

## **Svein Gjedrem: Interest rates, the exchange rate and the outlook for the Norwegian economy**

Speech by Mr Svein Gjedrem, Governor of Norges Bank (Central Bank of Norway), to the Mid-Norway Chamber of Commerce and Industry, Trondheim, 28 November 2007.

*The text below may differ slightly from the actual presentation. The address is based on the assessments presented at Norges Bank's press conference following the Executive Board's monetary policy meeting on 31 October and in Monetary Policy Report 3/07.*

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### **Introduction**

Monetary policy in Norway is oriented towards low and stable inflation with annual consumer price inflation of close to 2.5 per cent over time. The objective of low and stable inflation provides the economy with a nominal anchor. This means that all economic agents – households and enterprises, whether large or small – can plan ahead on the assumption that inflation will be low and stable.

In a small, open and decentralised market economy like Norway, and with our particular industry structure, there will be cyclical fluctuations. When economic agents have confidence that inflation is low and stable over time, the interest rate can also be set with a view to dampening the fluctuations somewhat.

### **Low inflation and solid growth in the Norwegian economy**

Inflation in Norway decelerated markedly from the late-1980s to the mid-1990s and has since been low and stable, and fairly close to, but somewhat lower than the target of 2.5 per cent, with considerably lower variability than earlier.

After a period of very low inflation in 2004, inflation was on the rise through 2005. Thereafter, domestic inflation showed an unexpected drop in 2006. Lower electricity prices have contributed to a fall in total CPI inflation in 2007. Underlying inflation, i.e. inflation adjusted for tax changes and excluding energy products, was fairly stable for a long period at between 1 and 1½ per cent. Underlying inflation has edged up gradually since late summer 2006. The most recent figures indicate that underlying inflation is now approximately 1½ per cent.

The Norwegian economy is expanding sharply after the strong upturn began in summer 2003. The upturn followed a period of slow growth from 1998 and a mild recession in 2002 and into 2003. Growth has been stronger than in the cyclical upturn in the mid-1990s. We have just reached the end of an unusually long period of economic growth. So far in the cyclical upturn, the mainland economy has grown by an average of just over 4 per cent annually. This year, growth appears to be over 5 per cent.

Growth is very strong for such an advanced stage of the economic cycle. This is clear from a comparison with the upturns in the 1980s and 1990s.

Unemployment has declined considerably and is now very low. The labour market is tight. Unemployment has not been as low since the latter half of the 1980s, and employment has risen faster this year than in living memory. It is estimated that the number employed will increase by 3.5 per cent this year, which would be the strongest rise recorded in the post-war period. The number of vacancies per unemployed has never been higher. There is a shortage of qualified labour in many industries.

Although unemployment has fallen sharply, wage-earners' share of corporate value added has been reduced, from around 75 per cent in the late 1980s to 70 per cent at the end of the 1990s, and now stands at below 65 per cent. Solid productivity growth and high prices for export goods and goods supplied to the petroleum sector have contributed to the reduction in

the wage share over the past few years. The ample supply of labour has probably had a dampening effect on wage growth. Increased globalisation may have provided greater opportunities for Norwegian enterprises to relocate production to other countries if labour costs become too high. This probably places some restraint on wage demands among workers in sectors where enterprises have such opportunities.

Historically, a high wage share has tended to be accompanied by low unemployment. Developments in recent years have provided the basis for strong growth in employment while the wage share has fallen.

Wage-earners and enterprises have both fared well. Low prices for imported goods have resulted in a subdued rise in consumer prices and a substantial increase in wage-earners' real wages. High export prices have contributed to holding down the rise in enterprises' real wages. Combined with high productivity growth, this has resulted in high corporate earnings and solid growth in employment.

Utilisation of production resources in the economy, labour and fixed assets, has increased markedly since summer 2003. Enterprises in Norges Bank's regional network report high capacity utilisation and limited capacity in most industries and regions and, as mentioned, a shortage of labour in almost all industries. Some municipalities have reported that the number of vacancies is higher than the number of job-seekers. There are also reports of shortages of other factor inputs. Not since the 1970s have there been such frequent reports of purely physical production constraints.

Reports from enterprises in Region Central Norway are not very different from the rest of the country. All industries report solid growth. Growth appears to be strongest in retail trade and services, while the building and construction sector reports only moderate growth. Continued growth is expected, but capacity problems are a constraint on growth in a number of industries. An increasing number of enterprises report that they have limited available capacity. For most enterprises, the labour supply is the most important constraint. Investment is expected to continue growing in all industries and in the local government sector. Employment is also growing, except in the building and construction industry, where employment growth now appears to have levelled off. Enterprises expect appreciably higher wage growth than at the same time last year. Enterprises state that higher pay is an important edge in the competition for labour.

After a long period of high housing investment and rising prices, activity in the housing market now appears to be slowing. Seasonally adjusted, house prices have fallen for four consecutive months. In recent years, house price inflation has been accompanied by strong growth in household debt. Credit growth remains high. Higher interest rates and falling house prices may lead to slower consumption growth and a higher saving ratio ahead.

There are large regional differences in house price developments, but the trend has been the same since year-end 2006. House price inflation is decelerating in all regions, with a 12-month decline in house prices in Hedmark and Oppland and a rate close to zero in Trøndelag.

The strong rise in house prices has been accompanied by an increase in turnover up to the summer of this year. The stock of homes for sale has varied somewhat in recent years, but since summer 2006 there has been a sharp increase. This may explain some of the decline in house prices in recent months.

The present economic expansion differs from previous upturns in that inflation has remained low so far despite strong growth and increasing capacity utilisation. There are several reasons for this.

First, low import prices and high prices for our commodity exports have improved Norway's terms of trade appreciably. Prices for oil and gas, freight, fish, industrial commodities and engineering products have increased considerably. Moreover, Norwegian importers have gained access to new markets in central Europe and Asia which offer substantially cheaper

consumer goods. Norway's terms of trade have improved by about 40 per cent since 2002. Recently, however the terms of trade have become slightly less favourable. This is partly due to weaker prices for Norwegian exports, such as metals. Slightly higher import prices have also had a negative impact.

Second, an ample supply of labour has boosted output growth. A strong increase in the population has expanded the growth capacity of the Norwegian economy without a comparable increase in wages. In particular, the supply of foreign labour has increased sharply after EU enlargement in 2004. Over the past two years, these labour inflows have accounted for over 30 per cent of growth in the labour force in Norway. At the same time, this has enabled Norwegian companies to be bolder in accepting new assignments and making investments, in the knowledge that they can procure labour throughout Europe.

Third, productivity growth has been unusually high, for both companies competing on international markets and those supplying goods and services to the domestic market. The result is lower production costs. Banks and other service sectors, in particular, have outperformed other countries in this respect. The business sector has been quick to adapt and change, and to make use of new technology that is available in an international market. This is probably due to the modernisation of the functioning of the economy through the 1980s and 1990s, which resulted in more efficient markets. In addition, growth in labour productivity reflected a marked fall in sickness absence in 2004.

### **The outlook for the Norwegian economy**

Monetary policy influences the economy with a lag. Norges Bank therefore has to be forward-looking in its interest rate setting. Developments in prices and capacity utilisation in Norway are influenced by both domestic conditions and economic developments in other countries.

Since the end of June, global money and credit markets have been characterised by sharp fluctuations, liquidity shortages and reduced risk willingness. The turbulence stems from problems in the US mortgage market. Defaults on subprime mortgages in the US began in the second half of 2006. Securities portfolios had been developed around these mortgages. Uncertainty arose among banks and investors that were directly or indirectly exposed to losses on subprime mortgages. Expected losses on mortgage-backed securities rose. Investors became gradually less willing to take risk. The premium on corporate securities increased markedly. The credit premium has been highest on the lowest rated securities, i.e. securities backed by subprime loans.

Another effect of the turbulence is credit migration, i.e. that the rating of securities has changed as the consequences of the unrest have become apparent. For example, a security that had an AAA rating, may now be rated AA or lower.

The turmoil spread rapidly to other parts of the financial markets. Banks that were directly involved, or had committed credit lines to other operators involved, were faced with growing uncertainty with respect to their liquidity needs and their own and other operators' potential losses. It may be difficult for banks to manage their own balance sheets because of uncertainty as to the size of the loans they will be left holding on their books that would otherwise have been financed in the bond market. As a result, they became very reluctant to lend money to one another. Money market rates increased markedly, also in Norway.

The contagion to the Norwegian money market reflects Norwegian banks' heavy reliance on foreign funding. The eurodollar market has been a frequently used source of financing for Norwegian banks. This is both because banks provide substantial lending in US dollars, and because this market is used to procure liquidity in NOK. In the latter case, banks borrow in USD and then swap USD for NOK.

The turbulence in financial markets and uncertainty related to developments in the US housing market have led to a decline in market expectations concerning economic growth, and central bank key rates have fallen, in both the short and the long term. There is considerable uncertainty as to how long market unrest will last, and the impact it will have on the real economy. The Federal Reserve has cut its key rate on two occasions this autumn, which has contributed to a further downward revision of interest rate expectations in both the US and the rest of the world, including Norway.

The interest rate differential between Norway and other countries can have an impact on the krone exchange rate. In the short term, however, the factors that influence the krone exchange rate vary. In periods, there seems to be a link between high oil prices and a krone appreciation, but there have also been periods when the krone has appreciated while oil prices declined. The krone appreciated when the interest rate differential against other countries was high in 2002, but as interest rates in Norway moved down to the level among our trading partners, the value of the krone fell back. In the past, we have observed that market turbulence has occurred in tandem with a weaker krone. This autumn the krone appreciated during the period of market turbulence, but has weakened somewhat in recent weeks, reflecting shifting themes in foreign exchange markets. However, it appears the krone will be a good 3 per cent stronger on average in the second half of this year than in the first half, and about 1.5 per cent stronger this year than last, which has a dampening impact on inflation.

Given our inflation-targeting regime, we will be mindful of the effects of higher interest rates on the krone exchange rate when inflation is low.

Global growth will also influence oil prices and developments in prices for other commodities. Oil prices are high and futures prices indicate that they will remain so. The price of Brent Blend has averaged close to USD 70 per barrel so far this year. In recent months, the price has been well above this level. Gas prices have also increased in recent years, reflecting the rise in oil prices and gas shortages in Europe. Gas prices fell somewhat in the first half of 2007, partly as a result of the decline in UK gas prices and the fall in oil prices in the first half of 2007. Both UK gas prices and oil prices have risen again this autumn. Gas prices are expected to remain at a high level, and the price of Norwegian gas may rise in the period ahead.

A long period of high oil prices has boosted investment in oil and gas activities, leading to a strong increase in domestic activity in recent years. The level of petroleum investment is historically high and the outlook is favourable. The discovery rate on the Norwegian continental shelf appears to be high this year. The number of applicants for new exploration activities is unusually high. Coupled with high oil prices, these factors will contribute to increased activity on the Norwegian continental shelf in coming years. At the same time, the composition of production is changing. Oil production is on the decline and has not been lower since 1994. Gas production continues to rise, and in 2007 production started on the large Ormen Lange and Snøhvit gas fields. The Ministry of Petroleum and Energy projects that total petroleum production will gradually decline in the years ahead.

Prices for commodities excluding energy have increased considerably since 2002. The rise in prices was particularly pronounced in spring 2006, when metal prices climbed by a full 45 per cent from March to June. The rise in metal prices has been driven primarily by strong global economic growth, particularly in China and other emerging economies. Prices for food and other agricultural products have also increased in recent years as a result of rising production costs owing to higher energy prices. Increased demand for biofuel has also contributed as agricultural products and land are used in the production of biofuel. Growth in demand for commodities is expected to remain high in the years ahead and supply will probably also increase. Prices for metals are expected to fall somewhat, but probably not back to the level in 2002.

Salmon prices fluctuate widely and are driven by a variety of domestic and global factors. Salmon prices rose sharply in summer 2006, driven by strong demand growth, particularly in Europe. Enterprises in Norges Bank's regional network report growing demand for high quality salmon. Avian flu and other crises linked to meat products have increased the preference for fish products. In the course of autumn 2006, salmon prices fell back to the levels before the price upswing, driven partly by somewhat lower demand but also by an increased supply of salmon.

### **The orientation of fiscal and monetary policy**

The Government uses the central government budget to influence economic developments. Government petroleum revenues are transferred in their entirety to the Government Pension Fund – Global and invested in securities abroad. However, as part of the budget resolution, the Storting decides on an annual transfer from the Fund to cover the government budget deficit, excluding petroleum revenues and capital income earned by the Fund. This annual transfer – direct petroleum revenue spending – has been sharply reduced in recent years, but is expected to increase somewhat next year. Developments reflect a marked increase in the government's general tax revenues as a result of the current period of strong expansion. This in turn reflects the automatic contribution made by the central government budget to curbing cyclical fluctuations because more money accrues to the state in favourable periods than in adverse periods.

If the economy had not been in a period of strong expansion and the economic situation had been more normal, a considerably larger transfer from the Pension Fund to the Treasury would have been necessary in order to balance the budget. This cyclically adjusted transfer is estimated at a good NOK 71 billion this year, and just under NOK 77 billion in 2008, and has increased gradually over time. It is this estimate that underlies the plan drawn up by the Government and the Storting, referred to as the fiscal rule. The rule states that the Government is to spend, as an annual average through the business cycle, the expected return on the petroleum fund i.e. 4 per cent. Because of the high level of activity, the Government has proposed somewhat lower petroleum revenue spending next year than the 4 per cent of the Fund's value at the beginning of the year.

The proposed tax programme for next year will have a fairly neutral impact on economic activity. Proposed direct and indirect tax rates will generate approximately the same government revenues as last year's tax rates had they been left unchanged. However, the overall central government budget will have a stimulatory effect. This is reflected in fairly strong nominal spending, which is higher than the rate of growth in mainland GDP that can normally be expected.

Norges Bank's interest rate setting is based on two main criteria for future interest rate developments. First, the interest rate is set with a view to stabilising inflation close to the target in the medium term. The horizon will depend on the shocks to which the economy is exposed and their effects on the path for inflation and the real economy ahead. Second, the interest rate path shall provide a reasonable balance between the path for inflation and the path for capacity utilisation. In the assessment, potential effects of property prices and the krone exchange rate on the prospects for output, employment and inflation are also taken into account.

The results of this trade-off are presented in the Monetary Policy Report in the form of a chart that presents baseline scenarios for the interest rate, inflation and capacity utilisation in the economy.

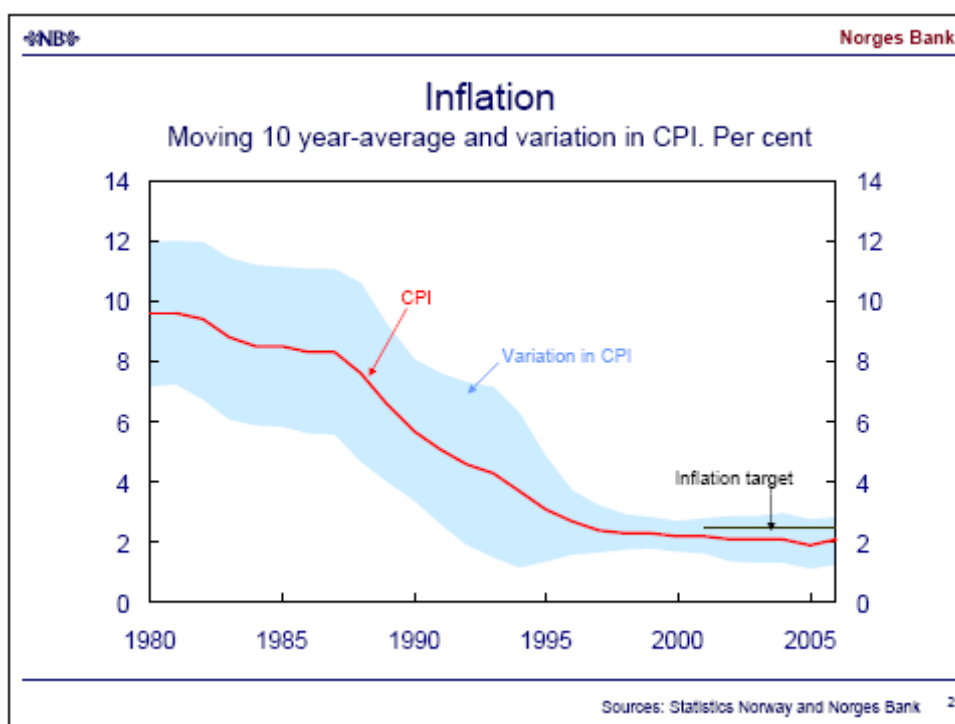
In Monetary Policy Report 3/07 it was pointed out that the inflation outlook is marked by opposing forces. The rise in prices for domestically produced goods and services is gathering pace. The Norwegian economy is still expanding, with unusually high demand for intermediate goods and labour. At the same time, the krone had appreciated markedly. This

may restrain inflation. The analysis implies that the key policy rate should be raised further, but to a lesser extent than envisaged in June.

At its meeting on 31 October, Norges Bank's Executive Board decided to leave the key rate unchanged at 5 per cent. At the same time, it was made clear that the key policy rate will probably remain in the interval 4¾-5¾ per cent until the next Report is published in March 2008, unless the Norwegian economy is exposed to unexpectedly severe shocks.

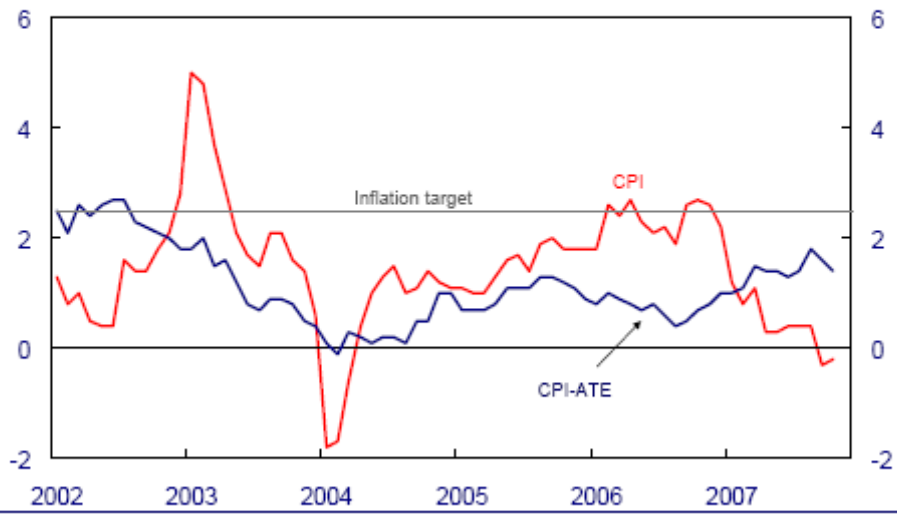
The projections are shrouded in uncertainty. The projections for inflation, output, the interest rate and other variables are based on an assessment of the current economic situation and the functioning of the economy. We have illustrated the uncertainty surrounding the projections for the interest rate, inflation and capacity utilisation with fan charts. The wider the fans, the more uncertain the forecasts are. If economic developments are broadly in line with projections, economic agents can also expect interest rate developments to be approximately as projected. On the other hand, the interest rate path may shift in relation to the projected path if the economic outlook changes or if the effects of interest rate changes on output, employment and prices are different from those projected.

Thank you for your attention.



### Low inflation

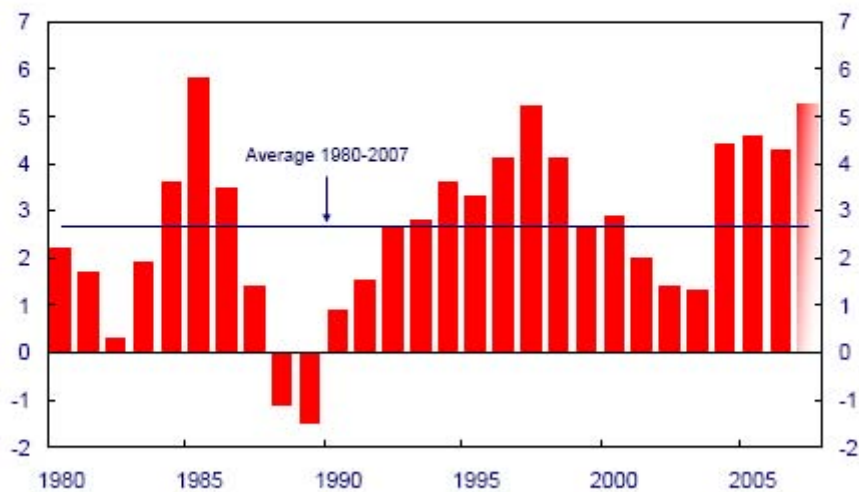
CPI and CPI-ATE. 12-month change. Per cent



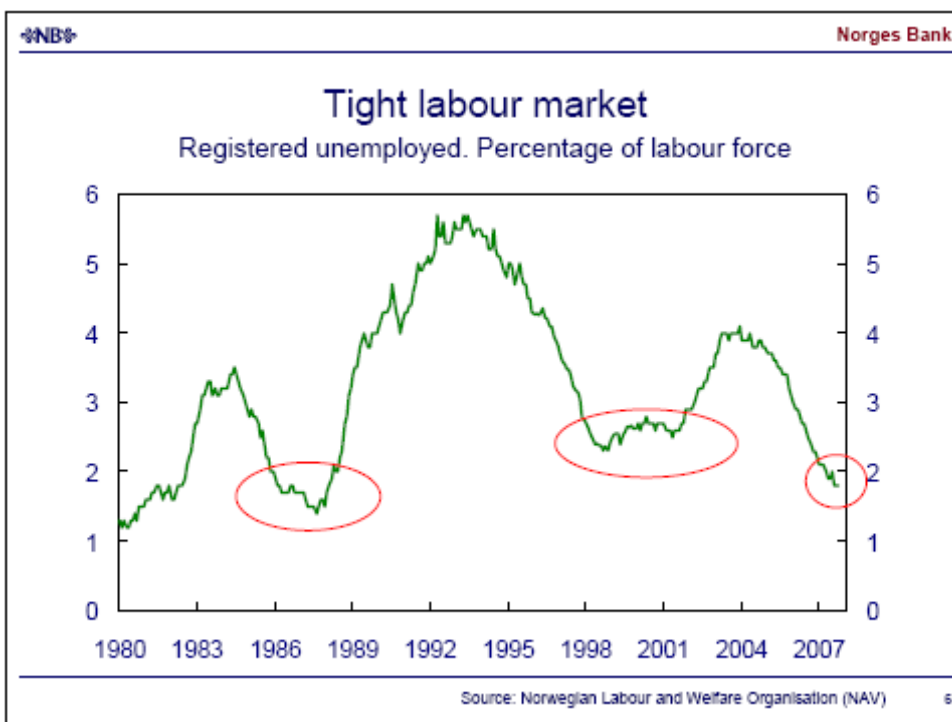
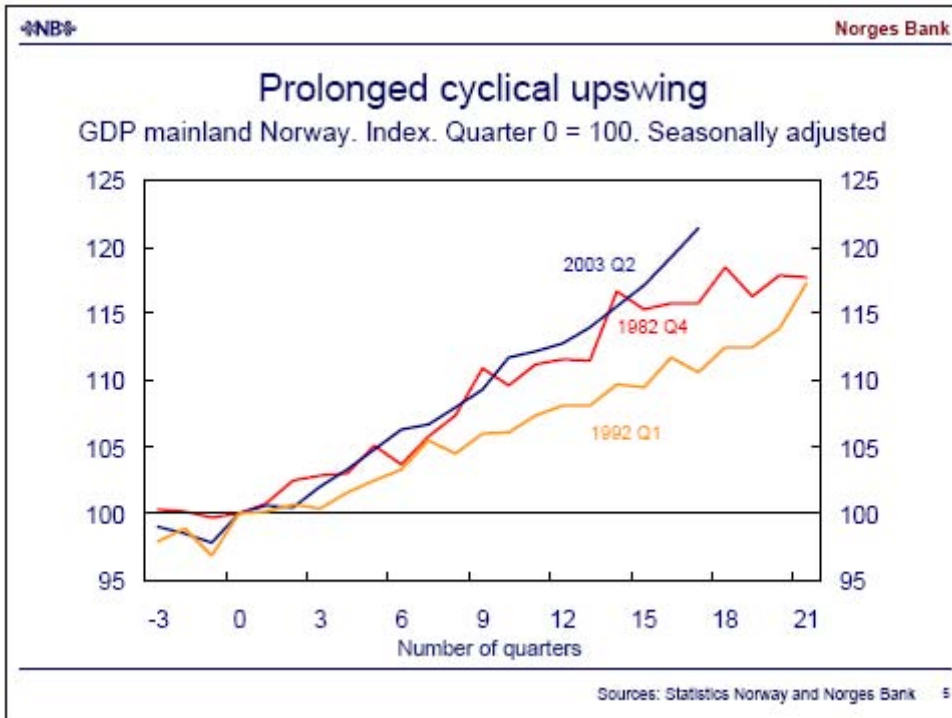
Source: Statistics Norway 3

### Strong economic growth

GDP mainland Norway. Annual growth. Per cent

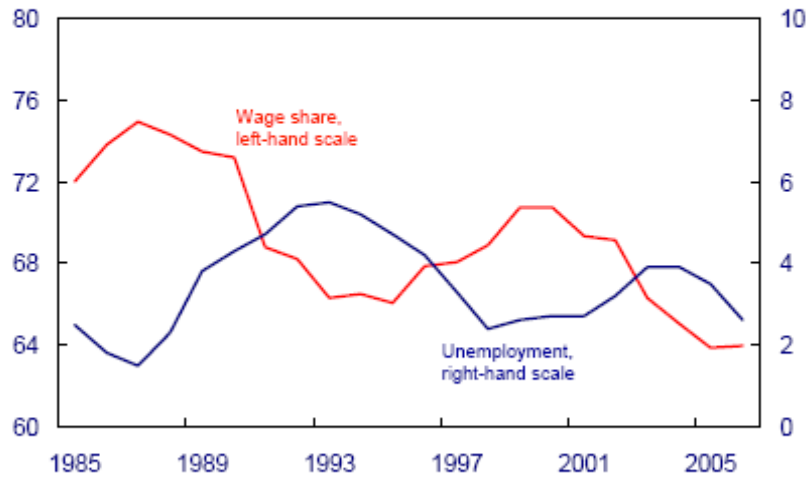


Sources: Statistics Norway and Norges Bank 4





### Wage share<sup>1)</sup> and registered unemployment Per cent



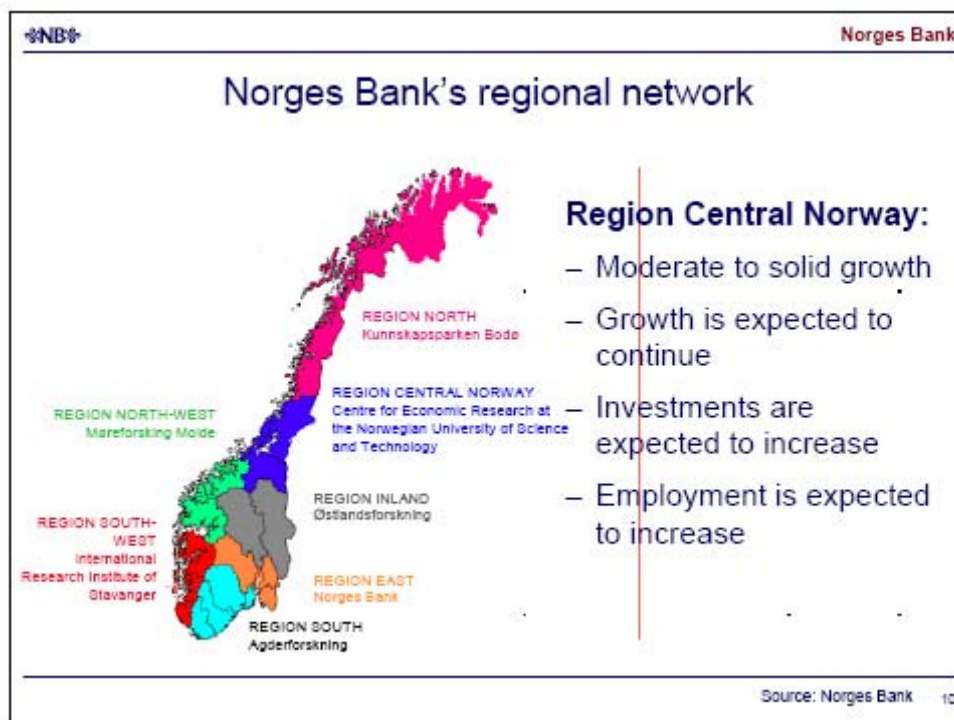
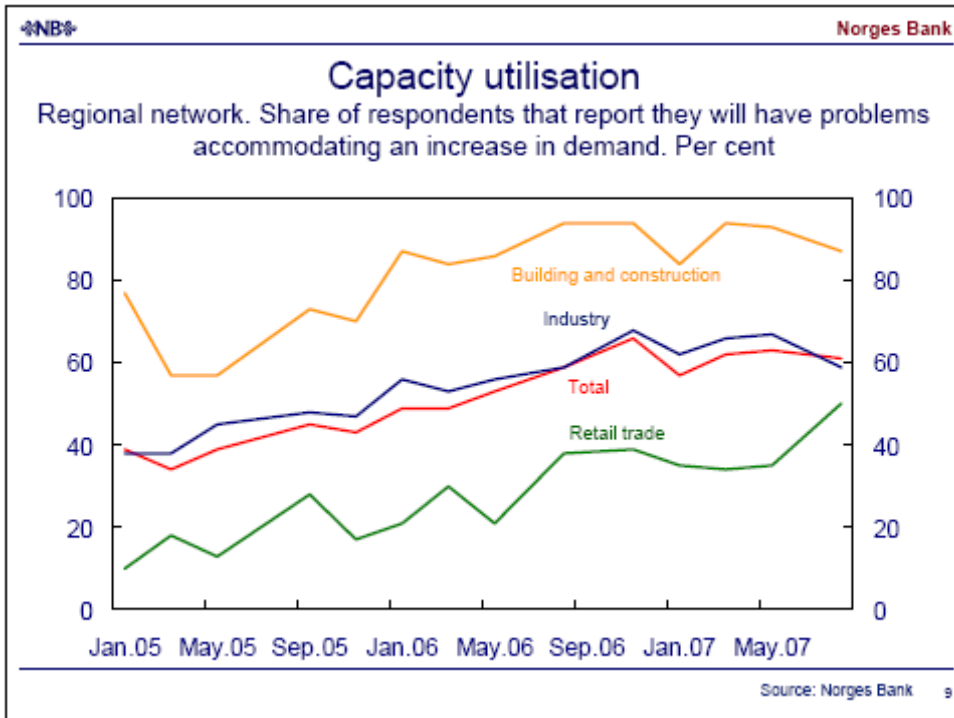
<sup>1)</sup> Labour costs as share of factor income. Market-oriented enterprises in mainland Norway.

Sources: Statistics Norway, Norwegian Labour and Welfare Organisation (NAV) and Norges Bank

### Wage-earners real wages and corporate earnings Annual growth. Per cent

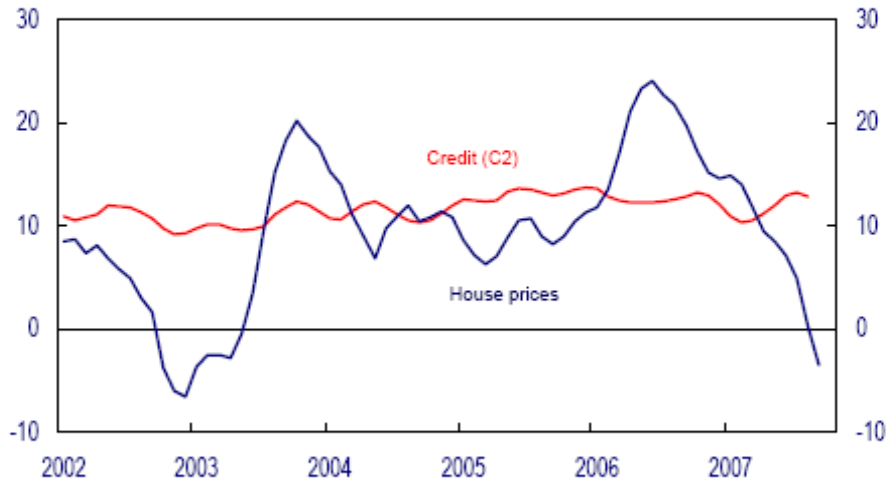


Sources: Statistics Norway and Norges Bank



### House prices and credit to households

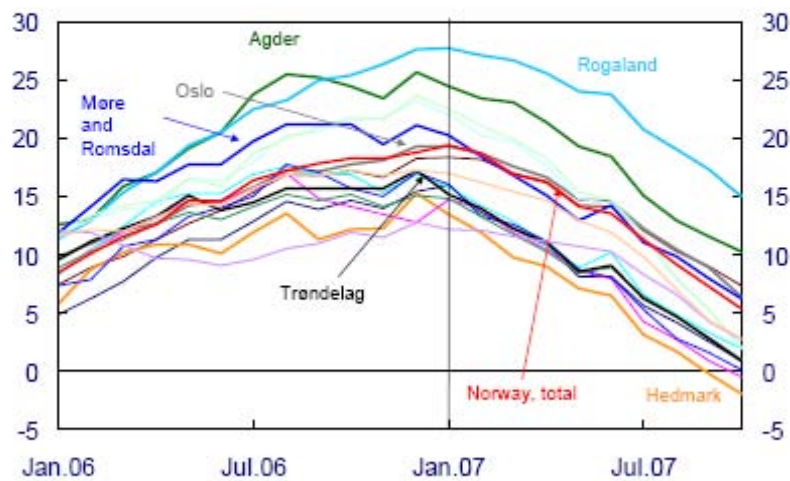
Change in 3-month moving average. Annual rate. Per cent



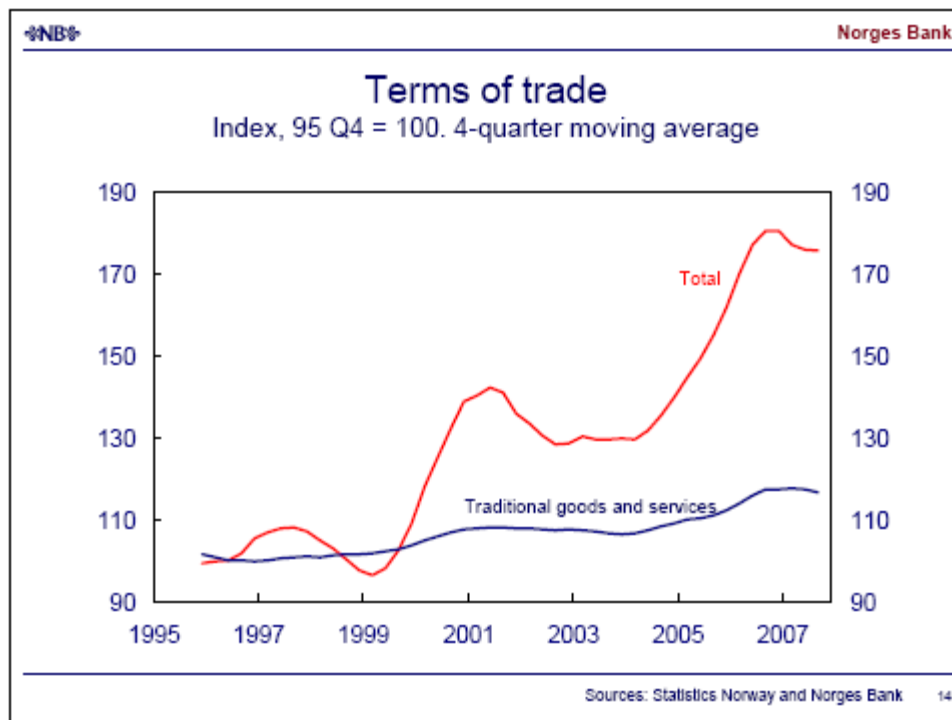
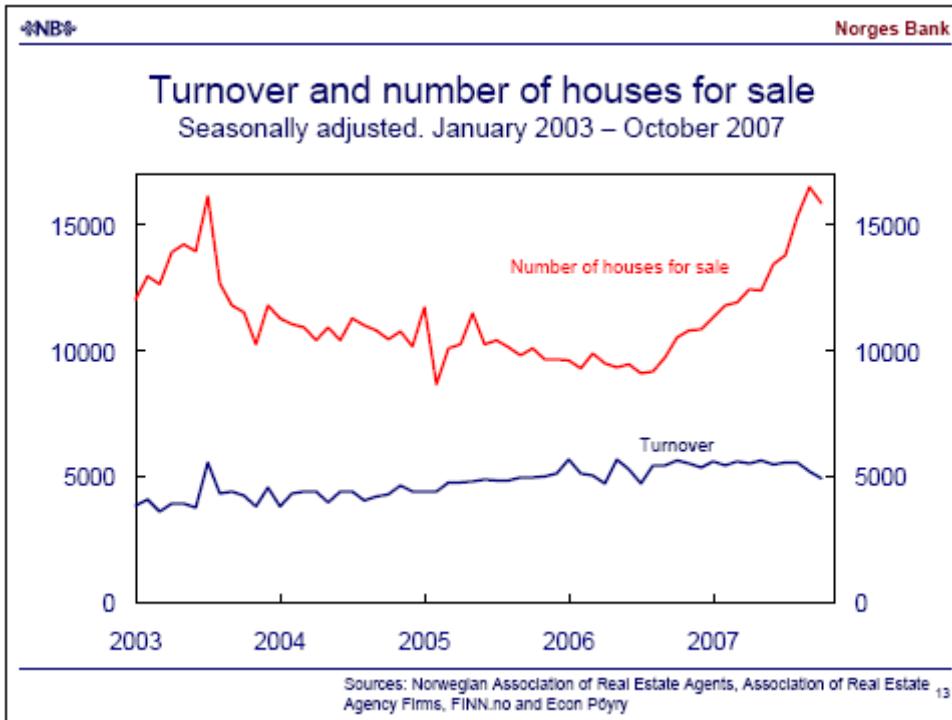
Sources: Norwegian Association of Real Estate Agents, Association of Real Estate Agency Firms, FINN.no, Econ Pöyry, Statistics Norway and Norges Bank 11

### Regional house prices

12-month change. Per cent. January 2006 – October 2007

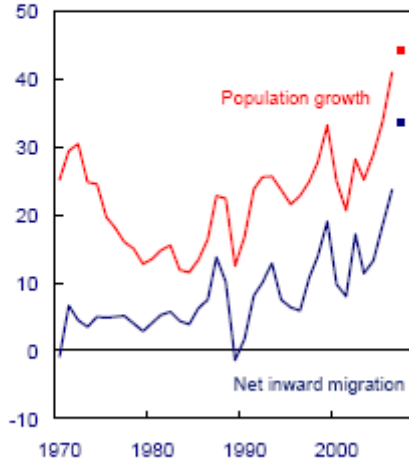


Sources: Norwegian Association of Real Estate Agents, Association of Real Estate Agency Firms, FINN.no, Econ Pöyry, Statistics Norway and Norges Bank 12



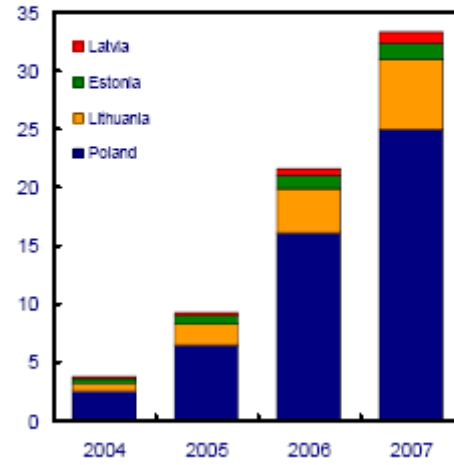
### Population growth and net inward migration

In thousands. 1970-2007<sup>1)</sup>



### Registered employees from new EU countries

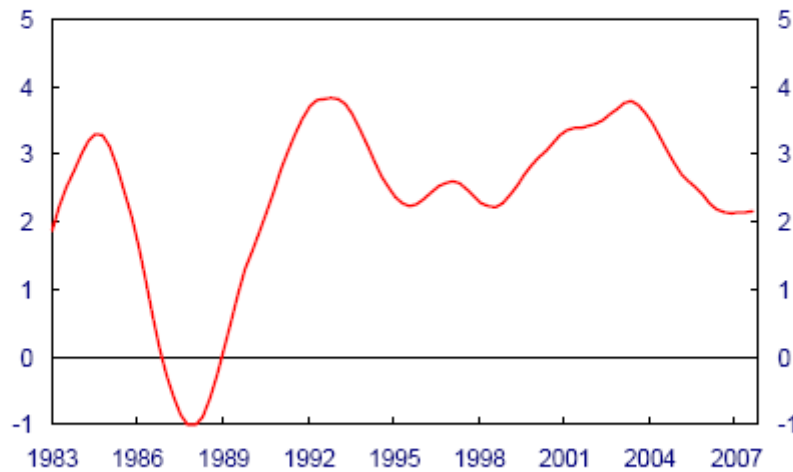
1000s of persons in the period Jan.-Oct.



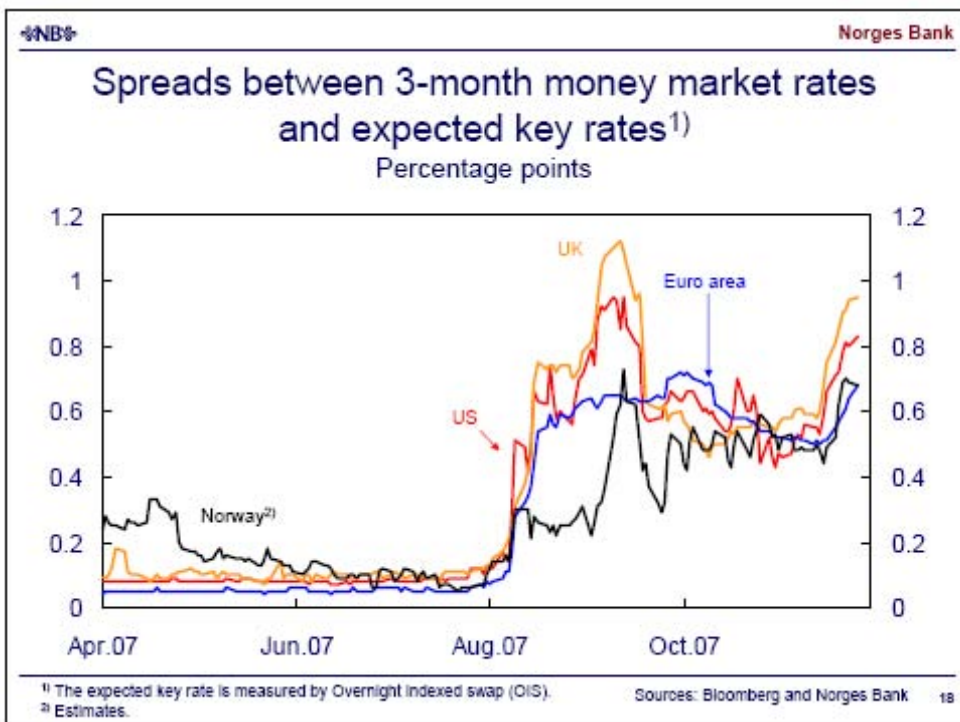
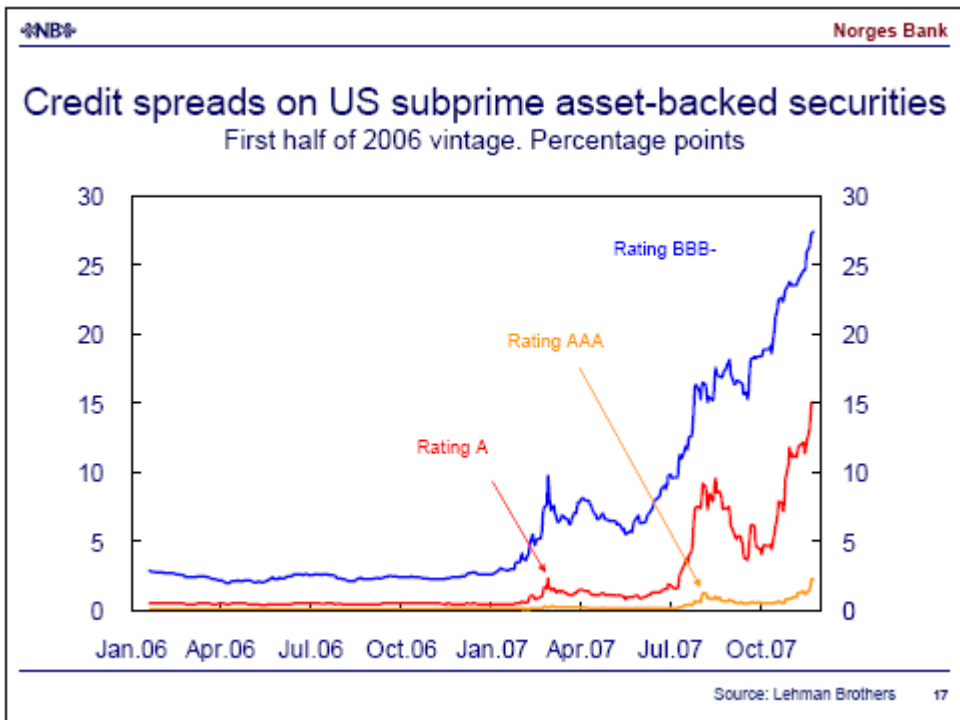
<sup>1)</sup> Estimate 2007 calculated as sum 06 Q4 – 07 Q3. Sources: Statistics Norway and Central Office - Foreign Tax Affairs 15

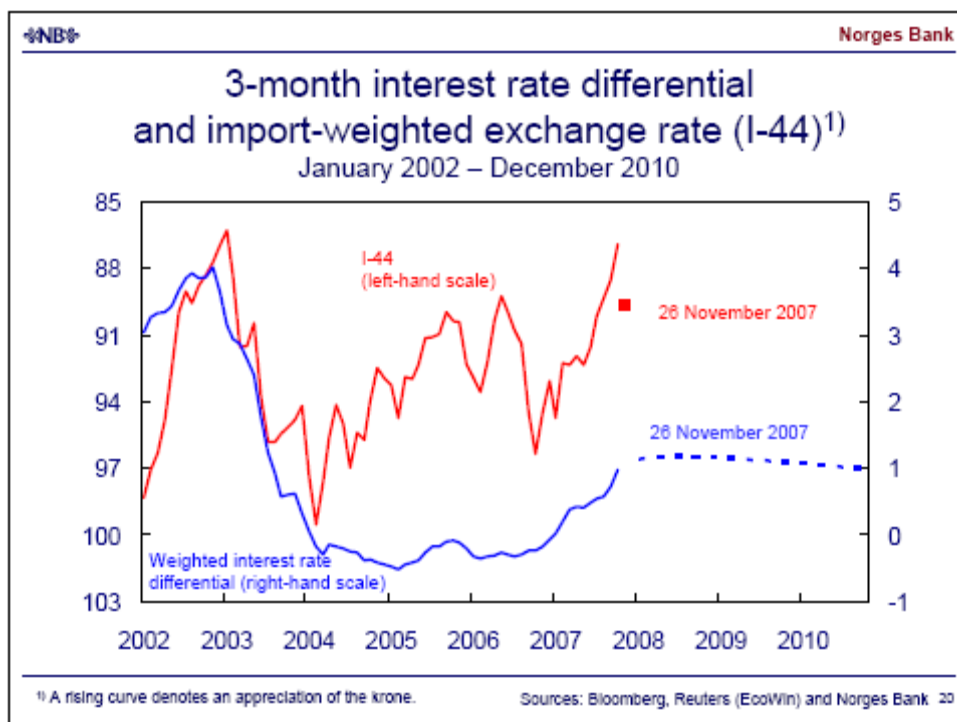
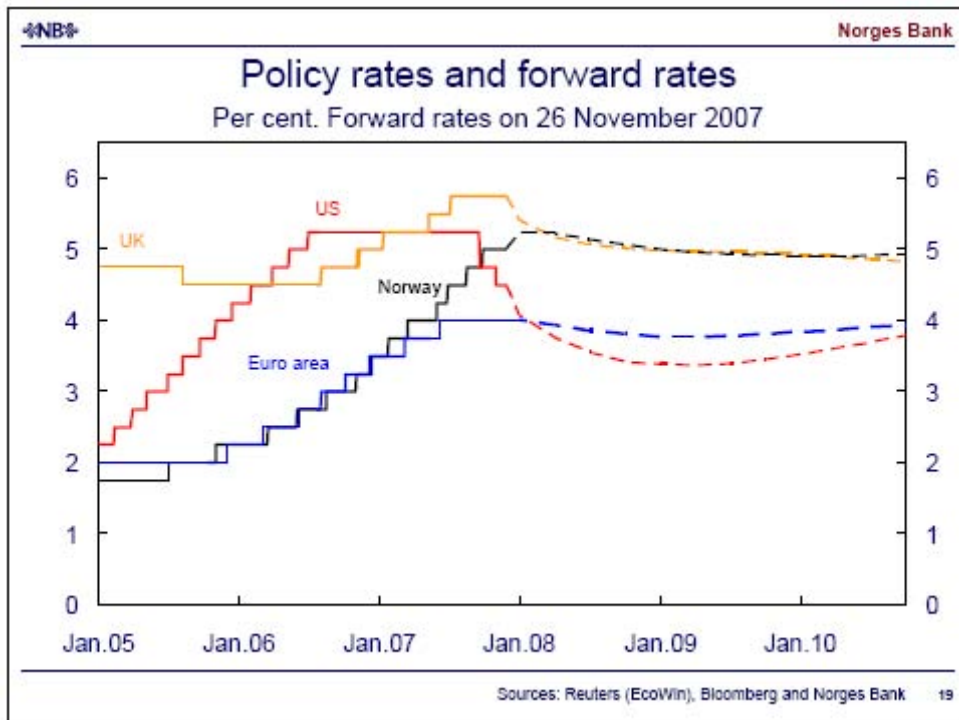
### Productivity growth in the business sector<sup>1)</sup>

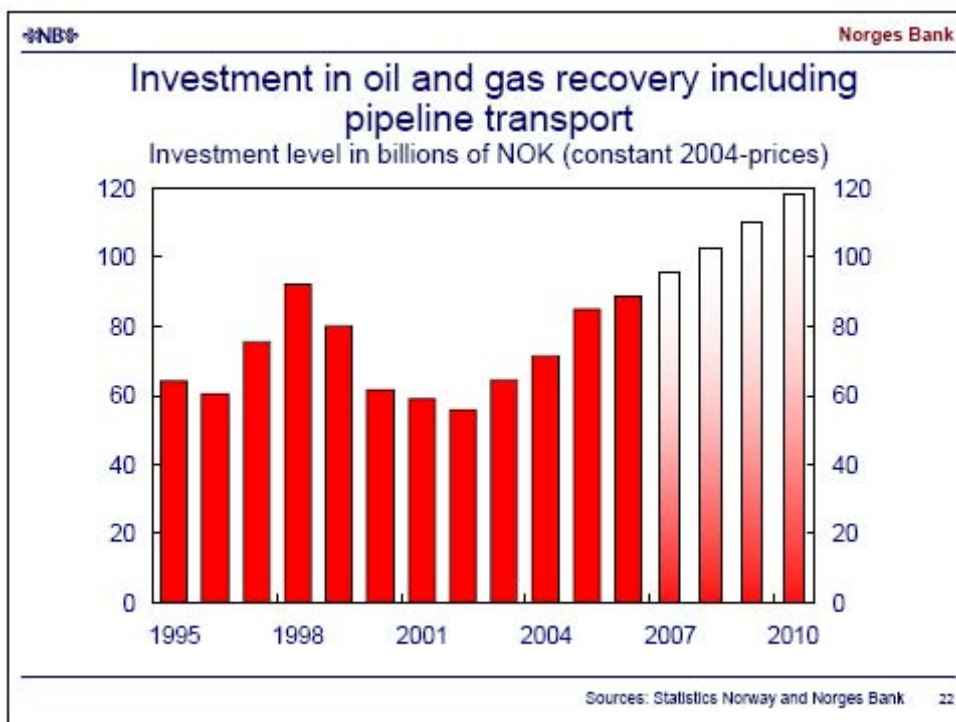
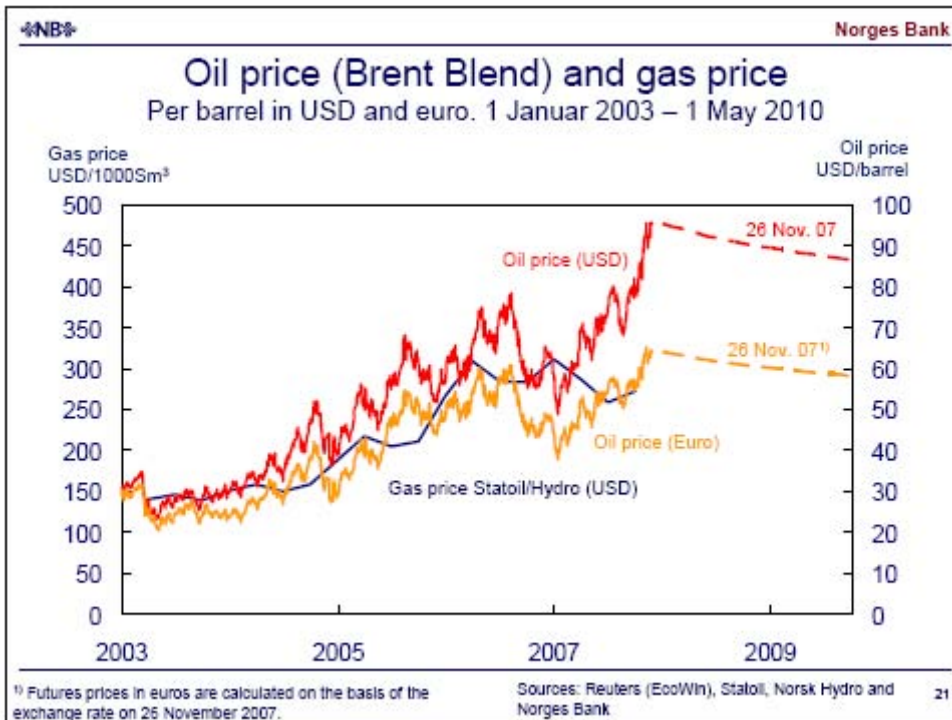
Trend. Annual growth in per cent



<sup>1)</sup> Mainland Norway excluding public sector, export industry, electricity supply and housing services. Sources: Statistics Norway and Norges Bank 15

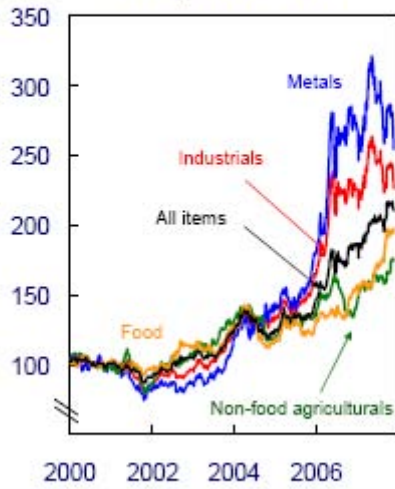








**International commodity prices in USD**  
Index, 2000 = 100



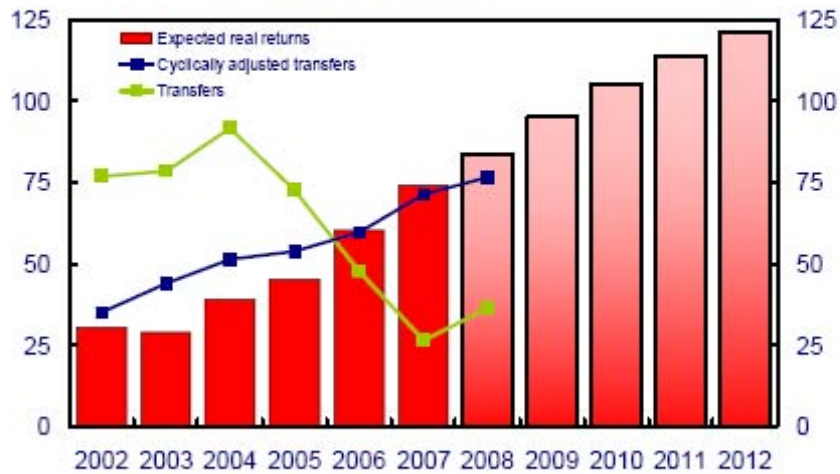
**Price of fresh Norwegian salmon**  
In NOK



Sources: Reuters (EcoWin), The Economist and Statistics Norway 23

**Government Pension Fund - Global**

Transfers to government budget and expected real returns  
In billions of 2008-kroner



Source: Ministry of Finance (National Budget 2006) 24

