

Economic perspectives

Annual address by Governor Svein Gjedrem at the meeting of the Supervisory Council of Norges Bank on Thursday, 14 February 2002

Introduction

The world economy is experiencing a slowdown. Growth in the US economy came to a halt last spring. Overinvestment, particularly in IT and telecom equipment, led to low returns on real capital and reduced corporate earnings. Stock markets declined when growth prospects were revised. Terrorism and war added to the uncertainty. These developments had contagion effects on European and Asian economies. Japan is in a deflationary recession.

The US economy is flexible and seldom remains in recession for a long period. There are some signs of an early recovery. However, there is a risk of a longer period of stagnation. Companies are highly leveraged and vulnerable. Household saving is at a low level. There is uncertainty associated with household wealth as it is invested in stocks and the housing market.

Oil prices have plunged by about 40 per cent since autumn 2000. Prices for other Norwegian export goods have declined since spring 2001. Exports fell in autumn of last year. The global economic downturn and the prospect of low import price inflation induced Norges Bank to reduce its key interest rate in December.

In spite of this, the effects of the global downturn on the activity level in Norway have been limited. Private and public consumption and housing investment continue to show strong growth. The fall in oil prices has not deterred oil companies from investing eagerly. Both the central government budget and the current account are in surplus. The Norwegian economy may weather the downturn without any substantial impact on the level of activity or employment, but with a continued risk of high growth in labour costs in the business and public sectors.

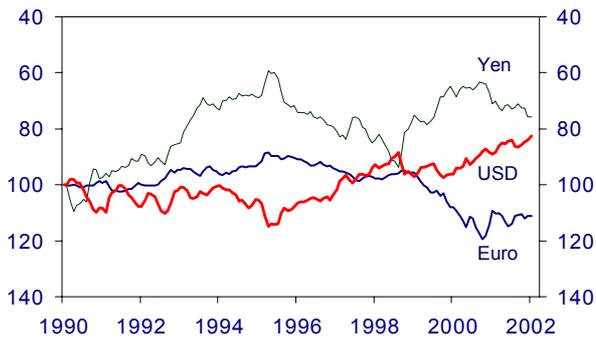
Economic policy

The guidelines for economic policy were revised last year. Henceforth, the real return on the Government Petroleum Fund shall be used over the central government budget. Central government petroleum revenues shall continue to be transferred to the Government Petroleum Fund and invested abroad.

Monetary policy shall be oriented towards low and stable inflation. The inflation target is 2½ per cent. When monetary policy is oriented towards stabilising inflation, it also contributes to stabilising aggregate demand and output. The inflation target is the nominal anchor for the Norwegian economy.

Low inflation is the objective and the interest rate is the instrument. If it appears that inflation, with unchanged interest rates, will be higher than 2½ per cent, the interest rate will be increased. If it appears that inflation, with unchanged interest rates, will be lower than 2½ per cent, the interest rate will

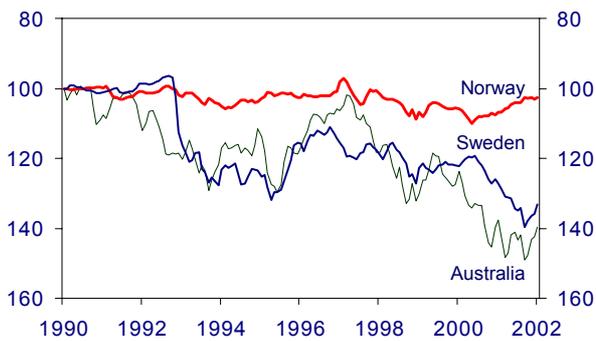
Chart 1. Nominal effective exchange rates
1990=100



Source: EcoWin

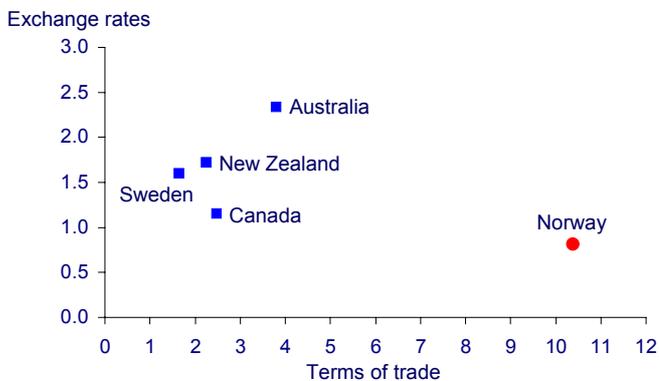
The figures for "euro" are for the German mark up to and including 1998 and for the euro as from 1999.

Chart 2. Nominal effective exchange rates
1990=100



Sources: EcoWin and Norges Bank

Chart 3. Fluctuations in terms of trade and exchange rates
Standard deviation. Per cent. 1990-2000



Sources: OECD and EcoWin

The vertical axis shows the standard deviation of annual changes in nominal effective exchange rates. The horizontal axis shows the standard deviation of annual changes in the terms of trade. The terms of trade is the ratio of export prices to import prices.

be lowered. Low and stable inflation will be a fixed feature of economic developments. This is something that the social partners, businesses, borrowers and investors in property and securities can take as a given.

From 1986, changes in the exchange rate or the prospect of changes in the exchange rate had implications for interest rates. A stable krone exchange rate was the nominal anchor. In Norway, this has been reflected in wage determination because labour cost developments among trading partner countries have been an important reference.

Exchange rates between major international currencies fluctuate widely (chart 1). The US dollar has appreciated by more than 30 per cent since 1995. The German mark – the euro since January 1999 – has depreciated by about the same between 1995 and autumn 2000. The Japanese yen has been particularly volatile.

Smaller countries have also experienced fairly wide exchange rate fluctuations (chart 2). The Swedish krona has depreciated by more than 10 per cent since summer 2000. The Australian dollar has weakened by over 30 per cent since spring 1997. The UK, Canada and New Zealand have also experienced wide exchange rate fluctuations. The Norwegian krone exchange rate, on the other hand, has been relatively stable.

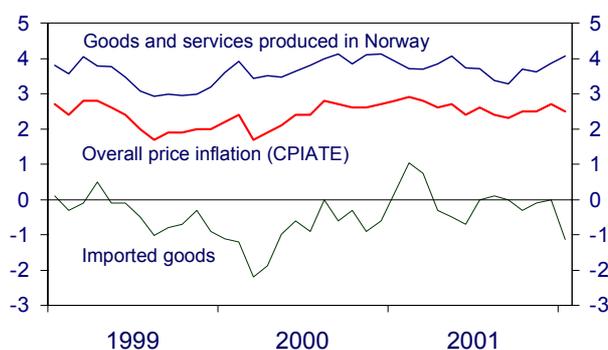
Countries whose exports include a large component of raw materials tend to experience considerable volatility in their exchange rate (chart 3). Australia is one example. Fluctuations in commodity prices entail changes in countries' terms of trade, which measures the ratio of export to import prices. Changes in the terms of trade have an impact on the exchange rate, which in turn curbs the effects of changes in commodity prices on profitability in the business sector. The exchange rate therefore serves as a buffer against changes in the terms of trade.

Norway's terms of trade also fluctuate considerably, primarily reflecting changes in oil prices. However, a substantial portion of petroleum revenues is invested in foreign equities and bonds through the Government Petroleum Fund. Changes in oil prices influence the size of the Fund, but have little effect on the use of petroleum revenues at home. The Government Petroleum Fund thus serves as a buffer against swings in the oil price, and thereby stabilises the krone exchange rate.

The Norwegian economy may nevertheless be exposed to disturbances of a type that cannot be absorbed by the Petroleum Fund. We have to be prepared for fluctuations in the value of our currency that are more in line with the fluctuations observed in other countries. The exchange rate will vary. This means that economic agents cannot assume that the krone will be stable against the euro, the US dollar or a weighted average of foreign currencies. It is the inflation target that is the economy's nominal anchor.

The increase in labour costs is important when Norges Bank's assesses the outlook for price inflation and sets interest rates. High wage growth, both in manufacturing and other sectors, will affect the internationally exposed sector through two channels. First, high wage growth will weaken earnings and employment. Second, the interest rate will be increased. Normally, this will lead to an appreciation of the krone, with a further weakening of earnings and employment. Manufacturing will, therefore, feel the effects of high wage growth to an even greater extent than earlier.

Chart 4. Consumer price inflation
CPI adjusted for real taxes and energy prices



Sources: Statistics Norway and Norges Bank

The chart shows the 12-month rate of increase in consumer prices, in prices for imported consumer goods and for goods and service produced in Norway. All the series are adjusted for the direct effects of real taxes and energy prices.

Since 1997, labour costs have increased annually by between 5 and 7 per cent. In spite of this, consumer price inflation has been close to 2½ per cent over the past few years (chart 4). The krone exchange rate has appreciated as a result of a wider interest rate differential between Norway and other countries. Combined with low growth abroad and increased trade with low-cost countries such as China, this led to a slower rise in import prices. As the world economy recovers, import price inflation will edge up. A rise in labour costs of more than 5 per cent will then only be consistent with the inflation target if the krone continues to appreciate.

In the long run, wages must be compatible with the value added that is generated by workers, i.e. labour productivity. Over time, the increase in real wages is therefore determined by developments in labour productivity. In Norway, productivity growth has averaged 1½-2 per cent over the last 20 years. If this continues to be the case, an increase in

nominal labour costs of around 4-4½ per cent in the long term will be consistent with the inflation target.

In general, an unexpected upward shift in labour costs will prompt an increase in interest rates in order to avoid higher inflation. With a floating exchange rate and unchanged interest rates, an increase in wage growth of one percentage point will eventually translate into a comparable increase in price inflation, unless this increase is based on higher productivity. The interest rate increase must be adjusted accordingly. First, the nominal interest rate must be increased to maintain the real interest rate. Second, the real interest rate must also be increased in order to prevent inflation from accelerating.

When wage growth reaches a level that is inconsistent with the inflation target, the result will be higher interest rates, lower employment and higher unemployment. Similarly, when wage growth is lower than the level consistent with the inflation target, the result will normally be lower interest

rates, higher employment and lower unemployment. The sharp growth in labour costs in recent years is a source of higher unemployment. When real wage growth is higher than productivity growth, corporate profitability declines. As a result, businesses will recruit less and shed more labour. In the public sector, we will see a growing conflict between budget limits and service production requirements.

A monetary policy that is oriented towards low and stable inflation will contribute to stabilising aggregate demand and output. As a result, the central government budget will not normally have to be used actively to stabilise the economy. An increase in unemployment that is due to a higher rate of increase in labour costs than implied by productivity growth cannot be offset by low interest rates or higher public spending and tax cuts, but requires changes in the functioning of the labour market.

There is an important interaction between monetary policy and fiscal policy. According to the new guidelines for fiscal policy, petroleum revenues are to be phased in approximately in pace with the expected real return on the Government Petroleum Fund. This guideline implies that fiscal policy will contribute to stimulating aggregate demand in the Norwegian economy every year for many years ahead. The guideline also implies that the use of petroleum revenues will increase as long as the Petroleum Fund is expanding.

Variations in oil prices are accompanied by considerable fluctuations in government petroleum revenues from one year to the next. It is important to prevent these fluctuations from spilling over to the mainland economy. Public expenditure and taxes that vary in relation to oil prices would result in an unstable economic environment. Financial markets would be marked by uncertainty and turbulence, with an increase in the risk premium on Norwegian securities. This would have resulted in higher and more variable interest rates. The risk of financial crises in Norway would also have increased because the cyclical fluctuations in the Norwegian economy would have been more pronounced. It is therefore an advantage that fiscal policy is now predictable and anchored in a long-term strategy.

The future size of the Petroleum Fund depends on oil price developments. The guideline ensures that we only use the return on wealth that has already been accumulated. This makes policy robust to changes in oil prices and ensures that petroleum wealth will be of benefit both today and in the future.

The guideline provides a framework that contributes to making the central government budget an appropriate tool for setting political priorities. It sets a limit on the share of petroleum revenues that the government can use each year and does not distinguish between domestic and foreign spending. This eliminates the waste of resources that two separate budgets would necessarily entail.

The government invests petroleum wealth in foreign securities through the Petroleum Fund. Government wealth is thereby more diversified. These investments have no impact on the Norwegian capital market. Both mainland private saving and business fixed investment have been high in recent years. In Norway, credit and capital markets nevertheless feature some weaknesses, with thin securities markets and a narrow investor and ownership base compared with other countries. The reasons, and hence the solutions, can probably be found in the structure of the taxation of dwellings, property and

financial assets, in a high level of state ownership of enterprises and in the organisation of pension saving in Norway. Investing even more government capital in Norway would reduce the return on investments in the Norwegian business sector and prompt other investors to invest elsewhere. Allocating even more capital to the Norwegian economy would probably lead to a rapid relocation of jobs to other countries, as the krone would tend to appreciate.

Effect on industry structure

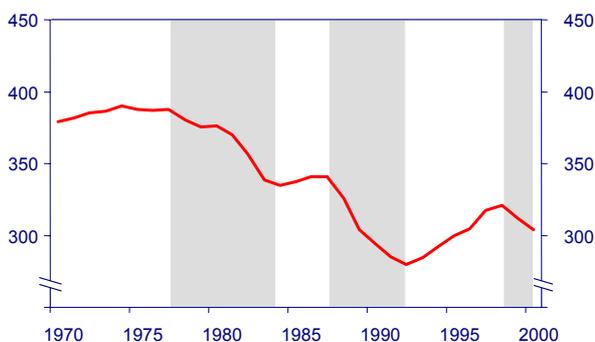
The planned use of petroleum revenues will increase demand for public and private services. The guidelines imply an increase in the use of petroleum revenues over the central government budget of around 3½ per cent of mainland GDP by 2010. This may entail an additional 60 000 person-years in the service sector. As long as there are labour shortages in Norway, a comparable decline in manufacturing employment is likely to occur.

Although the phasing in of petroleum revenues is a gradual process, the contest for labour resources will intensify. As a result, monetary policy is likely to remain fairly tight in the years ahead. A high interest rate level may in periods result in a strong krone. This may accelerate the scaling back of manufacturing industry. However, in the long run monetary policy cannot influence overall employment or its distribution across industries. A lower interest rate would have resulted in higher price and cost inflation, which would also have weakened profitability in the manufacturing sector. The end result would have been the same for employment and production, but in addition we would have had to face the costs of high inflation.

Even if employment and production in manufacturing are affected, the situation for Norwegian enterprises will not necessarily be negative. Some enterprises could be at the forefront of technological developments and increase efficiency in pace with the relatively high rate of growth in real wages in Norway. In recent years, we have also seen that many enterprises have moved large portions of their production abroad, particularly the most labour-intensive production. Norwegian manufacturing companies could therefore remain profitable even if the size of the manufacturing sector in the Norwegian economy is reduced. However, the scaling back of manufacturing also involves a risk. It makes the economy more vulnerable. The growth

potential of the economy – the basis for learning, innovation and development – may be impaired when less of the business sector is exposed to intense foreign competition.

Chart 5. Manufacturing employees
In thousands



Source: Statistics Norway

The bars in the chart illustrate the scaling back of manufacturing in waves, particularly in the periods 1977-1984 and 1987-1992.

Over the last thirty years, manufacturing industry has been scaled back in waves (chart 5). The sharpest declines were observed in the years between 1977 and 1984 and from 1987 to 1992. The declines were preceded by a deterioration in profitability in this industry. It may take time for a weakening to spill over to output and employment, but when the turnaround first occurs it takes place rapidly and on a large scale. Primary industries, in contrast, are scaled back gradually. These developments will take place in addition to the effects associated with the increased spending of petroleum revenues. All in all, employment in manufacturing and agriculture may fall by some

50 000-100 000 person-years in the period to 2010. Employment in the manufacturing sector may drop to below 250 000. In the agricultural sector, the number employed may be less than 50 000 person-years. Changes in industry structure, with an increase in the number employed in services and a decrease in manufacturing, will probably reduce the role of pay increases in manufacturing as a benchmark for wage determination.

Wage formation and the labour market

The structure of wage and income formation, the laws and rules governing the labour market and the social safety net are the main determinants of business costs and employment.

If the cost level is too high, the business sector will find it unprofitable to employ everyone who wants to work. The business sector must restructure rapidly when real wages increase sharply. Many activities will no longer be profitable and will be shut down. This could lead to higher unemployment.

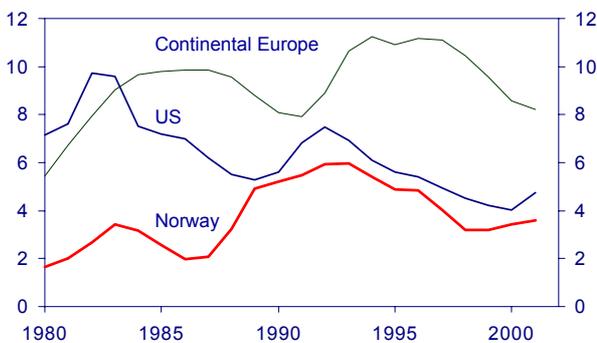
However, lower employment will not necessarily be reflected in unemployment figures. We may instead see a flow of discouraged workers into, for example, disability pensions, early retirement schemes or different types of adjustment packages. The extent to which these schemes are used will depend on financial incentives and entitlement thresholds.

In many European countries unemployment has remained relatively high (chart 6). By contrast, the US managed to reduce unemployment rapidly following the period of high unemployment early in the 1980s. The labour market in the US is decentralised, with local wage agreements and market-determined wages. Fluctuations in the economy rapidly spill over to employment and unemployment, as reflected in developments over the last year. Labour costs are adjusted, so that periods of high unemployment seldom last long. Because employment is easily adjusted, the business sector can quickly reap the gains of new technology. This makes investments more profitable and the economy more dynamic.

The US economy also features considerable wage and income differentials. In Europe, the differentials are smaller, particularly in the Nordic countries (chart 7). Coordinated wage determination in Norway has probably raised the income level of those workers who would otherwise have fared poorly in the wage settlements. Unemployment benefits, sick pay and pension schemes provide a shield against income losses.

Differences exist in qualifications and work capacity. A compressed wage structure can lead to an exclusion of those with the lowest work

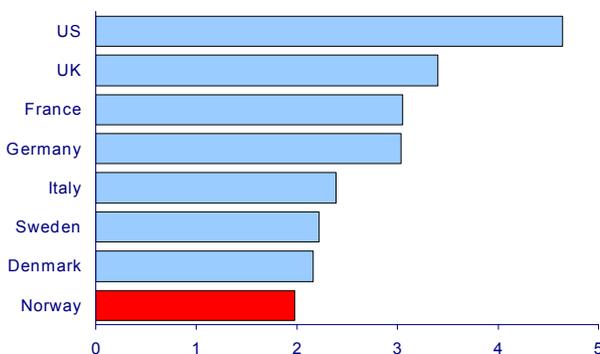
Chart 6. Unemployment
Per cent



Source: OECD

"Continental Europe" includes Switzerland and the EU countries except Sweden, Finland and the UK.

Chart 7. Earnings dispersion
Ratios. Highest relative to lowest income group

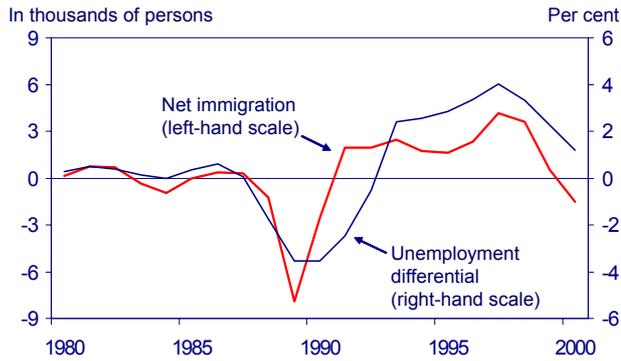


Source: OECD

Earnings dispersion is measured as the ratio between the lowest income of the highest income decile, and the highest income of the lowest income decile.

The figures are from the "OECD Earnings Database".

Chart 8. Labour immigration from Sweden
Unemployment differential and net immigration



Sources: Statistics Norway and the OECD

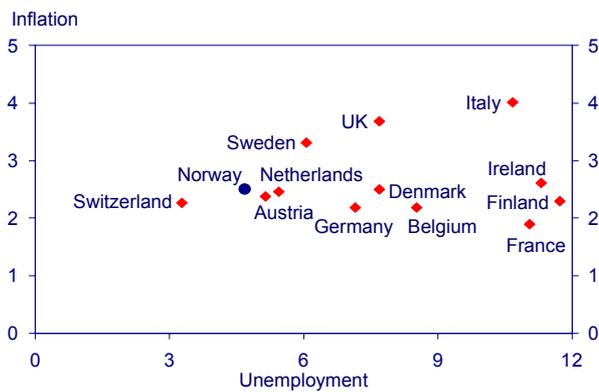
The left-hand scale shows registered changes of residence from Sweden to Norway less the number of registered changes of residence from Norway to Sweden.

The right-hand axis shows the unemployment rate in Sweden less the unemployment rate in Norway.

performance from the labour market, with increased numbers moving into social security. Labour markets in continental Europe are experiencing this, as is Norway to an increasing extent. Small wage differentials can also lead to a shortage of labour – bottlenecks – in some sectors and occupations.

The Nordic labour market has made a significant contribution to eliminating the bottlenecks observed in Norway in the 1990s (chart 8). The import of labour from other Nordic countries has been considerable, particularly to hospitals, hotels, restaurants and construction. When unemployment in Sweden was high in the mid-1990s, migration to Norway was also substantial. As unemployment in Sweden has gradually declined, the migration to Norway has come to a halt.

Chart 9. Inflation and unemployment 1990-2000
Per cent

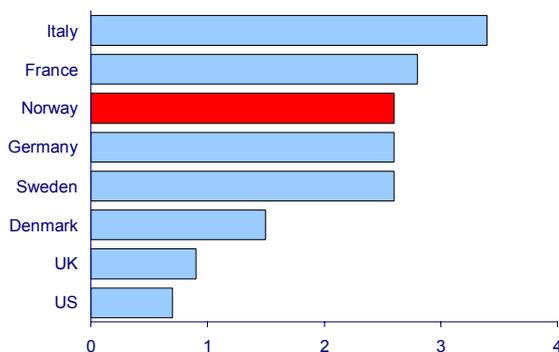


Source: OECD

The figures show inflation and the unemployment rate, measured as the average in the period 1990-2000.

Norway emerged from the crisis at the end of the 1980s and the beginning of the 1990s without a persistent fall in employment. This is because wage formation functioned well. Wage determination was coordinated, with substantial emphasis on overall employment. Wage discipline provided the authorities with the leeway to stimulate the economy, with limited risk of higher inflation. This policy yielded positive results. As regards unemployment and inflation in Europe in the 1990s, Norway is among the top performers (chart 9).

Chart 10. Employment protection
OECD indicator



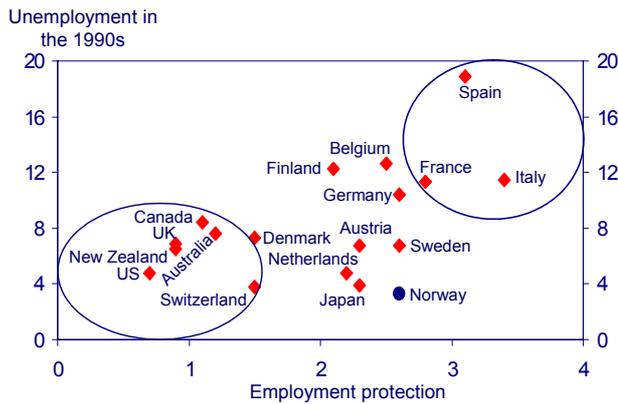
Source: OECD

The OECD's indicator for employment protection is a weighted average of 22 subindices for the degree of employment protection. The subindices are measures of various features of employment protection, such as notice period, number of months with income after notice of dismissal etc. Information on the indicator can be found in the OECD Employment Outlook, June 1999.

There may be many explanations for the wide differences in labour market performance across countries. Historical and cultural factors may play a significant role. On the other hand, certain common features and systematic differences should be duly noted. Among other things, the effectiveness of labour market programmes, the degree of coordination in wage formation, employment protection legislation (EPL), social security schemes and the education system may be important factors.

As in Norway, labour markets in continental Europe are marked by extensive employment protection legislation (chart 10), which implies substantial restructuring costs for companies. The higher the level of employment protection, the more an employee is perceived as a long-term investment and the more cautious the employer must be with regard to hiring. On the other hand, a high level of employment protection can motivate employers to develop skills among their employees.

Chart 11. Employment protection and centralisation



Source: OECD

The chart shows the level of employment protection measured by the OECD's indicator and the average unemployment rate, measured as averages for the period 1990-2000.

The rings denote countries with decentralised wage determination according to the classification of Calmfors/Driffil in the OECD Employment Outlook 1997.

With a centralised and coordinated wage formation process, the social partners can take account of overall employment in wage negotiations. The Scandinavian countries and Austria have organised wage determination in this way. Generally speaking, unemployment in these countries remained low in the 1990s and employment is high.

Many countries with decentralised wage determination and a low level of employment protection have also experienced high employment and low unemployment (chart 11). Wages are determined on the basis of each company's profitability and the supply of labour. This system can be found in countries like the US, Canada, the UK and Switzerland.

By contrast, a decentralised wage formation system that is combined with a strong bargaining position at the local level and extensive employment protection can produce unfavourable results. Countries with this type of structure include France, Italy and Spain. In these countries

unemployment is high, with substantial flows out of the labour market into various pension and social security schemes. Nor have countries such as Germany, Belgium and Finland, where employment protection is relatively extensive and wage determination only partly decentralised, achieved particularly favourable results even though the results are somewhat more mixed.

Extensive employment protection and a tightly knit social safety net reinforce the perception that the risk of an income loss is limited. Employees can take advantage of the bargaining power these rights afford to obtain high wages without taking into account the effects on overall employment. For their part, employers may have incentives to promote exclusion through government-financed social security schemes. Those who are not employed will be interested in finding employment, even at a lower wage level. However, it is not the unemployed who negotiate local wage agreements. This gives rise to a conflict of interests between the employed and the unemployed.

However, local wage settlements also feature a number of positive aspects. Wages are adapted to companies' capacity to pay, which enhances the flow of labour between industries, regions and occupations. Labour market bottlenecks are eliminated.

Coordinated wage determination in Norway had many advantages, but also limited the scope for eliminating bottlenecks or remedying imbalances across occupational groups, regions and industries. Groups that were not included in the coordination, such as liberal professions and salaried employees, were able to exploit companies' capacity to pay. The system of coordination came under pressure. It now appears that wages will increasingly be determined at the local level on the basis of each company's profitability, its need for labour and the supply of various types of labour.

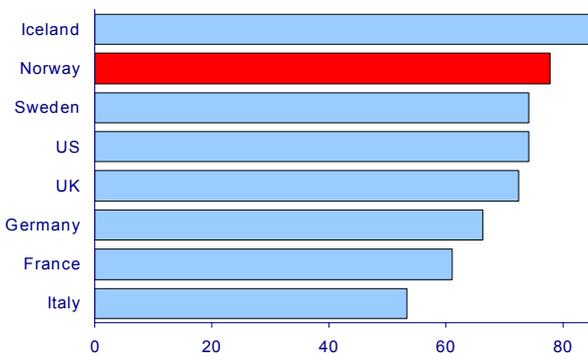
The wage formation process functioned well for a long period because of the strong emphasis that was placed on overall employment. A precondition for this has been that employees do not fully use the bargaining power provided by employment protection and the social safety net. Coordinated wage determination requires discipline. With a more locally based and less coordinated wage formation structure, the profitability of the individual enterprise and labour market conditions will be the main source of discipline. Extensive employment protection and a tightly knit social safety net may then lead to high unemployment and a substantial rise in flows of discouraged workers into social security schemes.

In the public sector, there are no absolute requirements as to profitability and efficiency. Public enterprises do not go bankrupt, and in many cases the authorities cannot allow a public enterprise to discontinue operations. This is a demanding starting point for a shift to more locally determined wages. The possibility of granting local pay increases might, however, increase efficiency if there are binding nominal budget limits for these entities and clear production requirements.

When a higher share of wages is determined at the local level and coordination is reduced, it will be even more important to promote flexibility in the labour market and the labour supply. Otherwise, an increasing number

of workers may be excluded from working life and unemployment may rise on a permanent basis, while the foundation for production is weakened. Effective labour market programmes, supported by a sound system for education and infrastructure, can facilitate these adjustments. It is also important to assess working environment and labour market legislation with a view to fostering greater flexibility. Hiring costs may be reduced and flexibility enhanced through greater scope for temporary employment and labour contracting. The throughput in universities and colleges can be improved. The financial incentives and entitlement thresholds in our social security system are also of substantial importance to employment.

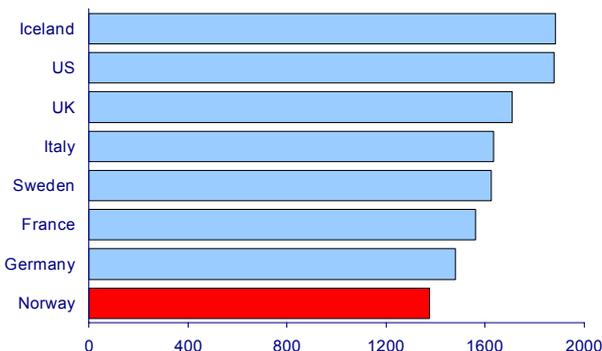
Chart 12. Employment
Percentage of population aged 15-64 in 2000



Source: OECD

The chart shows the number of employed as a percentage of the working age population (aged 15-64).

Chart 13. Average working hours
Hours per year per employee in 2000



Source: OECD

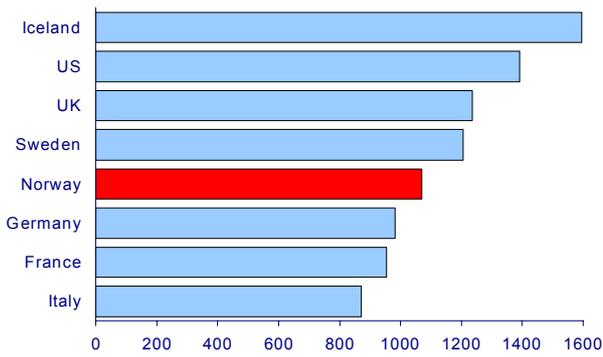
Pensions

In Norway, the employment rate is among the highest in the OECD area (chart 12). This reflects both high labour force participation and low unemployment.

The picture becomes more mixed when average working hours are taken into account (chart 13). The average is lower in Norway than in other countries. The sickness absence rate is high. Part-time employment is widespread.

The average number of person-hours worked in the working-age population is relatively low, despite high labour force participation and low unemployment. Among OECD countries, the only

Chart 14. Average labour input
Hours per person aged 15-64 in 2000



Sources: OECD and Norges Bank

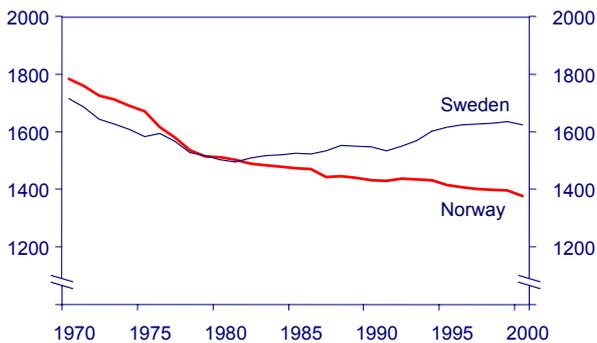
The chart shows the average number of person-hours worked per person in the working age population.

countries with lower figures than Norway are those with very high unemployment (chart 14).

In Norway, average working hours have fallen by more than 20 per cent in the last thirty years. This can be partly explained by the way working life and child care are organised, but similar trends also exist in many other countries, especially in Scandinavia (chart 15).

We cannot simply assume that people want to work more, even if an increased labour input will result in higher income and greater prosperity. It is natural to use some of the increase in prosperity for leisure. The considerable share of part-time employment may reflect choices that individuals do not necessarily want to change.

Chart 15. Average working hours
Hours per year per employee

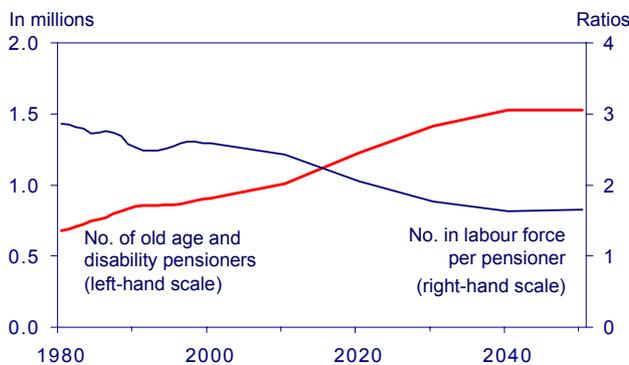


Source: OECD

On the other hand, if we increase our labour input to the level in Sweden, without reducing productivity, our future income would increase by more than the wealth increase resulting from a doubling of our petroleum wealth.

The structure of the tax and pension system influences the choice between work and leisure. Lower tax rates on employment income could boost labour input. The pension system is also of significance to labour input, as it influences employers' labour investment decisions.

Chart 16. Pensioners and the labour force



Sources: Statistics Norway, Ministry of Finance and NOU 2000:21

The expansion of the labour force is coming to a halt. At the same time, the number of old-age and disability pensioners is rising rapidly. Twenty years ago, there were nearly three persons in the labour force for every pensioner, whereas in 20 years, there will be fewer than two (chart 16).

Although life expectancy is high, the average retirement age in Norway is steadily falling. For men over 50, the average retirement age fell from nearly 67 in 1970 to a little more than 63 at the end of the 1990s. For the entire labour force, including all age groups, the average pension age in the National Insurance Scheme was down to 58.

Flexibility in working hours and in the retirement age gives each worker the opportunity to choose between work and leisure. This freedom to choose is a benefit in itself. However, the terms - wages, working hours and pension schemes - should reflect the value added of labour. Pension benefits should therefore depend on how long each individual chooses to remain in employment.

When the National Insurance Scheme was introduced in 1967, the scheme called for a clear link between labour input and future pensions. Supplementary pensions depended on earned pension points. However, supplementary pensions have gradually been reduced in relation to labour income. For most employees who are approaching the age of retirement, additional work effort results in little or no change in their future pensions. The relationship between labour input and future pensions has weakened.

The link is especially weak in the contractual early retirement scheme (AFP). For most workers, the annual pension does not depend on when they choose to retire, as long as they are between 62 and 67 years of age. Nor does the age of retirement affect the size of the national insurance benefits after the age of 67. Hence, the earlier an employee retires, the higher the total pension benefit will be.

A clearer link between labour input and future pensions may be achieved in a defined-contribution pension scheme. The total pension for individual employees will then be determined by the employee's contributions and the return on these contributions. The annual pension is determined by the individual's age of retirement and the total contribution. For every extra year of employment, the employee increases his pension wealth. In addition, the total pension wealth will be spread over a shorter retirement period. This means the longer a person remains in employment, the higher the annual pension will be.

The main principle is that there should be a clear link between labour input and pensions. Such a link may also be established in a system where the individual receives an annual pension that is stipulated in advance.

Sweden has recently implemented a pension reform that ensures that annual pension benefits increase in relation to the number of years the individual has worked. At the same time, an increase in life expectancy for each cohort will reduce the annual pension. This motivates the individual to remain in employment and to ensure that the system is sustainable.

The National Insurance Scheme's expenditure is financed directly over the central government budget. Decisions about national insurance benefits have a substantial influence on future taxpayers. These costs are not transparent when the budget is decided. Developments since 1967 show that such a pay-as-you-go system is not robust. Benefits change over time and costs can easily be pushed into the future.

The alternative is a system where pension expenditure is covered by accumulated capital, i.e. a funded system. In a funded system, a decision to increase pensions or reduce the age of retirement will require the allocation of capital today to cover future expenditure. Such a fund provides a measure of the cost of increasing pension expenditure.

Our pension system is complicated. In addition to the National Insurance Scheme, many other operators, including the central government, have established additional pension schemes. There are different rules for coordination and entitlement. Any shift to a fund-based system for the National Insurance Scheme will probably require transitional rules for many

years ahead. However, I believe that it will be possible to find solutions to these practical problems.

Distributional and practical considerations imply that minimum benefits in the pension scheme cannot depend on earlier employment, but should apply to everyone. On the other hand, supplementary pensions may be financed by a fund where the pension is determined by the individual's contribution to the pension fund and the return on the fund's investments.

Labour is our most important resource. The decline in average hours worked cannot continue if we are to have a sustainable pension system. The current evaluation of our public pension system must focus on the incentives to work and the effects on the average retirement age. A fund-based system may be an appropriate approach and at the same time make pension savings transparent for each individual. This may in itself provide an incentive to increase working hours.

Conclusion

The Norwegian economy is changing. Even a gradual increase in the use of petroleum revenues will change the industry structure substantially in the next decade. It appears that we may see an increase in locally determined wages. This will generate considerable gains, but in the absence of reforms in the labour market and in the social security and pension system, the growth potential and sustainability of our economy may weaken, labour may be displaced and unemployment may rise.

Monetary policy provides the economy with a nominal anchor. The guidelines hold the promise of a fiscal policy that is anchored in a long-term strategy. When fiscal policy is predictable, monetary policy can also contribute to stability in aggregate demand and output. The social partners, businesses, borrowers and investors can act on the assumption that the inflation rate will be 2½ per cent. Over time, the inflation target and labour productivity set the standard for wage growth.

Thank you for your attention.