 2	(1.6) (1.6)	$\frac{2^{1/2}}{2}$
Denmark	2	(2.1)	21/4	(2.4)	3
Norway's trad-					
ing partners EU-12-	13/4	(1.8)	21/4	(2.2)	$2^{1/4}$
countries ²⁾	21/4	(2.2)	$2^{1/4}$	(2.2)	2

¹⁾ The average projection for consumer price inflation from various private institutions at November 1996.

²⁾ Weighted by weights in ECU index.

Source: Norges Bank and Consensus Forecasts

of GDP. However, it is still uncertain how many countries will satisfy the criteria for participation in EMU. The uncertainty attached to EMU may also have a bearing on whether we will see the traditional cyclical path in European countries where the export growth recorded by many countries is being accompanied by higher investment.

Price inflation among trading partners is estimated at $1^{3}/4\%$ this year, partly reflecting extraordinary conditions in Sweden and Finland where a reduction in VAT on food and lower food prices in the wake of EU membership have contributed to low price inflation. In the period ahead international inflation is expected to remain at around $2^{1}/4\%$. This is partly based on the assumption that monetary policy in the US will be tightened if necessary in order to maintain growth in the economy within capacity limits. In Europe, there is still excess production capacity and thereby scope for higher economic growth without triggering any substantial quickening of inflation.

2.3 Domestic demand

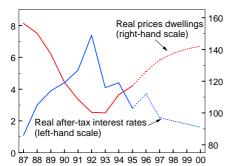
Households

Private consumption is projected to rise by $4^{1/2}$ % this year, with the surge in car purchases accounting for about $1^{3/4}$ %. Consumption growth is set to remain at a high level in 1997. Car purchases are expected to remain at about the same level as this year, whereas other consumption components are expected to edge up. Growth in private consumption is projected at $3^{1/2}$ % in 1997 and $2^{1/4}$ % in the period 1998-2000.

Household real disposable income has risen by close to 15% over the last five-year period, partly thanks to falling debt interest expenditure, sharp growth in employment and high real wage growth, particularly in 1996. This has been accompanied by low price inflation. Households have partly used their income growth to increase consumption and partly to improve their financial position.

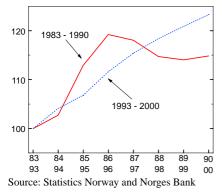
Household net financial wealth grew from 10% of disposable income in 1992 to about 40% at the end of 1995. The ratio appears to be rising further in 1996, partly reflecting capital gains on securities holdings. In addition, housing wealth has risen as a result of the 30% rise in the prices of resale homes in the same period, corresponding to wealth gains of over NOK 200bn. Resale home prices have risen in nominal terms by about 8% in 1996. Housing demand is surging and the recent fall in interest rates is expected to contribute to a continued sharp rise in house prices. House prices are projected to increase by a good 8% next year followed by a more moderate rise in the period 1998-2000.

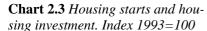
Real interest rates for households are also falling to a relatively low level. Based on the estimates in this report, the **Chart 2.1** *Real after-tax interest rate and real prices of dwellings*

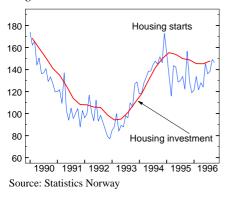


Source: Statistics Norway, ECON and Norges Bank

Chart 2.2 *Private consumption in the periods 1983-1990 and 1993-2000. Index 1983/1993=100*







real after-tax rate of interest will fall to 2% next year on the assumption of unchanged nominal interest rates. This may also boost consumption in the period ahead.

Total household saving is expected to decline somewhat this year and next year, and then edge up towards the end of the projection period. A substantial share of consumption growth in recent years relates to purchases of consumer durables. If these are considered as investments rather than consumption at the time of purchase, the household saving ratio would show a more steady movement in the period 1995-2000. Saving in real capital is expected to edge up as a result of higher housing investment. Investment in financial assets will probably drift down in the beginning of the period, followed by a gentle upward movement.

The high level of car purchases this year and the decline in the saving ratio over the last two years may indicate that households are exercising less spending restraint. This is further underlined by an expansion in credit. As a result, consumption growth may be higher in coming years than growth in disposable income, implying a possible further decline in the saving ratio. Low real interest rates and substantial wealth gains may entail that consumption reaches an unsustainable level, as was the situation in the mid-1980s. In that case consumption may fall towards the end of the projection period, see box under 2.1.

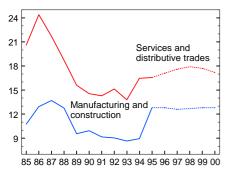
Housing investment

After rising sharply in 1994, housing investment showed a decline later in 1995 and the beginning of 1996 in spite of a number of factors which pointed to higher housing demand. Household income has risen sharply, households have improved their financial situation and the cost of building new houses has declined in relative terms. The low growth in building activity in the first half of 1996 is probably due to temporary factors such as a shortage of serviced sites and the heavy pressures in the construction industry, particularly in the eastern part of Norway as a result of a number of major construction projects such as the new main airport Gardermoen.

Housing starts picked up again in the second half of this year. New housing orders were 25% higher in the third quarter of this year than one year earlier, and the order backlog rose by 16% compared with the second quarter. Housing investment is projected to rise in the period ahead, estimated at almost 10% in 1997 and $2^{3}/4\%$ annually for the period 1998-2000. This scenario means that more than 20 000 dwellings will be built annually during the period. We also assume that the average size of dwellings will show an increase, although in the year 2000 it will still be substantially lower than in 1986.

ECONOMIC BULLETIN - 4/96 271

Chart 2.4 Investment rates. Investment in per cent of gross output



Source: Statistics Norway and Norges Bank

272 ECONOMIC BULLETIN - 4/96

INFLATION REPORT

Business fixed investment

Mainland fixed investment has exhibited solid growth since 1993, whereas the investment rate - the ratio of investment to production - is still slightly lower than in 1986-1987. Investment trends in recent years must be seen in connection with the low level of investment that prevailed at the beginning of the upturn, the favourable market trends and high profitability enjoyed by Norwegian enterprises as well as the implementation of some large-scale investment projects, including the methanol plant in Tjeldbergodden and the development of Gardermoen airport.

It appears that investment will expand by 4¹/₂% this year. The sharpest growth is being recorded by the construction industry and transport and communications sector, but manufacturing investment is also expanding at a brisk pace.

Relatively low interest rates will also have a favourable impact on corporate earnings and stimulate investment in the period ahead. In addition, investment growth will continue to be influenced by the development of Gardermoen airport and other major public sector investment projects such as the new National Hospital and the planned gas-generated power stations. Total mainland business fixed investment is projected to expand by a good 5% in 1997, receding to 3¹/₂% in 1998, 1³/₄% in 1999 and an approximately unchanged investment level in 2000.

The investment intentions survey for manufacturing industry points to lower growth in manufacturing investment in 1997. Continued buoyant investment growth in the engineering and metals industry will be partly offset by the completion of the methanol plant in Tjeldbergodden, which will reduce the investment level by NOK 1bn next year, or about 8% of manufacturing investment. Investment in the construction industry and manufacturing sector is projected to rise by $2^{1}/4\%$ in 1997, followed by slower growth in 1998-2000, although still at a high level.

Investment growth in private services and distributive trades is also expected to be robust next year. Commercial building starts and new orders for commercial buildings point to continued strong investment growth. Investment relating to the development of Gardermoen airport will remain at a high level in 1997, but no further growth in this investment project is expected next year. In the remainder of the projection period the decline in investment relating to Gardermoen airport will be partly offset by the construction of the two gas-generated power stations. Investment in distributive trades and services is expected to shrink from 6¹/4% next year to about zero in 2000.

Investment is highly sensitive to the cyclical situation. Higher-than-projected wage growth or sluggish domestic demand could contribute to a fall in investment. Weaker international prospects may also lead to lower investment growth than projected in this report. The fall in petroleum investment towards the end of the projection period will free up capacity, reducing in insolation the need for investment. In the event of higher-than-projected inflation in Norway, enterprises may shift a larger share of their investments abroad.

Public sector demand

These projections are based on the fiscal policy as presented in the Final Budget Bill for 1997. This means that underlying government spending growth will be 1/4% in real terms in 1997 and that the budget tightening will be equivalent to about 1% of GDP. It has also been assumed that the local government budget programme is adopted as proposed in the Final Budget Bill. Furthermore, the projections are based on an underlying real growth of 1% annually in central and local government spending in the period 1998-2000. Direct and indirect taxes are held constant from 1997 to the end of the period. These assumptions correspond to the mediumterm projections presented in the National Budget.

2.4 The balance of payments

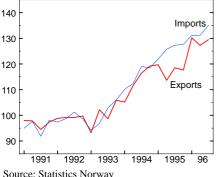
Traditional merchandise exports rose sharply in the first quarter of 1996 and have remained around this high level so far this year. Export growth has been broadly based, although fish, metals and machinery have exhibited the strongest growth. Export growth appears to be higher this year than in 1995 in spite of weaker growth among our main trading partners this year. A main contribution to export growth this year comes from the vigorous growth in exports to Asia and new markets in Europe.

Traditionally, Norwegian exports have won market shares at the beginning of an international cyclical upswing, primarily because our exports are largely commodity-based and supply product inputs at an early stage of the recovery. The recovery in Europe is under way, and we expect it to continue next year, thereby boosting the demand for Norwegian goods. On the other hand, growth could be hampered by the high level of capacity utilisation in export industries. This may be offset, however, by higher manufacturing investment. The fall in petroleum investment towards the end of the projection period will also free up capacity in manufacturing industry.

In spite of the projected higher growth among our trading partners in 1997, the growth in traditional merchandise exports is estimated to slow from $9^{3}/4\%$ this year to $6^{3}/4\%$ next year. This entails that exports will show renewed growth through 1997 following the stagnation recorded in the first quarter of this year. In the period 1998 to 2000 traditional merchandise exports are projected to grow at an annual rate of about 41/2%. This is slightly lower than the market growth for Norwegian exports and partly reflects a deterioration in

ECONOMIC BULLETIN - 4/96 273

Chart 2.5 Traditional merchandise exports and imports. Index 1993=100



Source: Statistics Norway

competitiveness in the projection period. However, we have assumed that this will be partly offset by a shift away from deliveries to the Norwegian oil sector towards export markets.

Norwegian export prices are essentially determined by international commodity prices, which tend to fluctuate widely. Prices for many key export products have declined this year, including the price of aluminium which continued on a downward trend in 1996. Prices of traditional export goods are projected to fall by 2% this year. Higher economic activity in areas such as Europe will probably contribute to a moderate rise in export prices in the period ahead. However, a sharp rise in commodities like aluminium is unlikely as a result of excess production capacity in this sector.

The strong expansion in imports in 1995 partly reflected the sharp growth in manufacturing investment. A continued rise in domestic demand has contributed to continued growth in imports in 1996. Higher imports of electricity have also made a substantial contribution to import growth this year. Growth in domestic demand is expected to slow, but the tendency towards a higher degree of international specialisation over time may lead to slightly higher growth in imports than in aggregate demand. However, a decline in manufacturing investment and other import-dependent demand components may have an offsetting effect.

Import prices are expected to remain unchanged this year compared with 1995, but are projected to rise by 1% in 1997 and by about 2% in the remainder of the projection period.

The balance of trade will show a large and growing surplus through the projection period, primarily as a result of higher export earnings from the petroleum sector. Towards the end of the projection period the trade surplus may also increase due to lower imports for petroleum investment.

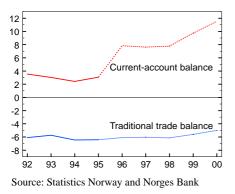
The current account of the balance of payments is also influenced by the gradual reduction in the deficit on the interest and transfers balance as Norway accumulates foreign assets. The current-account surplus is projected to rise from $7^{3}/4\%$ of GDP in 1996 to about $11^{1}/2\%$ at the turn of the century. Norway's net foreign assets are estimated at 42% of GDP at the end of the projection period.

The estimates for long-term movements in oil prices vary considerably. The projections are based on an unchanged real price of NOK 125 p/b from 1997. If oil prices are 10% lower than this level, the current-account surplus in 1997 will be reduced by about NOK 10bn and the state's net cash flow by about NOK 8bn.

Capital movements and net lending

The sizeable current-account surpluses in the years ahead must be matched by an equivalent net capital outflow. The accumulation of capital in the Government Petroleum Fund

Chart 2.6 *Current-account balance in per cent of GDP and traditional trade balance in per cent of mainland GDP*



274 ECONOMIC BULLETIN - 4/96

Table 2.4 Current-account surplusand net lending by sector. In billionsof NOK

	1996	1997	1998	1999	2000
Current-accou surplus	ınt 79	81	86	114	142
Domestic net	.,	01	00		
lending by					
sector					
- Public					
sector1)	60	68	74	88	104
- Households	15	11	12	17	23
- Enterprises ²⁾	5	2	0	9	15
-					

1) Including Norges Bank.

²⁾ Including petroleum, shipping, financial enterprises and statistical deviations.

Source: Norges Bank

will account for a substantial share of this capital outflow. Allocations to the Government Petroleum Fund came to about NOK 2bn in 1995 and are estimated to increase to NOK 46bn in 1996 and NOK 55bn in 1997. In the National Budget for 1997, it was estimated that the Petroleum Fund would amount to about NOK 270bn in 2000 based on an oil price of NOK 115 p/b. Based on our oil price projections, the Fund may reach more than NOK 300bn in 2000. We also assume that the capital outflow from the petroleum sector will be substantial, partly reflecting the repayment of debt that has financed petroleum investment. According to these calculations, annual capital exports by mainland enterprises will be low in the projection period.

Total net lending for domestic sectors is equivalent to the current-account surplus. Table 2.4 shows the estimated distribution of net lending by sector. As the table shows, the public sector will account for the largest share of total net lending the next few years.

Net lending in the household sector is expected to be slightly lower than in the last few years, see section on private consumption. Household net lending has declined since 1993, when it was a little more than NOK 33bn, but is expected to pick up again towards the end of the period. The table shows that net lending in the enterprise sector may fall up to 1998 and then increase again to around NOK 15bn in 2000.

2.5 Production and the labour market

Production

Total GDP has expanded sharply for several years and is set to rise by as much as $5^{1/2}$ % this year. The brisk growth must partly be viewed in connection with production in the petroleum sector. Output growth in mainland enterprises is also strong, and has been higher than the long-term growth potential of the Norwegian economy for several years. In the first three quarters of 1996, mainland GDP was 3.3% higher than in the same period last year. According to Statistics Norway, lower electricity production has reduced growth by 0.3-0.4 percentage point.

Mainland GDP is expected to rise by $3^{1/2}$ % in 1996. At the end of 1996 it appears that the impetus to growth remains strong, and production is expected to continue to rise sharply in 1997. Later in the projection period a slackening of domestic demand growth, slightly lower export growth and a fall in petroleum investment will contribute to slower output growth in mainland Norway, and towards the end of the period growth will be slightly lower than the long-term growth potential of the economy.

Output growth in the petroleum sector will also be slower compared with the sharp rise recorded this year. The petroleum sector's contribution will nevertheless entail that total

ECONOMIC BULLETIN - 4/96 275

GDP will expand at a somewhat stronger pace than mainland GDP throughout the projection period.

The labour market

Employment has risen by more than 140 000 during the past four years, with about half of this growth recorded in 1996. According to LFS figures, unemployment has only declined by about 30 000 during this same four-year period, from 6% of the labour force in 1993 to about $4^{1}/2\%$ so far this year. This means that a substantial share of employment growth has been offset by an increase in the labour force.

We experienced the same tendencies, in the opposite direction, at the end of the 1980s when the rise in unemployment was curbed as many individuals, particularly youths, left the labour force.

Changes in unemployment the next few years will partly depend on developments in the labour force, see box on developments in the labour force. If we assume unchanged labour force participation rates for the various age groups from the level prevailing thus far in 1996, demographic trends imply that the labour force will grow by an annual average of about 11 000 the next few years.

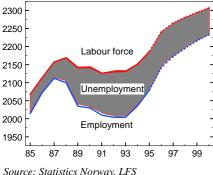
Our projections are based on the assumption that labour force participation rates will rise slightly in the period ahead. The labour force is expected to expand by 1% in 1997 and a good 1/2% on average in the period 1998-2000.

The production growth embodied in these projections entails that employment will continue to rise, but that growth will be somewhat more moderate in the years ahead compared with the levels recorded the last few years. Employment is expected to rise by about 30 000, or 11/2%, next year and by an annual average of a little less than 1% during the remainder of the projection period.

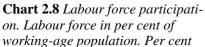
According to figures from Statistics Norway's Labour Force Survey, the rise in man-hours worked so far this year has been somewhat lower than the growth in the number employed. This reflects a slight increase in sickness absence and the fact that women and youths, who traditionally have had lower average working hours than other groups, have accounted for a substantial share of the employment growth. There is some uncertainty attached to changes in average working hours the next few years. Higher labour force participation rates among women and youths point to a continued reduction in average working hours in coming years. On the other hand, many part-time employees want to work longer, and in the period ahead the strongest population growth will occur for age groups that have relatively high average working hours. Our projections are based on the assumption that average working hours will decline by 1/4% next year and remain unchanged in the period 1998-2000.

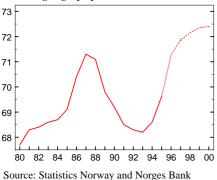
Even though growth in the labour force will continue to

Chart 2.7 Labour market. In thousands of persons



source: statistics Norway, LFS





276 ECONOMIC BULLETIN - 4/96

Developments in the labour force

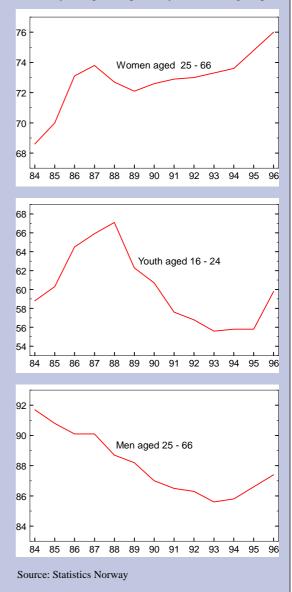
So far during this cyclical upturn, much of the growth in employment has been offset by an increase in the labour force. Historically, the supply of labour tends to vary cyclically. During upturns, the labour force will normally rise, while it is reduced during downturns. At the same time, there is obviously a limit as to how many people will actually be interested in employment. It must be assumed that some groups, eg students, will enter the labour market fairly quickly, whereas others are not interested until pay levels are higher. One question that may be raised in the current situation is how large the labour force can be before a further growth in the demand for labour results in considerably higher wage growth than previously.

Demographic trends are an important factor for the supply of labour. If we assume unchanged labour force participation rates for the various age groups from the level thus far in 1996, demographic trends entail that the labour force will grow by about 11 000, or at an average annual rate of 1/2%, the next few years. If employment expands by about 1/2% in the years ahead, this would thus not generate pressures in the labour market unless changes in rules concerning eg working hours or the pension age reduce the supply of labour in other ways.

If the supply of labour is to grow by a greater margin, however, labour force participation must increase. Women have accounted for a large share of the sharp growth in the labour force in recent years. Labour force participation rates for women have never been higher than the current level, but are still slightly lower than among women in Sweden and Denmark. Labour force participation among women may therefore continue to edge up.

Labour force participation among young people in the age group 16-24 has increased considerably the past year. The improvement in the labour market has provided greater opportunities for young people and students to work part-time, and entailed that in the short term young people look upon the labour market as an alternative to education to a greater extent. Labour force participation for this group is still low compared with the level in the mid-1980s. It seems probable, however, that enrolment rates in the education sector have risen on a permanent basis, partly as a re-

Labour force participation for various groups



ECONOMIC BULLETIN - 4/96 277

sult of the reforms in the education sector and the expansion of the district college system. The potential for continued growth in the labour force in excess of the population growth for this age group is thus probably limited.

Labour force participation for men aged 25-65 is still somewhat lower than at its peak during the last upturn. This may partly reflect a decline in labour force participation in the oldest segment of this group as a result of the special early retirement scheme. Moreover, the youngest segment of this group is now enrolled in the education system to a greater extent than earlier. It is thus likely that wage pressures will arise at a lower level of labour force participation for this group than during the last upturn.

In the projections, we have assumed that the overall labour force participation rate will edge up from a good 71% in 1996 to about 72% in 1998. The flexibility in the supply of labour is thus assumed to be approximately the same as thus far in the upturn. It is possible, however, that changes in the labour market, such as leave of absence schemes, higher enrolment rates, and a lower retirement age will have a greater impact than we have assumed. In that case it may be difficult to increase labour force participation rates from the current level, and the projected increase in demand the next few years may then result in a more widespread shortage of labour, higher wage growth and lower growth in employment than the projections indicate

278 ECONOMIC BULLETIN - 4/96

offset part of the employment growth, our projections entail a steady and moderate decline in unemployment. LFS unemployment is projected at 4% towards the end of 1997, edging down to $3^{1}/4\%$ towards the end of the projection period.

2.6 Wage growth and competitiveness

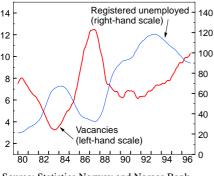
Both in Norway and internationally, it has often proved difficult to combine sharp growth in the demand for labour with low wage and price inflation. Traditionally, prices and wages have tended to rise sharply during a cyclical upturn such as the current one in Norway. Thus far during the upturn, however, wage growth has been lower than among our trading partners. Low nominal pay increases, coupled with a moderate external inflationary impetus, have contributed to curbing price inflation. We have little experience, however, with the current situation, ie brisk growth in the economy accompanied by relatively high unemployment. Several forces may contribute to higher wage growth than we have witnessed in recent years:

- Wage growth this year represented a preliminary break with the relatively moderate wage growth recorded in recent years. It would appear that the moderate settlements in recent years are partly ascribable to the high level of unemployment. As unemployment falls, and a shortage of some types of labour arises, achieving continued moderate wage growth will be a considerable challenge for the social partners.
- Structural features of the labour market may have changed the relationship between unemployment and wage growth. For example, parts of the labour force may have qualifications for which there is no demand in the labour market at the moment. One indication of this is the number of vacancies, see Chart 2.9. In spite of high unemployment, there are now signs of a shortage of qualified labour in the public health and care sector, in parts of manufacturing industry and in construction. Chart 2.9 also shows that the total number of vacancies is now as high as in 1986. The number unemployed, however, is far higher now. These factors indicate that wage growth may accelerate at higher unemployment rates than we have been accustomed to earlier.

The labour market has proved to be very flexible so far during this upturn. Employment growth has largely been accompanied by an increase in the labour force, with women making the largest contribution. Labour force participation rates, however, have never been higher than they are now. It is also likely that the enrolment rate in the education sector is now permanently higher. The potential for continued growth in the supply of labour is therefore limited in the medium term. If employment

ECONOMIC BULLETIN - 4/96 279

Chart 2.9 Registered unemployment and vacancies. In thousands of persons



Source: Statistics Norway and Norges Bank

growth remains strong, the labour market may quickly become tighter even when unemployment rates are fairly high.

As noted, the projections for wage growth are based on past information on wage formation, as incorporated in Norges Bank's macroeconomic model RIMINI. As usual, however, we have assumed that the policy of moderation over the past few years will have an impact on the level of nominal wages. All in all, wage growth is projected to reach $4^{3}/4\%$ in 1997 following growth of about $4^{1}/4\%$ this year, with the wage carry-over into 1997 estimated at about 2%. The labour market will be slightly tighter next year and consumer price inflation will rise. Profitability in enterprises will remain relatively high even though some manufacturing sectors have recorded a decline. Profitability in the construction sector, for example, appears to be rising.

Based on projections for developments in the real economy, and in particular changes in the labour market, wage growth is estimated at about $5^{1/4}$ % on average for the period 1998-2000. A projected decline in unemployment from 4% in 1997 to nearly 3% at the end of the projection period will have the effect of pushing up wage growth. On the other hand, high wage growth will also gradually reduce profitability in enterprises, contributing to curbing wage growth.

Wage growth among our main trading partners is estimated at about $3^{3/4}-4\%$ both in 1996 and in the remainder of the projection period. Compared with the estimates for wage growth in Norway, this may entail that labour costs in Norway will rise by nearly 6% more than among our trading partners in the period 1996-2000.

280 economic bulletin - 4/96

MAIN MACROECONOMIC AGGREGATES

Percentage change from previous year, if not otherwise stated

	1996	1997	1998-20001)
Real economy			
Private consumption	$4^{1/2}$	31/2	$2^{1/4}$
Public consumption	2	1	13/4
Total gross investment	$2^{1/2}$	7	$-2^{1/4}$
Accrued oil investment	0	8	$-16^{1/2}$
Mainland Norway	$4^{1/2}$	51/2	$1^{1/2}$
Enterprises	61/4	51/4	13/4
Dwellings	$-2^{1/4}$	93/4	23/4
General government	$6^{1/2}$	3	-1
Mainland demand	4	31/4	2
Exports	91/2	6	31/2
Oil, gas and pipeline transport	$18^{1/2}$	61/2	31/4
Traditional goods	93/4	63/4	41/2
Imports	31/4	61/2	1
Traditional goods	6	5	2
GDP	$5^{1/2}$	$3^{1/2}$	$2^{1/4}$
Mainland Norway	31/2	3	2
Labour market ³⁾			
Emplyment, LFS	3	$1^{1/2}$	1
Labour force, LFS	$2^{1/2}$	1	1/2
Unemployment, LFS	$4^{1/4}$	4	31/42)
Prices and wages			
Consumer prices	$1^{1/4}$	$2^{1/2}$	32)
Annual wages	$4^{1/4}$	43/4	5 ¹ /4
Import prices, traditional goods	0	1	2
Export prices, traditional goods	-2	1/2	$1^{3/4}$
Crude oil prices, NOK (level)	132	125	131
External account			
Trade surplus, NOKbn	98	93	1372)
Current account surplus, NOKbn	79	81	142^{2}
Current account surplus, % of GDP	7 ³ /4	71/2	$11^{1/2^{2}}$
Memorandum item			
Household saving ratio	7	61/4	63/4

1) Average annual growth.

 ²⁾ At end of period.
³⁾ The figures for the labour market are based on Statistics Norway's adjusted LFS figures, which may deviate slightly from the official LFS figures.

Economic Bulletin – 4/96 281