

Economic perspectives

Address by Governor Svein Gjedrem at the meeting of the Supervisory Council of Norges Bank on Thursday, 16 February 2006

1. Introduction

On the way into this building, we pass a statue of the nineteenth century Norwegian actor Johannes Brun. He performed at Christiania Theatre, which once stood in the square in front of the main entrance. Brun was an acquaintance of Henrik Ibsen, who also worked at the same theatre for a period – part-time as dramatic consultant – when the theatre he had been directing closed. This was a difficult time for our great dramatist, both personally and financially. He was struggling to overcome writer's block and the public's preference for the mediocre and the trivial.¹ Nineteenth-century Christiania (now Oslo) was described as "O great and little city!

What a cold and surly sky broods over you!"²

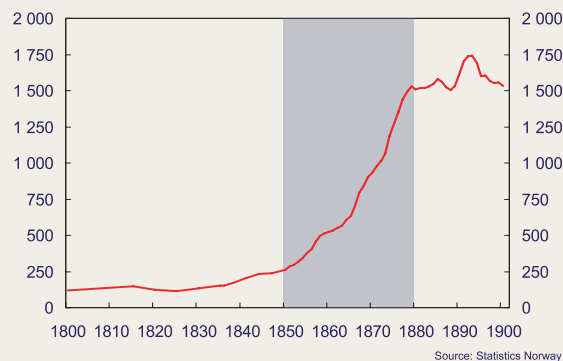
A bleak time for Ibsen, perhaps. But the Norwegian economy was not faring all that badly. The economic expansion that had begun in the 1820s gathered momentum from the middle of the century. The British navigation acts were repealed in 1849 and the Norwegian fleet was permitted to transport other countries' goods to and from England. Norway had suddenly become a major exporter of services. The tonnage of the Norwegian commercial fleet increased almost six-fold from 1850 to 1880.

2. Changes in the international division of labour

We are now again in a period of considerable changes in the international division of labour. Global trade is again growing at a markedly faster pace than production, thanks to technological advances and a sharp reduction in the costs associated with trade in goods, services and information.

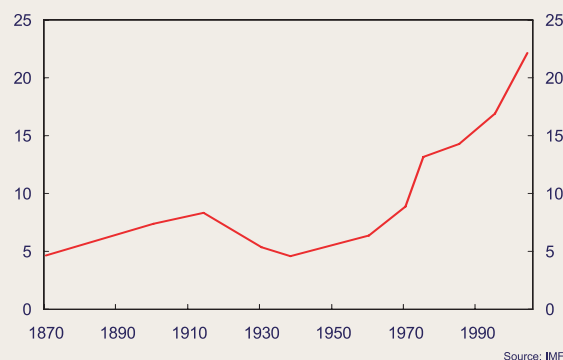
Trade barriers have been removed. In the early post-war years, tariff barriers between a few industrialised countries were dismantled. The later rounds in GATT, now the WTO, embraced both a far broader agenda and a greater number of countries. Today, almost all coun-

Chart 1. Norwegian merchant fleet 1800 - 1900. In thousands of gross tons



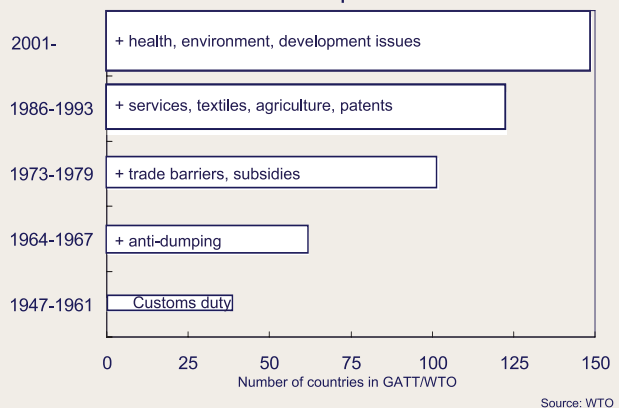
The chart shows developments in the Norwegian merchant fleet from 1800 to 1900 in thousands of gross tons. Annual figures.

Chart 2. Exports of goods. Per cent of global GDP. 1870 - 2004



The chart shows the total of individual countries' exports as a share of global GDP, measured in USD. 1870 to 2004. Annual figures.

Chart 3. Extended trade cooperation



The chart shows developments in GATT/WTO trade cooperation from 1947 to February 2006. The x-axis indicates the number of countries that have taken part in negotiations in different periods. The bars indicate the new topics included in trade cooperation in the different periods.

The number of countries that took part in the Torquay round (38) is shown for 1947-1961. [The numbers of participants in the various negotiations in the period 1947-1961 were: Geneva 1947: 23, Annecy 1949: 13, Torquay 1951: 38, Geneva 1956: 26, Geneva 1960-1961 (Dillon round): 26]

¹ Michael Meyer: Henrik Ibsen: the Making of a Dramatist 1828-1864, London 1967, p. 168

² Meyer, op.cit. p. 217: Excerpt from The Judge's Daughters, by the 19th century author Camilla Collett.

tries participate as members or observers and the issues are far-ranging. In addition to dismantling tariff barriers, anti-dumping measures have been introduced, subsidies have been removed and agreements have been entered into for textiles and agricultural products. In the current round, issues related to health, the environment and development are also being discussed.

Political changes have amplified this tendency. At the beginning of the 1990s, China changed course and is now a member of the WTO. Its share of total exports is growing rapidly. India is at the starting-line.

These countries have large labour forces that offer their services at very low wages, and these labour resources are available to companies that compete on world markets. The working-age population in rural China is nearly the same as that of the entire OECD area. Many are underemployed and are seeking work in urban areas.

Low labour costs and more efficient transport and communication attract labour-intensive production. Production is being transferred to China or other emerging economies. There are many examples showing that competition in selling highly skilled services is also intensifying. Myopia surgery is offered in Turkey. Dental care and other medical services are also offered, at prices that are substantially lower than in Norway. Norsk Hydro reports that almost 300 000 hours of engineering services for the Ormen Lange project were supplied by Indian engineers, located in India.

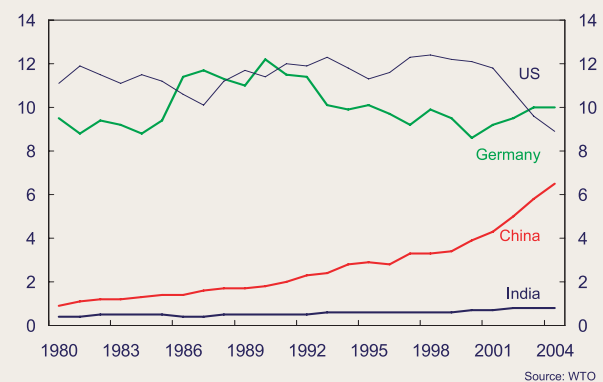
Trade in services flows both ways. Norwegian architects are designing landmark buildings all around the world. Det Norske Veritas sells its services worldwide. A company – Vik-Sandvik – that designs ships that are built in Europe, Asia and the US has its head office in the rural community of Fitjar. An ICT firm located in Ølen municipality – Omega – is developing and installing software for customers in Baku and Dubai.

New markets in Asia are creating opportunities for industrialised countries. Resources are transferred to enterprises producing goods and services that require specialised skills. Businesses that have been sheltered and protected by national regulations are in a weak position when new technology or new agreements expose them to external competition.

The shift in the division of labour is now influencing – and will continue to do so for a period – real wage growth in industrialised countries. The risk that a business will have to wind up operations or move abroad is dampening costs. In a number of European countries, wage growth is also being influenced by labour inflows from the new EU member states.

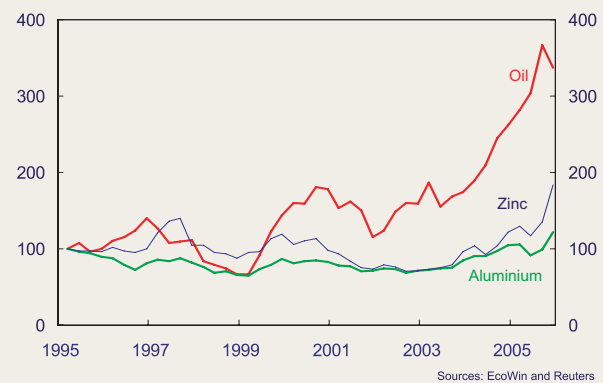
Increased trade has engendered higher demand for shipping services and favourable freight rates. This has in turn led to a boom in the shipbuilding industry. At the same time, high energy prices are boosting investment in the petroleum and electricity sectors, with considerable impetus to the engineering industry. Growth in Asia

Chart 4. Share of global merchandise exports. Per cent



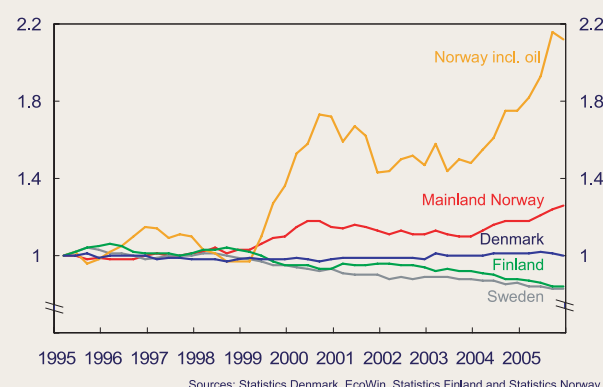
The chart shows the shares of global merchandise exports of the US, Germany, China and India in the period 1980 to 2004. Annual figures.

Chart 5. Commodity prices. Index



The chart shows the spot price for oil, zinc and aluminium in USD. The series are indexed to 100 in 1995 Q1. Quarterly average of daily quotations.

Chart 6. Terms of trade. Index



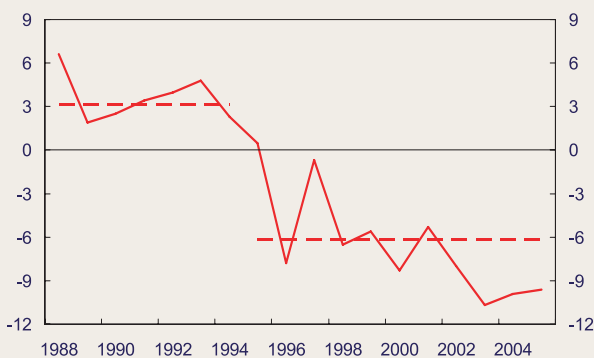
The chart shows the terms of trade of Denmark, Finland, Sweden, Norway and mainland Norway, from 1995 Q1 to 2005 Q4. The terms of trade are calculated as the export price index relative to the import price index. The indices cover all exports and imports apart from the indices for mainland Norway where oil and shipping are excluded from the export price index.

is having a favourable impact on aluminium prices.

Prices for our imported goods are falling in relation to prices for goods we export. Norway's terms of trade are improving. The impact of the rise in oil and gas prices is particularly strong, but the terms-of-trade gains for the mainland economy have also been high.

The situation in Norway differs from that of its Nordic neighbouring countries. Sales of Swedish and Finnish high-tech products are growing strongly in volume terms, but prices are falling. Denmark has a diversified business sector, which is overall moving on a steady path.

Chart 7. Change in prices for jackets, sweaters, blouses and dresses. Annual change. Per cent

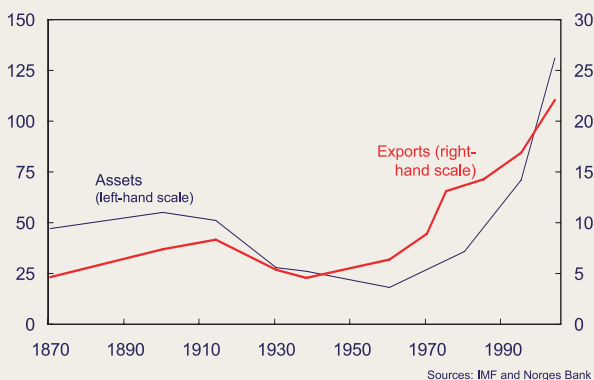


Sources: Statistics Norway and Norges Bank

The chart shows the change in prices from 1988 to 2005 in the product group "Women: blouses, dresses, skirts, jackets, sweaters" (Statistics Norway's COICOP group K03122). Annual figures.

The broken lines indicate the average change in prices in the periods 1988-1994 and 1995-2005, respectively. The time of the break is estimated in an analysis carried out by Norges Bank for the period 1980-2005.

Chart 8. Exports and foreign assets. Per cent of global GDP. 1870 - 2004



Sources: IMF and Norges Bank

The chart shows developments in exports and foreign assets from 1879 to 2004. Annual figures. The "Exports" curve shows the total of individual countries' exports as a share of global GDP. The "Assets" curve shows all countries' foreign assets (publicly or privately owned) as a share of global GDP. Values up to 1995 have been estimated by the IMF. The value for 2004 has been estimated by Norges Bank. The growth in foreign assets for the average of the G7 countries (the US, Canada, Germany, France, Italy, the UK and Japan) has been used for the period 1995-2004.

As consumers, we are benefiting from falling prices for many imported goods. Clothing prices are an illustration of this. Prices rose by around 3 per cent annually for a long period, but since 1995 they have been falling by about 6 per cent annually. This kink point coincides with the dismantling of the restrictions on textile trade and it coincides with a period of rationalisation in retail trade in Norway. China's membership of the WTO has subsequently pushed down prices further.

The Internet facilitates price comparison, and price margins in all sectors are under pressure.

World financial markets are also in flux. Technological advances, increased trade and liberalisation have increased cross-border capital flows. Foreign ownership of businesses has increased considerably. At the same time, savings are increasingly being invested in foreign countries. The home bias for investment has diminished.

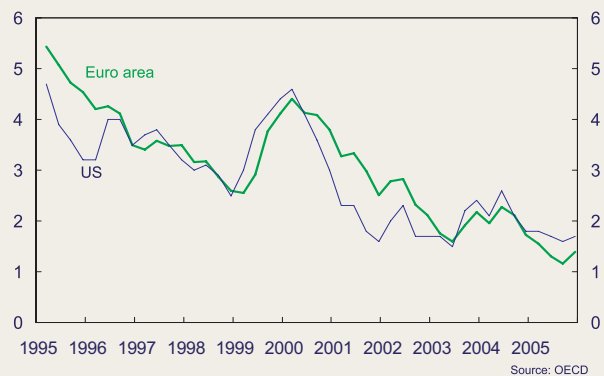
In recent years, long-term interest rates have declined. Low and stable inflation in many countries has made a contribution. Investors have less of a need to hedge against high inflation. There is a strong tendency to save among Asian and oil-exporting countries, while the willingness to invest is limited in many industrialised countries. This is pushing down interest rates. Low long-term rates probably also reflect low short-term interest rates and ample liquidity.

Interest rate developments and buoyant growth have led to a sharp rise in equity prices in the past few years. At the same time, property prices are rising sharply in many countries.

Low interest rates, sharply rising equity and property prices, high commodity prices and high energy prices are probably linked to cyclical developments and may therefore be transitory. Changes in the international division of labour, integrated financial markets and increased competition in broad goods and services markets are more permanent.

Globalisation and cyclical developments have been

Chart 9. Long-term real interest rates. Per cent



Source: OECD

The chart shows long-term real interest rates for the US and the euro area from 1995 Q1 to 2005 Q4. Long-term real interest rates are estimated by deflating yields on government bonds with a maturity of about 10 years by average consumer price inflation for the past two years. Quarterly figures.

kind to the Norwegian economy. Few countries are benefiting as much as Norway – and losing as little – in the current environment of freer trade in goods and services and cross-border labour mobility.

3. Challenges to monetary policy

After almost two decades of high inflation, the rise in prices stabilised in many countries in the 1990s. The year-on-year rise in prices in the industrial countries was about 13 per cent at the beginning of the 1980s. In the course of the following decade, it fell to below 2 per cent. Today, most central banks orient monetary policy towards low and stable inflation.

The practical implementation of monetary policy can vary, but the common objective is price stability. Low and stable inflation has contributed to solid growth in the global economy in recent years. Despite rising oil prices, international conflicts that have led to uncertainty, and other disturbances, the impact on inflation and output has been moderate.

The perception in Norway in the 1960s and 1970s, as in other countries, was that strong growth and low unemployment could be achieved if we were only willing to accept somewhat higher inflation. But it was gradually recognised that this was not the case. In 1980, Odd Aukrust, research director at Statistics Norway said the following about economic developments in Norway: “Unfortunately, there is even less reason for optimism this time. It appears that the competitive position of Norwegian manufacturing will weaken in the coming year. The main problem is that no one controls price developments. With an inflation rate of around 10 per cent a year, no one dares to make investments that could stop this price carousel.”³

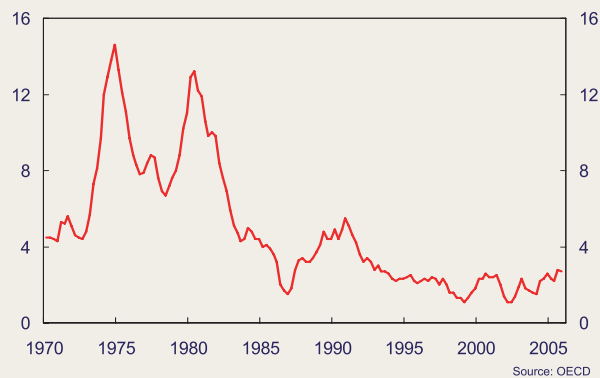
From the second half of the 1980s, the authorities started using monetary policy to control inflation.

At the beginning of the 1990s, inflation had fallen, and since 1988, inflation has averaged 2½ per cent. Studies of price developments for all goods and services show that price formation underwent a permanent shift around 1988.⁴ A transition occurred from a period of high and unstable inflation to the current period of low and stable inflation.

Bringing the rate of inflation down had its costs. In the years from 1988 to 1992, the Norwegian economy experienced the deepest recession of the post-war period. But growth picked up quickly, and the 1990s as a whole was a golden decade. It also appears that the present decade will be favourable. A foundation was laid when the Norwegian authorities took control of inflation.

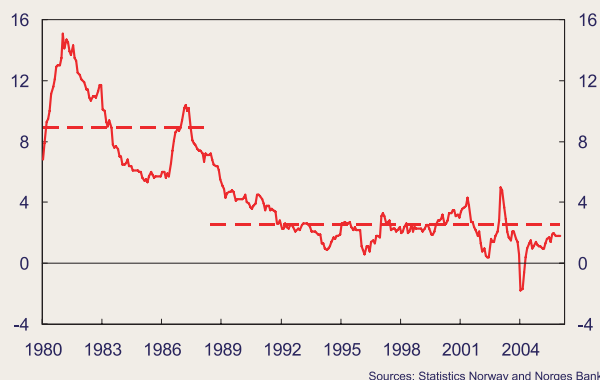
Developments over the past 40 years illustrate that the most important contribution monetary policy can make to sound economic developments in the long term is low and stable inflation. This provides the economy with a nominal anchor.

Chart 10. Inflation in industrialised countries. Annual change. Per cent



The chart shows G7 inflation from 1970 Q1 to 2005 Q4, measured as the change in the consumer price index on the same quarter the previous year. Source: OECD

Chart 11. Inflation in Norway. Annual change. Per cent



The chart shows inflation in Norway from January 1980 to January 2006. Inflation is measured as the change in the consumer price index on the same month the previous year. The broken lines indicate the average for January 1980 to May 1988, and for June 1988 to January 2006, respectively. The time of the break is estimated in an analysis carried out by Norges Bank in the period 1980-2005.

Low and stable inflation makes it easier for economic agents to distinguish changes in relative prices from changes in the general price level. Prices become a more accurate information vehicle. Alan Greenspan has defined price stability as “a situation in which households and businesses in making their saving and investment decisions can safely ignore the possibility of sustained, generalized price increases or decreases”.⁵ This is the aim of monetary policy in all countries.

When there is confidence in the inflation target, monetary policy can also contribute to stabilising output and employment.

Norges Bank operates a flexible inflation targeting regime, so that weight is given to both variability in inflation and variability in output and employment in interest-rate setting.

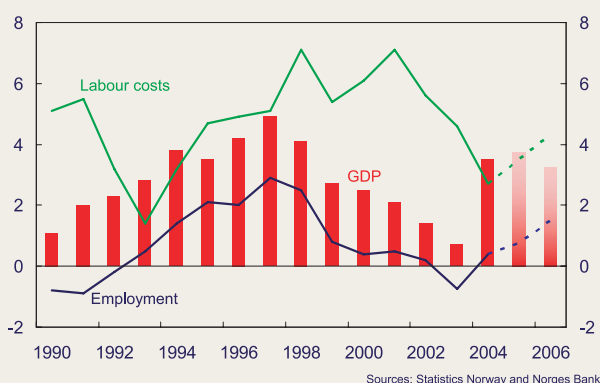
Past experience indicates that expectations as to future inflation remain stable even if inflation varies somewhat

³ Interview in Adresseavisen, 27 December 1980.

⁴ Based on an analysis conducted by Norges Bank of price indices for more than 130 different groups of goods and services for the period 1980-2005.

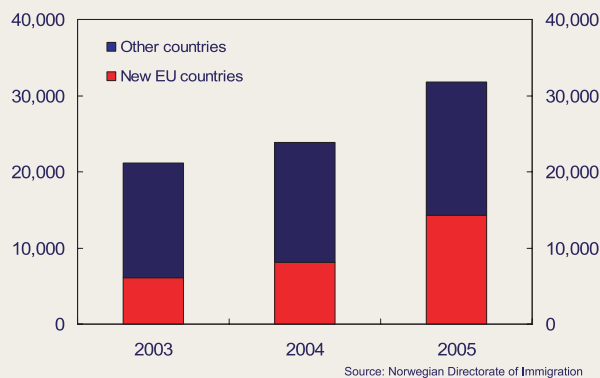
⁵ Alan Greenspan: Testimony before the Committee on Banking, Finance and Urban Affairs, U.S. Senate, July 13, 1988.

Chart 12. Employment, labour costs and mainland GDP. Annual growth. Per cent



The chart shows growth in GDP, the number employed and labour costs per person-hour worked for mainland employees. Annual figures. Figures for 2005 and 2006 are projections from Inflation Report 3/05. The estimated rise in labour costs is set as equal to estimated wage growth in Inflation Report 3/05. The estimate includes the costs of an increased number of vacation days and the introduction of mandatory occupational pensions.

Chart 13. Work permits



The chart shows the average number of foreign workers per year with a valid work permit (issued for the purpose of work) in Norway. The average is calculated from monthly figures from 1 January 2003 to 1 December 2005. Nordic citizens do not need work permits and are therefore not included in "other countries".

New EU countries include Poland, Lithuania, Latvia, Estonia, Slovakia, the Czech Republic, Hungary, Slovenia, Malta and Cyprus.

as long as the interest rate is used actively to curb the effects. Monetary policy cannot fine-tune economic developments, but it can prevent the largest effects from occurring when the economy is exposed to disturbances. In some situations, it may be appropriate to hedge against particularly unfavourable developments.

If inflation deviates substantially from the target for a period, the interest rate will be set with a view to gradually returning it to the target, so that we avoid substantial variations in output and employment. Through the 1990s, inflation remained on the whole in the interval 1½– 3½ per cent. Inflation has varied slightly more in the past few years. In a period of increased cross-border labour flows, substantial technological advances, changes in competitive conditions and new trading patterns, we may, with our very open economy, have to accept a somewhat greater variation in inflation and deviations from the target, as we have witnessed over the past two to three years.

Even though economic growth has been strong over the past 15 years, economic cycles have varied. A clear upturn in the years from 1993 to 1998 was followed by a period of more moderate growth and a mild downturn in 2002 and into 2003. Since summer 2003, the Norwegian economy has again experienced a marked upturn.

Wage developments reflect and influence business cycles. Strong employment growth in the 1990s resulted in a rise in labour costs, which in turn had a dampening impact on growth. Moderate wage growth in recent years is being accompanied by a strong cyclical upturn.

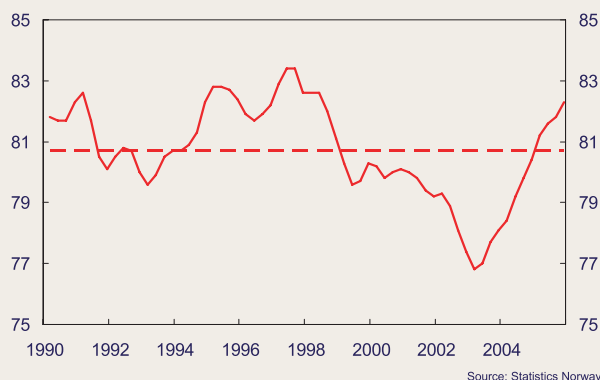
The Norwegian economy has continued to exhibit high growth this year. Low interest rates, higher petroleum investment and strong global growth have been the most important driving forces. Low interest rates contributed at the beginning of the upturn to high growth in

private consumption and housing investment. Last year, exports and corporate investment also showed solid growth. There is now a broad upswing in demand for goods and services. It has taken time for employment to pick up, but this is occurring now.

Inflation has increased somewhat, but is still very low, even 2½ years after the cyclical change. Inflation is still being restrained by the fall in prices for imported consumer goods, increased competition in a number of markets and the current period of lower nominal pay increases.

The trend in prices for consumer goods over the past two or three years is a result of favourable developments in the Norwegian and global economies. Low inflation is being accompanied by real income growth and a rise in production. In other words, low inflation is not the

Chart 14. Capacity utilisation in manufacturing. Per cent



The chart shows the capacity utilisation trend in manufacturing, measured as a percentage, from 1990 Q1 to 2005 Q4, as it is measured in SN's business tendency survey. The broken line indicates average capacity utilisation for the period.

result of declining demand, activity or employment.

The labour supply and production equipment set a limit in the short term on the level of production in Norwegian enterprises. When production approaches this limit, wage and price inflation will pick up. For an open economy like Norway's, this limit can vary. We buy an increasingly wide range of goods and services abroad. The production of goods for the domestic market can be moved abroad. Services can also be provided by producers in other countries.

Norwegian companies are no longer looking to the domestic labour market only. Other Nordic countries are an important source of labour. Last year, the number of work permits issued increased by 30 per cent. A large share came from the new EU member states. The waiter from Sweden, the Polish carpenter, the cherry-picker from Lithuania, the dentist from Iran and the physician from Sri Lanka are altering the capacity limits of the Norwegian economy.

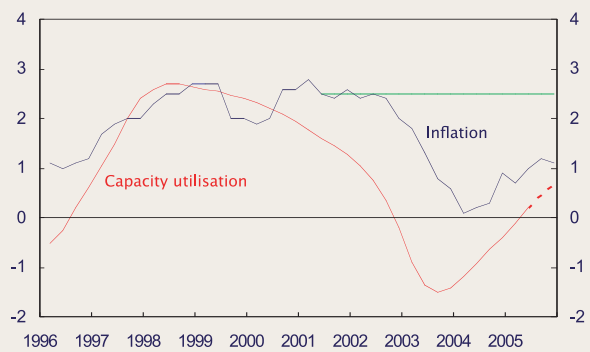
Nonetheless, many services are provided and must be delivered in Norway. Nor do we want to drive internationally exposed businesses out of the mainland economy. Language and cultural differences place limits on how quickly foreign labour can be absorbed, and the supply may diminish inasmuch as the economies of Sweden and Poland are now growing strongly. Norway's skills requirements and authorisation procedures are also curbing competition. Laws and resolutions on minimum pay requirements may also restrict the flow of labour.

Current evidence suggests that capacity utilisation is increasing in some sectors of the Norwegian economy.

Norwegian industrial leaders report that they are nearing capacity limits with regard to labour, plant and equipment. Three of four enterprises in the construction industry report that they are operating at capacity limits.⁶

The number of advertised vacancies is rising steadily.

Chart 15. Inflation and capacity utilisation in the Norwegian economy. Per cent



Sources: Statistics Norway and Norges Bank

The chart shows developments in inflation and capacity utilisation in the period 1996 Q1 to 2005 Q4. Inflation is shown as the CPI-ATE, which is the CPI adjusted for tax changes and excluding energy products (change from same quarter previous year). Capacity utilisation is measured as Norges Bank's estimate of the output gap. The output gap measures the difference between actual output and the output that is consistent with stable inflation (potential output). Quarterly figures for the output gap are derived from annual figures. The estimates for 2005 Q3 and Q4 are from Inflation Report 3/05. The green line indicates the inflation target of 2.5 per cent.

There are reports of shortages of craftsmen, project managers and supervisors, engineers and skilled workers.

Even though capacity utilisation is rising, there are no visible signs of inflation. Intensified competition is exerting downward pressure on margins. Wage growth is still at such a low level that it is strengthening businesses and employment. However, we have experienced earlier that cost inflation can rapidly accelerate. The settlements in 2004 and 2005 resulted in moderate wage growth. There are now signs of higher local pay increases in some industries. Pay increments are probably rising in occupations where pay is directly linked to performance. Municipalities and public entities have

Chart 16a. Household income and debt. Annual growth. Per cent

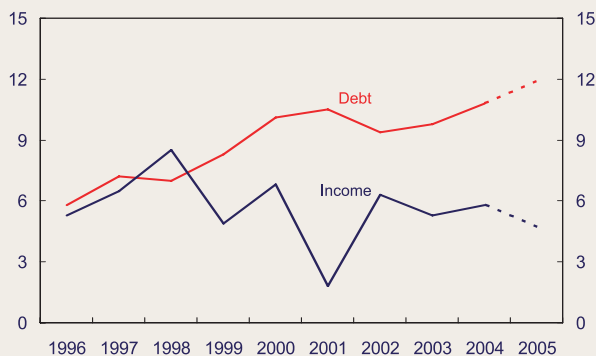
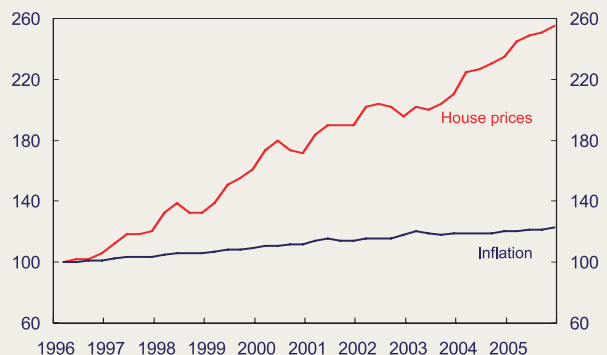


Chart 16a shows the growth on the previous year of household disposable income and new debt from 1996 to 2005. Annual figures. The disposable income series has been adjusted for estimated reinvested share dividends since 2001. Debt is total growth of credit to households in Q4 compared with Q4 of the previous year. Estimates for 2005 (see Inflation Report 3/05).

Chart b shows developments in house and consumer prices in the period 1996 Q1 to 2005 Q4. The series is indexed to 100 in 1996.

Chart 16b. House and consumer prices. Index



Sources: Sources: Norwegian Association of Real Estate Agents, Association of Real Estate Agency Firms, Finn.no, ECON, Statistics Norway and Norges Bank

⁶ Information from Norges Bank's regional network, January-February 2006.

Chart 17. Key interest rate forecast. Per cent



The chart shows actual developments in and Norges Bank's forecast for the key rate (the sight deposit rate) in Inflation Report 3/05 from 2004 Q1 to 2008 Q4. The shaded area represents one standard deviation.

recorded a sharp increase in revenues, and this may easily translate into higher labour costs. Nevertheless, the labour market is not so tight that there is a pronounced risk of a marked increase in wage growth in connection with the spring income settlement. Moreover, employee organisations have gained acceptance for important changes in labour legislation and regulations. This probably reduces the near-term risk of pay increases that weaken production.

A characteristic of the wage formation process in Norway has been that fairly long periods of moderate nominal pay increases and rising employment have culminated in a sharp rise in cost inflation – often as a result of working hour reforms – and a decline in employment. Developments in labour costs and the wage settlements in 1974 and 1975, 1986 and 1987 and in the period between 1998 and 2002 laid the basis for a subsequent decline in output and employment. In our interest-rate setting, we must continuously assess how we should take account of the risk of another sharp rise in cost inflation when the labour market tightens.

In the conduct of monetary policy, we assess the objective of stabilising inflation at close to 2½ per cent over time against the objective of stabilising output and employment. Given the low inflation rate, we have decided to keep interest rates at a low level and at times considered an even lower interest rate. However, against the background of solid growth in the Norwegian economy since summer 2003, we have instead decided to use some time to bring inflation back to target.

Household debt has risen sharply since the mid-1990s. At the same time, house prices have shown a marked increase. Debt developments through the 1990s can probably be viewed to some extent as a delayed adaptation to the deregulation of the housing and credit markets in the 1980s, after many households burned their fingers immediately after the deregulation. At the same time, the credit market has deepened. New loan products have emerged, and it is easier to raise loans. Borrowers

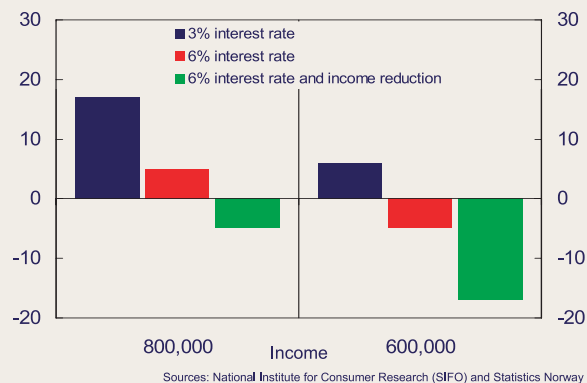
can choose their repayment schedule. Credit and housing market liberalisation provides homebuyers with the opportunity to establish a high housing standard early in their adult lives and draw on this capital later in life. In recent years, household income growth has been solid, household confidence regarding the future has been strong and households probably perceive higher income levels as permanent. This may have resulted in a further rise in house prices and debt. In addition, low real interest rates are currently contributing to this.

We have limited scope for restraining structural changes that take place when households increase their debt over several years in order to invest in housing and other property and assets. An interest rate level that effectively restrains this restructuring process would also have had adverse effects on economic activity. However, households are more vulnerable when debt is high. Long periods of sharply rising asset prices and debt may be a source of subsequent instability in production and employment.

We believe that expectations regarding interest rate developments have a greater impact on household and business borrowing and investment behaviour than actual interest rates.

Norges Bank communicates its analysis of the outlook for the Norwegian economy and the interest rate. At this juncture, the outlook for output and inflation suggests that the interest rate should be gradually – in small, not

Chart 18. Disposable income after payment of basic expenses, interest and principal. Per cent of income



The chart shows an example of what two families have left as disposable income as a percentage of after-tax income after basic expenses, interest and principal have been paid.

The one family has a gross income of NOK 800 000 and debt of NOK 2 million. The other family has a gross income of NOK 600 000 and debt of NOK 1.5 million. Both loans have a repayment period of 20 years.

Basic expenses are based on a standard SIFO budget for a household of two adults and two children (aged 2 and 14), of NOK 222 480 per year. NOK 16 000 per year has been added for other expenses, including electricity.

The blue bars show disposable income as a percentage of after-tax income for each family given an interest rate level of 3%. The red bars show the same information for an interest rate level of 6%, and the green bars for an interest rate of 6% and a 10% income reduction.

⁷ Based on the analyses in *Inflation Report 3/05* and the assessments provided in the press release following Norges Bank's monetary policy meeting on 25 January 2006.

too frequent steps – brought up to a more normal level.⁷ The economic outlook is uncertain. We illustrate interest rate uncertainty ahead with a fan chart, which is meant to capture the outcome with a 70 per cent probability.

The consequences of higher interest rates for two households are illustrated in this chart. Both households comprise two adults and two children. One household has a gross income of NOK 800 000 and NOK 2 million in debt. The other has an income of NOK 600 000 and NOK 1.5 million in debt. The chart shows the two households' income after basic expenses and interest and principal payments have been paid. The household with an income of NOK 800 000 can cope reasonably well with a debt of NOK 2 million even after the interest rate has increased by 3 percentage points. The household with the lowest income will have a tight margin. Principal payments will have to be deferred and, even with a deferral of a few years, this household will have little leeway after basic expenses have been paid. In order to increase its financial leeway, it will either have to increase its income, or reduce housing consumption and dispose of its debt.

Both households will be vulnerable should one member lose income from employment and have to rely on benefits. With an income loss of 10 per cent, even the household with the highest income level would have to make considerable spending adjustments.

Although these households have higher-than-average debt, this debt level is not uncommon. However, for most households, it will be relatively easy to cope with gradually higher interest expenses.

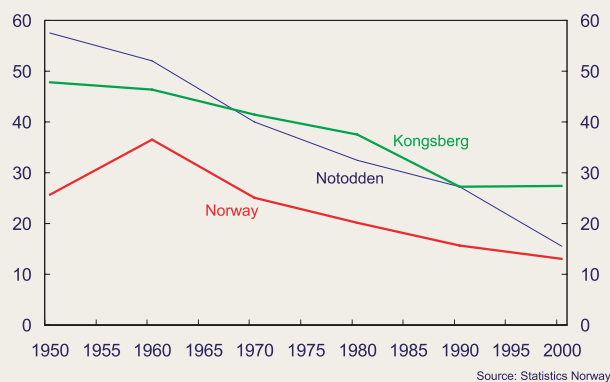
The outlook for the Norwegian economy is favourable. Output has picked up, although so far not to such a degree that there are visible signs of inflation. As long as the rise in prices is slow, it will be appropriate to maintain a low interest rate. But when capacity utilisation increases, the interest rate will have to be raised gradually towards a more normal level.

Even though price inflation has deviated from the target for a period, there are no indications that economic agents have changed their view of future inflation. Expectations are stable. When households and businesses make their saving and investment decisions and set prices, they can safely ignore the possibility of sustained, marked increases or decreases in the general price level. The business sector can base their decisions on the assumption that wage and cost inflation will not revert to the level seen in the 1970s and 1980s. Employees also know that their pay increases will not be eroded by inflation. Low and stable inflation is a credible objective.

4. Are we equipped for the future?

Norwegian enterprises have access to new markets and are encountering increasing competition. New businesses are emerging while others are scaling back and closing down.

Chart 19. Manufacturing workers as a percentage of the working population



The chart shows the number of workers in manufacturing as a percentage of the total working population for Notodden, Kongsberg and Norway. The figures are taken from population and housing censuses in 1950, 1960, 1970, 1980, 1990 and 2001.

In 2001, the figures for working population in the population and housing census were obtained from registers. The statistics therefore use the number employed as an approximation of the working population.

We have behind us 15-20 years of fairly sound macro-economic management, which provides a good basis for growth in the Norwegian economy. The banking system and securities markets are highly developed. Generally, only unprofitable projects lack financing and capital. In a take-over, new owners completely re-haul poorly run operations. In Norway, as in other industrialised countries, private ownership is firmly protected. This is a competitive advantage and a fundamental precondition for a market economy to function over time.

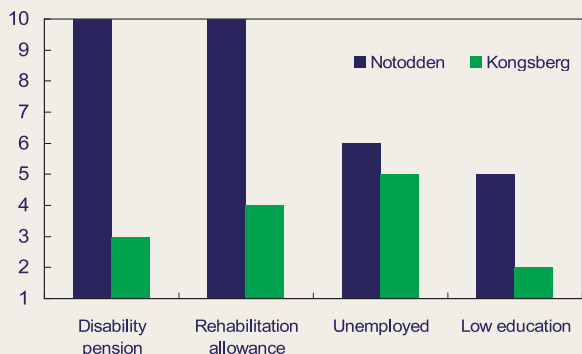
We like to believe that we have a highly educated labour force, and find some support for this in OECD surveys. As a result of the tax reforms of 1992 and 2006, we are able to finance the welfare state fairly effectively. Our infrastructure is being developed. The security provided by our welfare system means that restructuring is easier than in many other countries. Like other Nordic countries, we apply labour market rules that for the most part do not impede restructuring.

We learned a great deal about successful – and less successful – restructuring in the 1970s and 1980s. Two local communities that had to restructure are Kongsberg and Notodden.

The cornerstone enterprises in these two communities had to cut their workforces substantially. Kongsberg fared well. When Kongsberg Våpenfabrikk declared bankruptcy in 1987, its defence business was continued while all its civilian production was split up and sold. The new companies and spin-off companies in Horten, Stjørdal and Egersund have posted solid growth and profitability. Several of the companies have become leaders in their field. An adequate supply of state-of-the-art technical expertise has been important for the companies' restructuring success.

Notodden did not fare as well. In the 1950s, Tinfoss

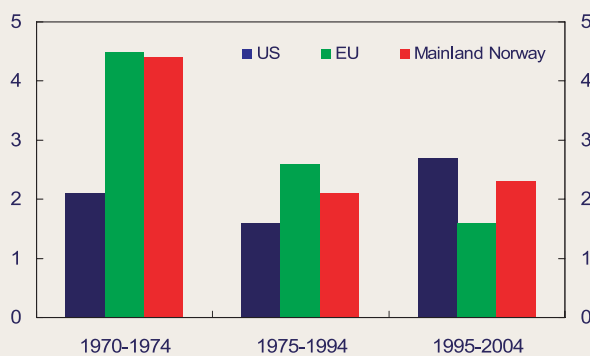
Chart 20. Living conditions - problems. Index. 2005



Source: Statistics Norway

The chart shows developments in selected sub-indices on problems linked to living conditions produced by Statistics Norway. The indices take values from 1 to 10. Municipalities and districts are ranked in 10 groups of equal size. A value of 1 means that the municipality is one of the 10 per cent with the lowest value in the indicator, etc., while a value of 10 means that the municipality is one of the 10 per cent with the highest value in the indicator. A high indicator value means, for example, a relatively high share of disability pensioners, unemployed etc.

Chart 21. Productivity growth in the business sector. Per cent



Sources: Bureau of Labor Statistics, OECD and Statistics Norway

The chart shows average business sector productivity growth in mainland Norway, the US and EU countries in the periods 1970-1974, 1975-1994 and 1995-2004. Productivity is calculated as value added per person-hour worked.

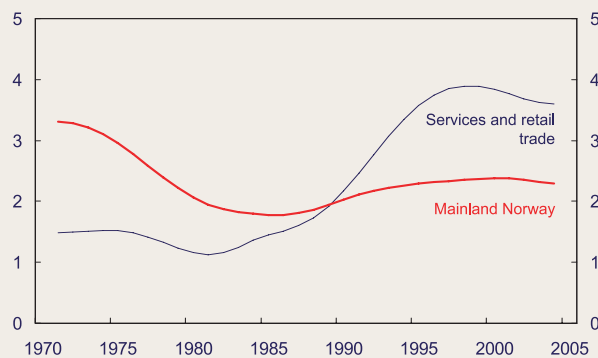
Figures from 1970 are not available for the EU and for Norway. Figures for the non-farm business sector have been used for the US. The EU here consists of Germany, France, Italy, Belgium, the Netherlands, Denmark, Ireland, the UK, Spain, Finland and Sweden.

Jernverk and Norsk Hydro employed more than 1500 manufacturing workers. Towards the end of the 1960s, they started shedding labour. The processing industry has now been closed down. Many workers are now commuting to other municipalities, including Kongsberg. The share of the population that is on disability benefits or participating in various labour market programmes is above the national average. The basis for establishing new businesses has not been as favourable as in Kongsberg, but there are now at last signs that the situation is improving.

Kongsberg Våpenfabrikk was wholly state-owned. This was widely perceived as a guarantee for continued operations. The company repeatedly required state capital injections following unfavourable results. When the government allowed the company to fail, this also represented an important choice with regard to state ownership policy. Profit requirements bolstered discipline in the fledgling companies. At the same time, when the original company was split up, competencies and values became visible.

The state still has extensive ownership interests in Norwegian business and industry, but it has adopted a completely different approach to the management of its interests following the experience in Kongsberg, Mo i Rana, Sulitjelma and Syd-Varanger. Corporate governance is now exercised through resolutions in general meetings and according to recommendations from nominating committees, and the board and management can run companies with the objective of increasing value. The state-owned companies are subject to exactly the same market discipline as other operators, with a required return and continuous adaptation and development. This is also the only way companies can avoid stagnation.

Chart 22. Productivity in Norway. Annual growth. Per cent



Sources: Statistics Norway and Norges Bank

The chart shows trend productivity growth for mainland Norway, and for services and retail trade, from 1971 to 2004. Annual figures. The figures are a Hodrick Prescott trend estimated by Norges Bank.

Through the Government Pension Fund, the state owns equities worth more than NOK 500 billion, spread across nearly 3 500 companies in over 30 countries. The holdings are minority interests. While long-term interests in state-owned companies require ownership discipline and distance from decision-making, the challenge to the Pension Fund is to assert its minority interests and contribute to transparent corporate governance. Here we can apply internationally recognised principles drawn up by the OECD and the UN.

Restructuring in state-owned enterprises and the wider business sector has enhanced the efficient use of labour, capital and other resources.

International comparisons indicate that production in Norway is fairly efficient – also in sectors other than oil and gas.⁸ A comparison shows that both Norway and

⁸ See for example OECD (2006): Economic Policy Reforms: Going for Growth; Bart van Ark (2005): "Europe's Productivity Gap: Catching Up or Getting Stuck"; and Christine Cumming: Panel Remarks in a Symposium on Productivity, Competitiveness and Globalization, Banque de France, Paris, November 4, 2005.

Europe were catching up with the US for a while. In Norway, productivity showed a particularly strong increase at the beginning of the 1970s. Growth was weaker from the mid-1970s and up to the beginning of the 1990s, but has since picked up somewhat again.

Productivity growth has been weaker in many European countries over the past decade. Restructuring in retail trade and the financial industry in particular has progressed at a slower pace in Europe than in the US. In this respect, developments in Norway are more similar to developments in the US. When productivity growth picked up in Norway, it was primarily in retail trade and the postal, telecom and banking industries.

Two factors seem to be important for growth:

First: In areas and enterprises in decline, adversity can trigger creativity when companies are split up and new owners make their entry.

Second: In order to reap the benefits of new technology, enterprises must be able to make rapid changes in their workforces.⁹

However, at a more fundamental level, growth and restructuring capacity is closely linked to the level of skills in a population. European surveys indicate that there is a high level of science and technology skills among the adult population.¹⁰ Surveys among pupils and students do not provide an equally positive picture. A report from the Norwegian Mathematics Council shows that the level of mathematical skills among new university students has declined markedly in recent years.¹¹ Even the top performing students score considerably lower than earlier. This is illustrated here as the percentage of correct answers in arithmetic and percent calculation, but we find similar scores for other mathematical skills. Norway is taking an economic risk in allowing the skills level to decline.

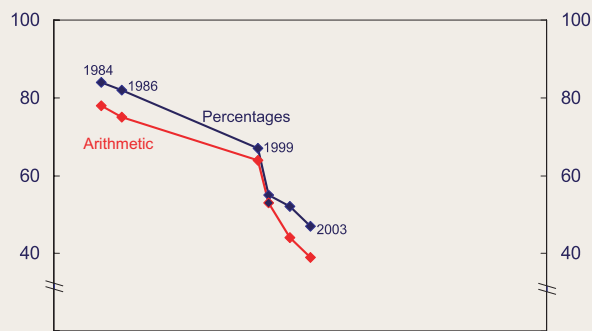
But – to take a brighter view of this: We have after all experienced that negative trends can be reversed in very important areas of society.

Our most important resource is our labour force. The employment rate is high in Norway. This is because many wish to participate in working life, and the vast majority find a job.

However, the Norwegian labour market also has its weak points. The annual number of person-years worked is lower in Norway than in the US and the rest of Europe. Both in Norway and the rest of Europe, the fall in the number of working hours is ascribable to longer holidays and shorter working days. The standard working year is short in Norway, but on the other hand Norway also has a higher percentage of part-time employees than other countries. Access to these working hour arrangements has made it easier for women and young workers to enter the labour market.

The income level in Norway has increased. Many may prefer to take advantage of this by increasing their leisure time in the form of shorter working days or longer holidays. And this has in fact taken place.

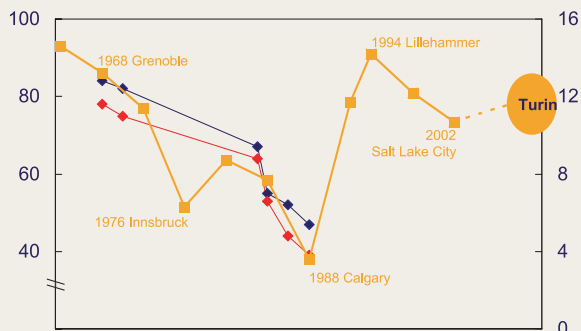
Chart 23. Mathematical skills among new students. Percentage correct answers



Source: Norwegian Mathematics Council

The chart shows the percentage share of students with correct answers for two problems with which the Norwegian Mathematics Council tested students in 1984, 1986, 1999, 2000, 2001 and 2003. The tests are national, and are taken by new students at universities and regional colleges.

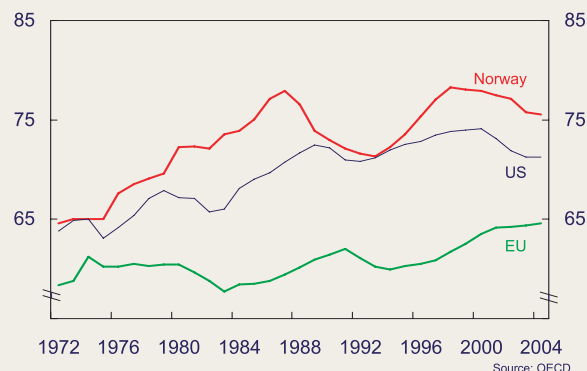
Chart 24. Norwegian medals in the Winter Olympics. Percentage of total attainable medals



Sources: Norwegian Mathematics Council, IOC and Norges Bank

The chart shows the percentage of students with correct answers for two problems with which the Norwegian Mathematics Council tested students in 1984, 1986, 1999, 2000, 2001 and 2003. The tests are national, and are taken by new students at universities and regional colleges. The chart also shows the percentage of Norwegian medals of the total number of medals in the Winter Olympics from 1964 to 2002 (right-hand scale).

Chart 25. Share employed. Per cent



Source: OECD

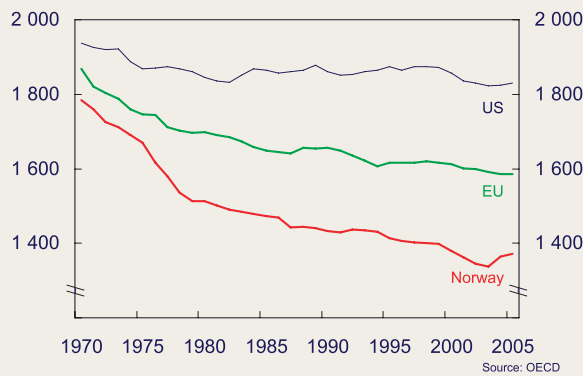
The chart shows the employment rate in Norway, the US and the EU (EU-15) from 1972 to 2004. The employment rate is measured as the number of employed persons aged 15-64 as a percentage of the total population in the same age group. Annual figures.

⁹ See for example Cumming (2005) and van Ark (2005), op.cit.

¹⁰ European Commission (2005): Special Eurobarometer 224, Europeans, Science and Technology, June 2005.

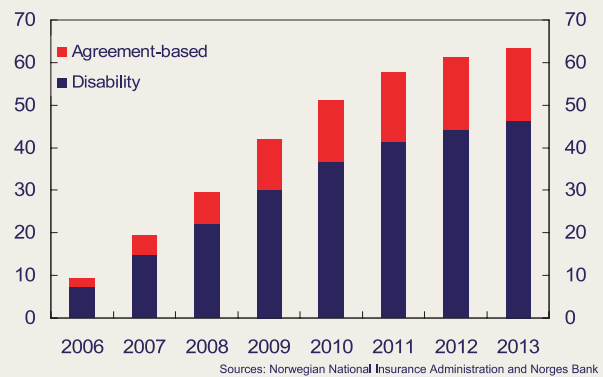
¹¹ Source: Telemark University College: Norwegian Mathematics Council's autumn 2003 survey among new students, February 2004.

Chart 26. Hours worked per employee



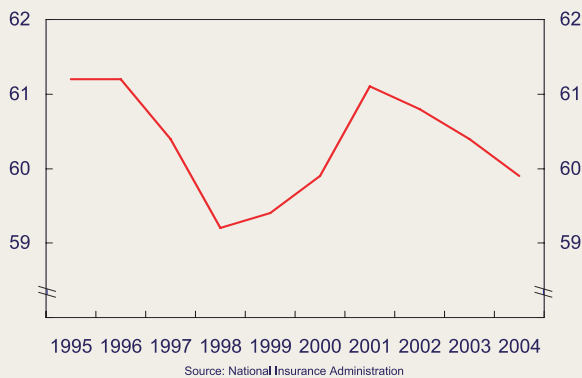
The chart shows actual hours worked per employee in the US, the EU and Norway from 1970 to 2004. Annual figures. Here 'EU' means only the euro area.

Chart 28. New pensioners on agreement-based and disability pensions. Projections. In thousands



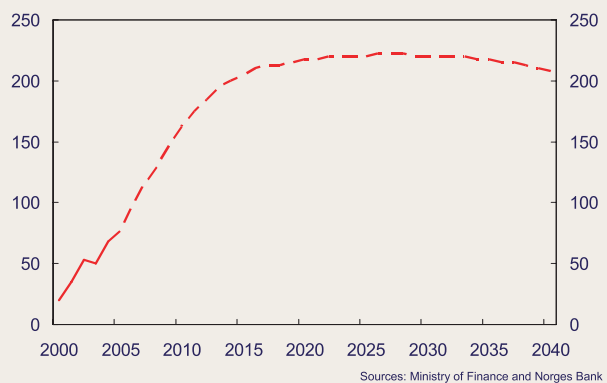
The chart shows Norges Bank's projections for new pensioners on agreement-based and disability pensions for the period 2006 - 2013, based on demographic developments and age-based rates for qualifying for disability and agreement-based pensions in 2005. Annual figures.

Chart 27. Expected retirement age



The chart shows the expected retirement age from 1995 to 2004. The figures indicate average retirement age, adjusted for skews in the population's age composition and mortality rate.

Chart 29. Government Pension Fund - Global. Per cent of mainland GDP



The chart shows developments in the value of the Government Pension Fund - Global as a percentage of mainland GDP, from 2000 to 2040. Annual figures.

Moreover, the retirement age is steadily declining. The expected retirement age is now below 60, when disability pensioners are taken into account. At the same time, life expectancy has increased, and leisure time accounts for an increasing share of our lives.

The large post-war cohorts will only reach ordinary retirement age after 2012, but are now nearing the age when they are eligible for early retirement. If they opt to retire under the scheme as it functions today, the number of pensioners under the contractual early retirement scheme will increase by 16 000 in six years. Similarly, the ageing of the population will result in an additional 41 000 disability pensioners.

The incentives embedded in pension rules, benefits and taxes encourage early retirement. The pension rules make it costly for companies to recruit older workers.

The wage trend perceived by a wage-earner as appropriate over a lifetime may also deviate from the trend in work capacity expected by the employer.

The basic problem seems to be that individuals are not sufficiently exposed to the social costs associated with leisure and early retirement. Nor are the right incentives offered to individual businesses.

5. Saving and returns in the Government Pension Fund

Our labour force is clearly our most important national resource, but Norway also has substantial petroleum wealth. The state's share consists partly of the value of oil and gas under the seabed and partly of the financial wealth accumulated in the Government Pension Fund – Global.

It is misleading to look upon the cash flow from petroleum activities as income. The appropriate economic perspective is to see the transfer of the cash flow to the Government Pension Fund as a way of transferring capital from one account to another – from petroleum to foreign securities.¹² By doing so, we diversify risk.

We are in a period marked by high oil and gas production and high prices. Substantial resources are therefore transferred from the one account to the other. Combined with high returns, the result is that the value of the Government Pension Fund is rising rapidly and may continue to do so in the years ahead.

The Fund is now approaching the nominal value of one year's GDP and may reach two in the course of the next decade. This is based on the assumption that oil prices remain high over the next few years and then fall to about USD 30 per barrel. Experience has shown that forecasts for both oil production and oil prices are highly uncertain.

The government bases its withdrawals from the Fund on an average real return of 4 per cent for financing current expenditure. Given this spending rule, the return may come to finance more than 15 per cent of government expenditure in 10 years. We thus reap considerable benefits from managing our petroleum wealth well. The return represents future income that we forego if we draw on this wealth today. But even with this source of income, more than 80 per cent of expenditure must be covered by other sources. Financing the large pension payments that will have to be disbursed after 2012 will be very demanding in any event.

The Government Pension Fund has a prudent investment strategy, with broad risk diversification, and a real return of 4 per cent is expected in the long term. There are examples of companies and investors that achieve a considerably higher return on capital over time. However, it is important to remember that for each successful investor earning high returns, there are many others with the same ambition and risk willingness, but with a record of poorer performance and bankruptcies. The Government Pension Fund cannot run the risk of ending up among the worst performers.

The globalisation of financial markets provides the Fund with good opportunities for investing and diversifying risk. However, we cannot insulate the Fund from wide annual swings in the value of the investments. We invest in international equity markets where prices fluctuate widely. These fluctuations are the reason why equity investments generate a higher return over time. The best year in the Fund's history so far was 2003, when it posted a real return of 11 per cent. This stood in sharp contrast to the previous year's result, which was -6 per cent.

The use of the Fund's return must therefore be smoothed over time in order to prevent events in inter-

national capital markets from spreading to the Norwegian economy.

6. Conclusion

In the character of Peer Gynt, Ibsen drew a rather unflattering portrait of the Norwegian man who travelled out into the world and became rich – but who had no concern for others. At the end of the play, Peer is penniless.

Ibsen himself left Norway, and although the Norwegian landscape and his Norwegian identity were at the core of his writing, it was his encounter with other ideas and thinking that enabled him to reshape his experience into world-class literature.

In the asylum in Peer Gynt, where “man is himself to the uttermost limit” and “no-one considers another's ideas” but “encloses himself in a barrel of self”, Peer Gynt is crowned “Emperor of Self”. When the roles are reversed and the asylum's keepers protest at being caged instead of the inmates, the director of the asylum, Begriffenfeldt, answers: “When the world's in a whirl, then we must whirl with it”.¹³

We do not share this attitude. We must not whirl helplessly along with the world. We should take advantage of the opportunities globalisation offers, but also contribute to those changes ourselves.

Thank you for your attention.

¹² Most of the central government's cash flow from the sale of oil and gas is derived from the extraction of wealth under the seabed (economic rent), while the remainder is a normal return on invested capital.

¹³ Henrik Ibsen: Peer Gynt. Translated by Peter Watts. Penguin Books, London, 1966.