

## **Svein Gjedrem: Asset prices and economic policy**

Address by Mr Svein Gjedrem, Governor of Norges Bank (Central Bank of Norway), at the Centre for Monetary Economics (CME)/BI Norwegian School of Management, Oslo, 12 September 2008.

*The text below may differ slightly from the actual presentation.*

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### **Inflation targeting**

Inflation targeting was introduced in Norway by Royal Decree in March 2001, after it had been applied for a period in many other countries. Our experience so far has been that inflation targeting has provided a sound basis for stabilising inflation and inflation expectations.

In the period from 2003 to the beginning of 2008, inflation was below target. Ever-cheaper goods flowed into Norway from Asia, and with solid productivity growth in Norwegian enterprises, the rise in prices for domestically produced goods and services was also subdued. In an environment of low inflation, the interest rate was also low. At the same time, it was stated that when inflation picked up, the interest rate level would again return to a normal level.

Solid growth in output and demand for goods and services gradually led to prospects for higher inflation. Since summer 2005, the interest rate has gradually been raised again to prevent inflation from becoming too high. The interest rate was raised well before inflation moved close to 2.5 per cent. In 2007, the key policy rate reached what we consider to be a normal level.

From 2003 and up to the end of 2007, growth in the Norwegian economy was high and gathered momentum both more quickly and more markedly than in the business cycles in the 1980s and 1990s. The interest rate has by and large curbed the effects. The interest rate was low in the years between 2003 and 2005 while activity in the economy was still moderate, and has gradually been raised since then. Because inflation was low, the interest rate was kept low in a period of high growth and increasing capacity utilisation. Three factors were important:

First, labour has flowed into Norway from other countries. The opening of the labour market to the new EU countries has provided us with access to a reserve of labour. Inward labour migration rose towards the end of the cyclical upturn and has contributed to sustaining the high level of growth. In 2007, the population expanded by more than 56 000, with net immigration at 40 000. This is the highest population growth ever recorded in Norway.

Second, businesses in Norway have become increasingly efficient, resulting in lower costs. It has been profitable to hire more employees despite the high wage level in Norway. The business sector has made use of new technology and businesses have been restructured. The many sweeping reforms of the 1980s and 1990s – the fundamental shift in the Norwegian economy<sup>1</sup> – resulted in more efficient markets. Over the past few years, we have reaped the benefits of the measures implemented then.

Third, Norway's terms of trade have improved. Sales of Norwegian exports have been high, and we can import more goods in exchange for the goods and services sold by the business sector. Lower import prices have led to low inflation and a strong increase in employees' real

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<sup>1</sup> Jon E. Dølvik, T. Fløtten, G. Hernes and J.M. Hippe (2007): Hamskifte – den norske modellen i endring (Fundamental shift – the Norwegian model in flux), p 15, Gyldendal Norsk Forlag A/S. Norwegian only.

wages. High export prices have resulted in solid corporate earnings. Norway's disposable income increased in real terms by more than 35 per cent in the five years to 2007.

Owing to the growth in productivity and improved terms of trade, enterprises have been able to increase their share of value added in spite of higher real wages for employees. At the same time, employment rose sharply and unemployment fell to the lowest levels recorded since the beginning of the 1980s.

These factors are now becoming less prominent. It is not likely that developments in Norway's terms of trade will be as positive in the years ahead. Productivity growth seems to be declining – at least cyclical. Wage-earners' share of value added is rising again, and this restrains labour demand. At the same time, inflation has quickened.

High energy and commodity prices are fuelling global inflation. Food and energy prices are also rising in Norway, even though the import share is low. The shift towards imports from low-cost countries has moderated. After falling for several years, prices for imported goods are now beginning to rise.

Looking back, inflation has varied somewhat. The three supply-side shocks reduced inflation while boosting production capacity. Low interest rates, favourable economic conditions internationally and substantial investment in the petroleum sector increased demand for goods and services. High capacity utilisation gradually pushed up inflation. Now that interest rates have risen to a more normal level and the global economic situation is deteriorating, growth is slowing and capacity utilisation may again seem to be approaching levels that are more sustainable. The impact of the downturn abroad on the Norwegian economy is uncertain, but on balance it now seems that inflation will gradually stabilise near 2.5 per cent without unnecessary wide fluctuations in output and employment.

By and large, we must then be able to assert that inflation targeting has served us well during these years.

There have been surprises. The growth potential of the Norwegian economy has been very high. It took a long time for employment to rise after the recovery started, and in 2006 – well into the upturn – inflation fell markedly. Over the past year, import prices and food prices have increased, and against this background the monetary stance may have to be on the tight side for a period.

### **Prevention of systemic risk**

At the same time, developments in other countries, and probably also in Norway, have shown that financial and property markets can be a source of instability in prices, output and employment. The US is facing a deep crisis in its financial system. Extensive intervention on the part of the government authorities and the central bank, most recently by placing Fannie Mae and Freddie Mac in conservatorship, has probably mitigated the effects, but confidence in banks and financial undertakings has not been restored. European financial markets are also marked by turbulence and uncertainty. Even in Denmark – after nearly 25 years of a highly successful economic policy – a medium-sized bank has failed.<sup>2</sup>

These problems have prompted many countries to review regulations and the functioning of financial and credit markets.

Financial and credit markets in Norway have changed considerably over the past 10-20 years, resulting in substantial welfare gains. Enterprises now have access to credit at a more correct interest rate. Households have greater opportunities to smooth saving and

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<sup>2</sup> See statement by Governor Nils Bernstein, Danmarks Nationalbank, at the press conference about Roskilde Bank, 25 August 2008. ([www.danmarksnationalbank.dk](http://www.danmarksnationalbank.dk)).

consumption over a lifetime. Less rationing and higher required returns have boosted the growth potential of our economy.

Since the end of June 2007, money and credit markets in other countries have been characterised by sharp fluctuations, tight liquidity and reduced risk appetite. The problems started in the US mortgage market, but quickly spread to other financial market segments. Banks, funds and financial undertakings had to bring bonds back onto their own balance sheets, they began to doubt the financial position of their counterparties and held on to their money. As a result, premiums on interbank loans rose markedly.

Norwegian banks rely heavily on international markets for their funding. The rise in money market premiums in the US and Europe therefore rapidly spread to Norwegian interest rates, even though Norwegian banks are profitable, enjoy confidence and have limited loss exposure.

When banks would no longer lend to each other, many central banks provided liquidity with a longer maturity and lower collateral requirements than usual. Norges Bank has also, in periods, increased the volume of lending to Norwegian banks. We have provided extra short-term liquidity, for example through currency swaps. We have also offered banks loans with longer maturities than earlier.

We have not changed the collateral requirements for loans. This is because we already accepted a broad range of collateral than those central banks. This is because – for reasons we appreciate – the Norwegian government bond market is very thin. For a long time, nor did we have a well developed market for other bonds. At the same time, bank demand for loans from Norges Bank is considerable in some periods of the year. In this decade, we have been able to tighten the collateral requirements somewhat, most recently in 2005, when we among other things restricted access to using bank securities as collateral. At that time, we announced that we would later go a step further. This promise remains intact.

Central bank measures have curbed the fluctuations in interbank interest rates, but only for loans with short maturities.

For longer maturities, premiums have continued to rise, and the premium on 12-month money market rates is now more than one percentage point.

The turbulence has particularly affected banks with low deposits and considerable money market loans. Both Roskilde Bank, recently taken over by Denmark's Nationalbank, and Northern Rock, which had to be bailed out by the Bank of England last year, had fairly low deposit-to-loan ratios. Combined with large exposures in the property and construction sectors, this made them vulnerable. Norwegian banks generally have higher deposit-to-loan ratios, although there are differences.

Banks and investors, both in Norway and abroad, are now charging higher premiums and higher prices for providing capital for acquisitions, restructuring and investment, and highly leveraged enterprises must pay high risk premiums when they borrow. It has become more difficult to obtain funding. Norges Bank's survey of bank lending indicates that banks are gradually tightening their lending standards. Household debt growth has recently edged down. At the same time, consumption growth has slowed, but consumption is still higher than disposable income. Corporate credit growth remains high, at least for the time being.

The experience of the financial crisis has prompted governments and others to put liquidity risk higher on the agenda. In June, the Basel Committee on Banking Supervision published Principles for Sound Liquidity Risk Management and Supervision.<sup>3</sup>

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<sup>3</sup> See Basel Committee on Banking Supervision, Bank for International Settlements, June 2008.

Norges Bank has a role as lender of last resort. This means that Norges Bank can provide an individual bank or the banking system with extraordinary liquidity when demand for liquidity cannot be satisfied by other sources.<sup>4</sup> Our view is that the provision of extraordinary liquidity should be restricted to situations when financial stability may be threatened without such support.

Experience shows that the seeds of financial instability are sown during periods of rapidly rising debt and asset prices, including house prices. Over the past 15 years, house prices have surged, and particularly in 2006, even though Norges Bank had at that time already raised the interest rate on several occasions. High household income growth and bank competition for lending and market shares are contributing factors. Nor can we disregard the possibility that in periods developments have been driven by the conviction that prices would only continue to rise.

Unusually low long-term interest rates have probably also fuelled house price inflation in recent years. Norwegian households primarily finance home purchases with adjustable-rate mortgages. Nonetheless, long-term interest rates are important because they provide information about developments in short-term rates that borrowers can expect over time.

Now that the interest rate has moved up to a fairly normal level, the rise in house prices has come to a halt, and prices are now falling. We have seen that when the interest rate is raised to curb the rise in prices for goods and services, interest-rate setting also contributes to stabilising asset prices. Moreover, we believe that our communication, where we emphasise that the interest rate is set with view to stabilising inflation, and with forecasts for the interest rate ahead, has contributed to dampening fluctuations.

It is nevertheless important to be aware that in a small open economy like Norway there is little room for setting the interest rate at a level that diverges from that of other countries with the aim of influencing property prices and credit growth. The task of steering inflation is in itself demanding. With Norway's balance-of-payments position, the effects on capital movements and the krone exchange rate may be considerable. Pursuing a very firm approach to steering property prices and credit will easily lead to a krone out of balance and result in adverse effects on inflation and inflation expectations.

Monetary policy contributes to stabilising developments in the economy. Nonetheless, in some areas, the framework may lead to a situation where business cycles may be self-amplifying. In the following, I will focus on aspects of the functioning and regulation of the housing market and banking activities.

The interplay between developments in the housing market and the credit market is important for stability in our economy. Prices, investment and home sales show considerable swings. Homes are important forms of collateral and price developments influence household borrowing and give rise to credit cycles. Housing loans account for 40 per cent of Norwegian bank balance sheets.<sup>5</sup> The framework conditions for the housing market are thus important for how wide fluctuations in output and employment are and for the risk of financial shocks and instability. The experience of the banking crisis in the early 1990s did admittedly entail limited bank losses on loans to households, and substantial losses on loans to business and corporate customers, which were affected by a fall in household consumption. Banks may certainly refer to this when they assess the credit risk of their loans, but they should perhaps not be as certain that people will stand by their creditors in the future as they did 15-20 years ago. Household debt is very high. Attitudes may change and debt servicing discipline may also be influenced by the debt settlement scheme that has gradually become less

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<sup>4</sup> See Financial Stability 2/2004, p 36, Norges Bank.

<sup>5</sup> Including branches of foreign banks, subsidiaries and housing loans in mortgage companies.

restrictive.<sup>6</sup> Banks should make ample allowance also for this risk in their loan disbursement and interest rate premiums.

It is important for stability in the housing market that the supply of housing reacts rapidly to changes in demand. On this score, our experience has been fairly positive with a high level of residential construction in recent years.

The tax system should treat investment in residential property neutrally and on a par with other investments. Several official studies in recent decades<sup>7</sup> – from Sekse to Skauge – have shown that the tax system favours residential property consumption and investment. This leads to overinvestment in residential property, displacing other types of investment. At the same time, the tax system makes it more advantageous to own a home instead of renting.

Through the years, the tax on the advantage of homeownership has been gradually reduced. In 2005, it was removed. Tax deductibility of debt interest was maintained. In practice, this implies a housing investment subsidy. Homeowners benefit from an income deduction for expenses for income acquisition, but do not pay taxes on the income. In central areas where available sites are scarce, the tax advantage will result in a higher level of house prices.

A more neutral taxation of residential property – for example as proposed by the Skauge Commission in 2003 – would also have a stabilising effect on the price level in the housing market. A tax that is based more on market values will increase when house values rise and fall when house values decline. This will curb the willingness to pay when purchasing homes during upturns and sustain it during downturns.

The exemption for residential property tax is a source of more unstable house prices and credit cycles. Interest rate setting cannot remedy this.

Banks primarily rely on lending funds that they have borrowed, either in money and securities markets or from depositors. Norwegian bank equity capital only accounts for about 6 per cent of bank balance sheets. By way of comparison, Norwegian limited companies have an equity ratio of close to 40 per cent. Since banks manage customer deposits and because they have low equity capital, it is important they have effective risk management systems. Banking activities are also subject to regulation and supervision by the authorities. The law establishes minimum levels of capital for banks.

Banking activity is pro-cyclical. During an upturn, the value of assets increases more than debt. This strengthens bank earnings and solidity. Increased equity capital provides room for additional lending. During a downturn, securities values fall and loan losses rise. Banks will then tighten up.

Banks state financial assets at market value.<sup>8</sup> When value changes rapidly come into evidence in the accounts, bank owners and creditors are provided with better insight into a bank's financial position, and banks can then rapidly act to maintain their capital adequacy.

The new capital adequacy rules – Basel II – are designed to strengthen the stability of the financial system. The capital requirements seek to ensure that a bank's capital is commensurate with its risk profile. For Norwegian banks, which have a large proportion of

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<sup>6</sup> The Act relating to debt settlement (Act 99/1992), which came into force in 1993, shall provide individuals with serious debt problems with a possibility to regain control of their finances. The Act was amended in 2003. A new proposal to amend the act is now being circulated for comment.

<sup>7</sup> NOU 1973:3 Taxation of dwellings (headed by Tor Sekse) and NOU 2003:9 Tax Commission (headed by Arne Skauge).

<sup>8</sup> The IFRS, or a simplified application of the IFRS, applies to banks belonging to a listed company. Under the regulation, financial instruments are to be stated at fair value, in practice at market value. See Act no. 56 of 17 July 1998: Act relating to annual accounts, etc., (Accounting Act), Chapter 2.

housing loans in their loan portfolios, Basel II entails a substantial reduction in capital requirements after a transitional period. This is because highly secured housing loans have a low risk profile. Bank equity ratios have fallen in recent years. At the same time, Tier 1 capital, which is a risk-weighted measure of financial strength, has been stable. This reflects a sharp increase in bank lending secured by mortgages on residential property in this period.

The Basel II framework offers limited experience so far. It presupposes that risk assessments consider the prevailing macroeconomic environment. There is still a risk that banks give excessive weight to recent years' experiences in their assessments and models. The supervisory authorities can help remedy this by ensuring that banks' assessment of risk in internal models is based on data from at least on complete business cycle. The supervisory authorities also have the possibility of imposing an extra capital requirement on a bank if the bank has large risk exposures. Banks must therefore perform stress tests to demonstrate that they have sufficient capital to weather a downturn.

Regulatory changes can probably reduce fluctuations in banks' eagerness to lend. Banks could be required to accumulate additional reserves. One example is that in a favourable economic situation banks could be required to make additional provisions for future losses, as is the case in Spain.<sup>9</sup> Another proposal<sup>10</sup> is that the capital requirement should be raised when lending growth increases.

Banks may be forced to sell large volumes of assets in a crisis situation. Three US academics<sup>11</sup> have recently proposed a supplement to the capital requirements in order to reduce this selling pressure. They propose that banks acquire a form of insurance that is paid out when the banking sector as a whole has losses over a certain level. When a crisis occurs, banks will then be assured of a supply of fresh capital.

Foreign-owned branches and subsidiaries have a market share in Norway of close to 35 per cent in terms of total assets. Most of them are chartered in the other Nordic countries. Rules or practices in Norway that diverge from other countries will influence the competitiveness of Norwegian-owned bank and is in practice hardly feasible.<sup>12</sup> Other countries will be of the same mind. It is therefore easy, particularly in an upturn, to be drawn into a negative spiral that culminates in a least common multiplier for capital requirements. It is my view that it is important to strengthen cooperation in this area, particularly between Nordic finance ministries and supervisory authorities. We must aim at a common approach to preventing systemic risk.<sup>13</sup>

Nordic cooperation is already extensive, but primarily focuses on crisis management of a potential crisis in cross-border banks. Crisis simulation exercises with the participation of finance ministries, supervisory authorities and central banks – 15 participants from 5 countries<sup>14</sup> – illustrate that interests may easily conflict and that coordination is very

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<sup>9</sup> See Ordonez, M.F. "Speech by the Governor. 2008 International Monetary Conference – Central bankers panel, Banco de Espana, 2008.

<sup>10</sup> See article in Financial Times, 4 June 2008, "A party pooper's guide to financial stability".

<sup>11</sup> See Kashyap, A.K., R. Rajan and J.C. Stein, "Rethinking Capital Regulation", 2008. [www.kansascityfed.org](http://www.kansascityfed.org).

<sup>12</sup> In 2006, the Financial Supervisory Authority of Norway recommended that the highest loan-to-value ratio for home mortgages with the lowest risk weight using the standardised approach under Basel II be lowered from 80 to 75 per cent of sound mortgage lending value. The Ministry of Finance did not follow the recommendation. Norges Bank agreed with the Ministry of Finance, referring to the effect on competition.

<sup>13</sup> See "Can the authorities manage crises in the financial system?" by the Governor Stefan Ingves, Sveriges Riksbank, [www.riksbank.se](http://www.riksbank.se).

<sup>14</sup> In the crisis simulation exercise in autumn 2007, all the Nordic countries participated. In addition, the Baltic central banks were observers.

demanding. Perhaps above all, the exercises show that we must double our efforts to prevent any further crises in the Nordic banking system.

It is also possible that the authorities' hands are tied to a further extent that during the Nordic banking crisis under the EU rules on state aid. It is my impression that the rules are practiced in a way that limits the scope for recovering government funds. If this is the case, government will be more reluctant to intervene in the event of a crisis.

Norway has a generous guarantee scheme. Deposits are guaranteed up to NOK 2 million per depositor per bank – an amount that is substantially higher than the statutory minimum of EUR 20 000 in the EU, i.e. about NOK 160 000. Of the other Nordic countries, Denmark has the highest amount at around NOK 325 000. In the UK, the amount has recently been raised to a good NOK 350 000, and a further increase to about NOK 500 000 has been proposed. Other EU countries generally have lower guaranteed amounts.

Since 2007, many branches of foreign banks have become members of the Norwegian scheme to increase their deposit to loan ratio. This is not purely coincidental. The Norwegian scheme is probably slightly naïve in its design. As mentioned, the amount guaranteed is very high, and there has been a period without fee payments. At the same time, the competition for deposits has intensified at home and abroad.

There is an element of moral hazard associated with any insurance scheme. In Norway, even depositors with very large deposits do not have to assess the financial strength of a bank. Our deposit guarantee scheme has a flypaper effect, and under the protection of the scheme the banks have bid up deposit rates to strengthen their liquidity. This will eventually have an effect on lending rates as well.

Norges Bank has reviewed the Norwegian guarantee scheme and in a submission to the Ministry of Finance recommends the following revisions<sup>15</sup>:

- Member banks must always pay a fee
- The membership fee is differentiated more clearly according to the banks' risk exposure
- ... and thus becomes counter-cyclical by using growth in banks' activities as a supplementary measure of risk exposure
- A reduction in the guaranteed amount per customer
- An increase in the notice of withdrawal for voluntary members of the Norwegian Banks' Guarantee Fund from one to two years
- Branches of foreign banks pay to the extent possible a membership fee according to the same rules that apply to Norwegian banks

We have constructed a simple example of how such a fee system could be designed. Our example shows what banks' total fee payments would have been since 1993 compared with actual payments. The fee rates depend on both the banks' lending growth and bank's core capital ratio. The chart also shows actual payments of membership fees.

In our example, the fee payments would have been considerably lower early in the 1990s and large in recent years when lending growth has been high. This provides a better profile with small payments in periods of low growth in bank activities and high payments when growth is strong.

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<sup>15</sup> In a letter of 27 June 2008, the Ministry of Finance has asked the Financial Supervisory Authority of Norway to assess the need for regulatory revisions to the Norwegian Banks' Guarantee Fund.

## Conclusion

The experience so far is that inflation targeting has provided a good basis for stabilising inflation and inflation expectations. Interest rate setting and interest rate forecasts have also contributed to stabilising output and employment and prices in property markets.

In some areas, regulations and frameworks can result in amplifications of fluctuations in asset prices and credit flows. For example, tax subsidisation of homeownership can be a source of recurrent instability in house prices and credit.

The turbulence in financial markets has prompted many countries to consider measures to improve regulation and the functioning of markets. In Norway, the authorities can also strengthen the work on preventing systemic risk. With our cross-border banks, broader Nordic cooperation, particularly between finance ministries and supervisory authorities, would be appropriate. But there is also work to be done at home. Norges Bank is proposing, for example, revisions to the Norwegian Banks' Guarantee Fund with a view to reducing moral hazard.

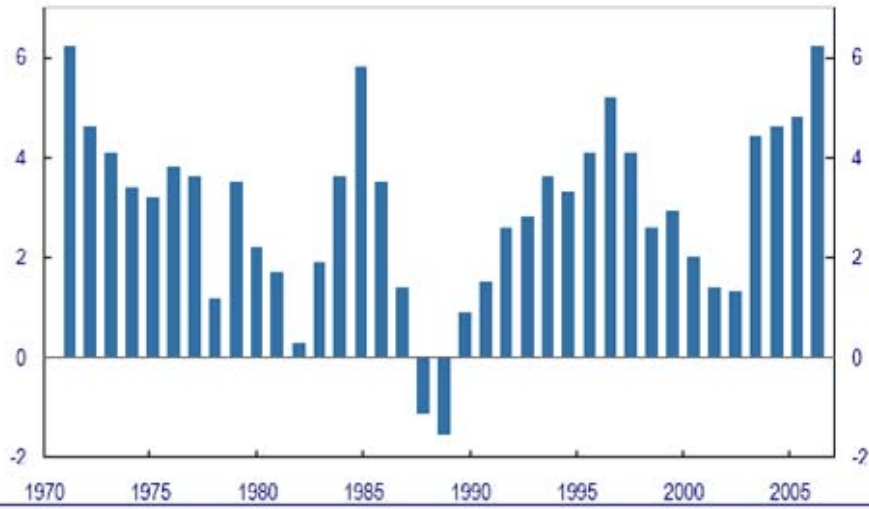
Thank you for your attention.





### Economic growth

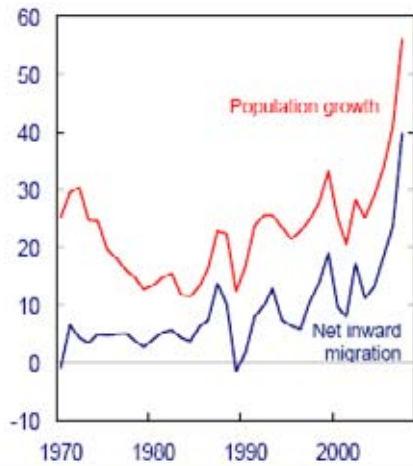
Annual growth in volume. Mainland GDP. Per cent



Sources: Statistics Norway and Norges Bank 3

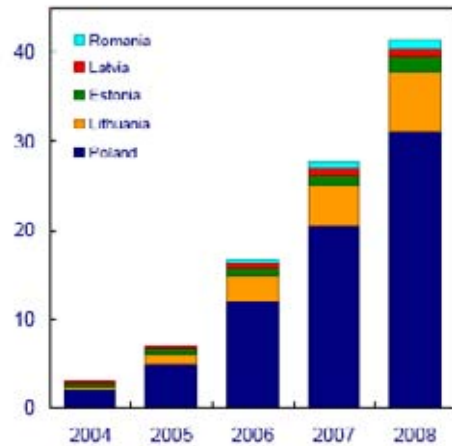
### Population growth and net inward migration

In thousands

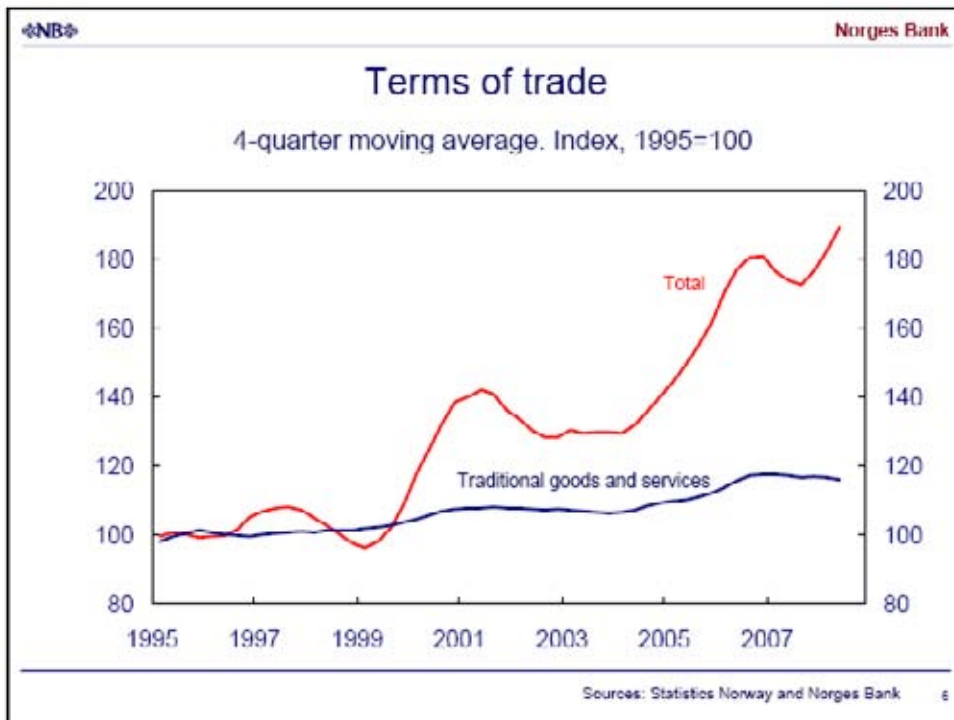


### Registered employees from new EU countries

In thousands. As of August



Sources: Statistics Norway and Central Office – Foreign Tax Affairs 4



### LFS unemployment and wage share<sup>1)</sup>

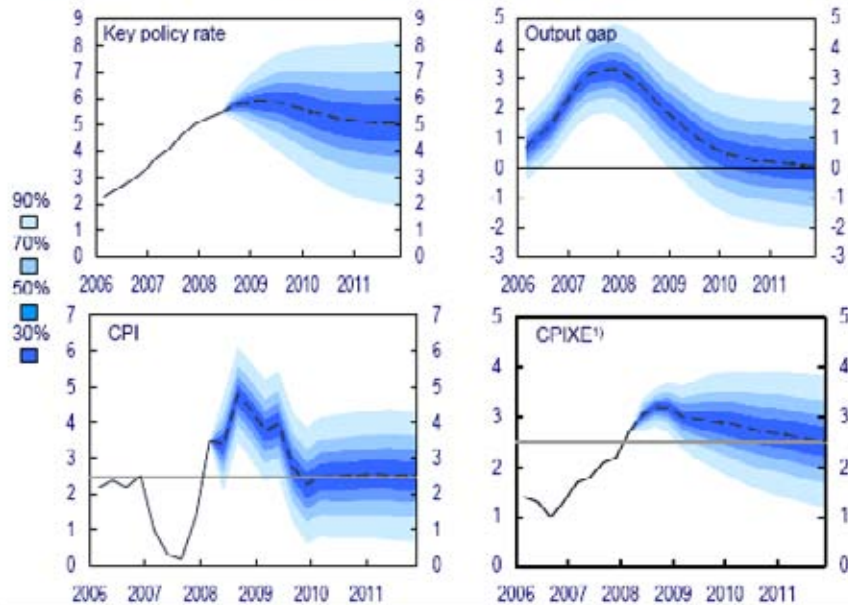
Per cent



<sup>1)</sup> Wages as a share of factor income in market-oriented mainland enterprises

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

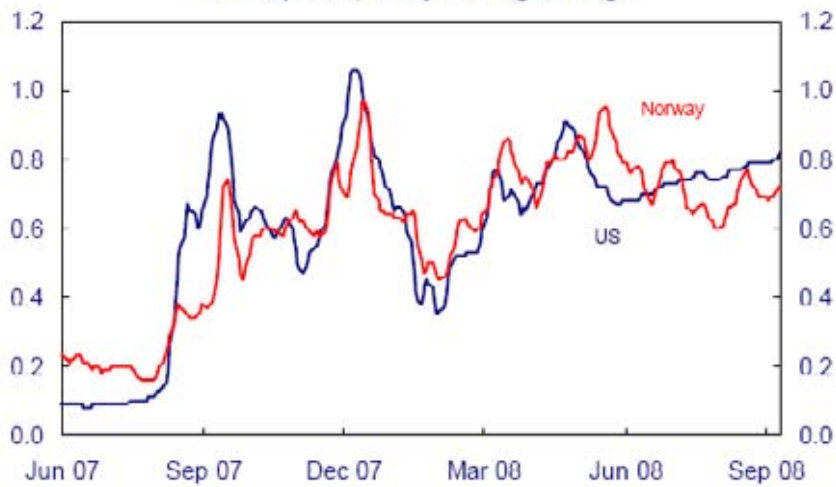
### Baseline scenario i MPR 2/08



<sup>1)</sup> CPIXE: CPI adjusted for tax changes and excluding temporary fluctuations in energy prices

Sources: Statistics Norway and Norges Bank

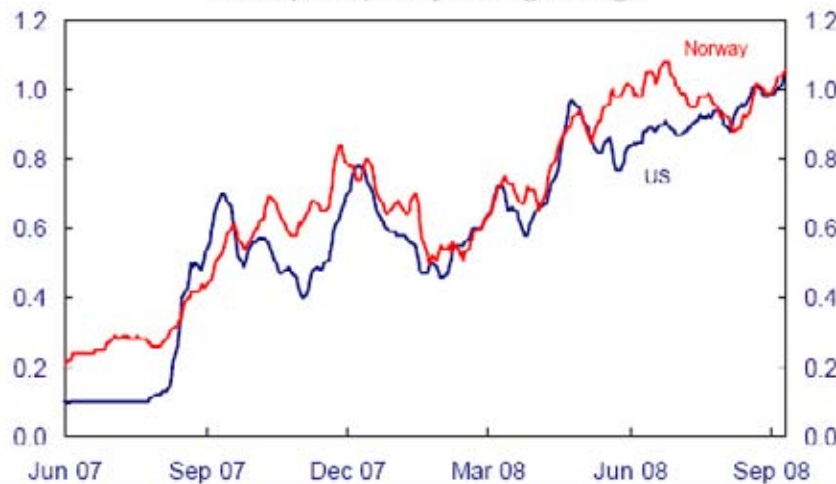
### Difference between 3-month money market rates and expected key policy rate<sup>1)</sup> Basis points, 5-day moving average



<sup>1)</sup> Expected key policy rate is derived from Overnight Indexed Swap (OIS) rates

Sources: Bloomberg, Thomson Reuters and Norges Bank 9

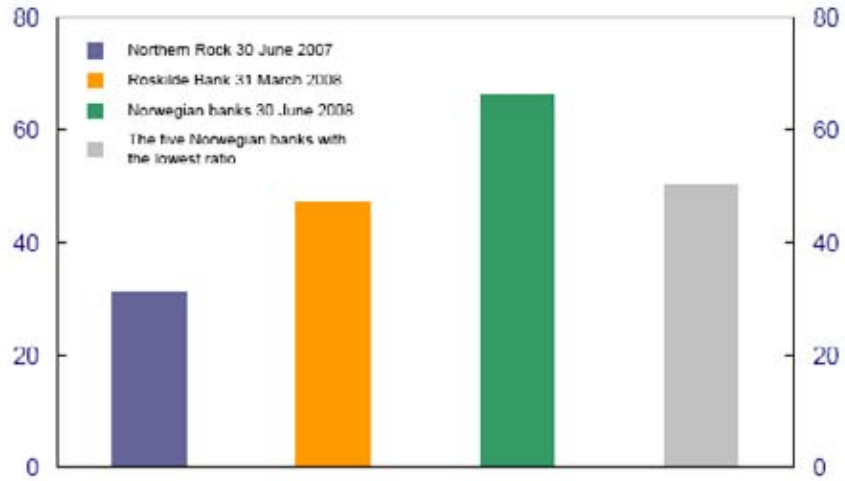
### Difference between 12-month money market rates and expected key policy rate<sup>1)</sup> Basis points, 5-day moving average



<sup>1)</sup> Expected key policy rate is derived from Overnight Indexed Swap (OIS) rates

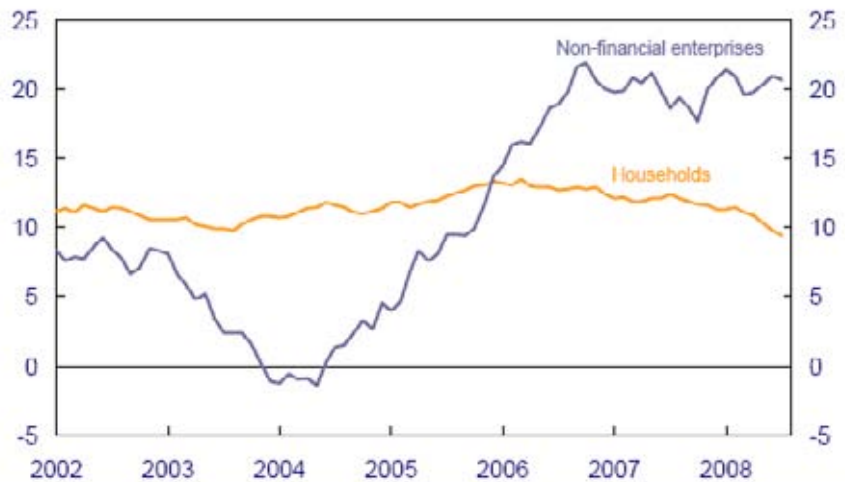
Sources: Bloomberg, Thomson Reuters and Norges Bank 10

Deposit-to-loan ratio (customer deposits / lending to customers) in distressed banks in the quarter before the crisis and in Norwegian banks today. Per cent

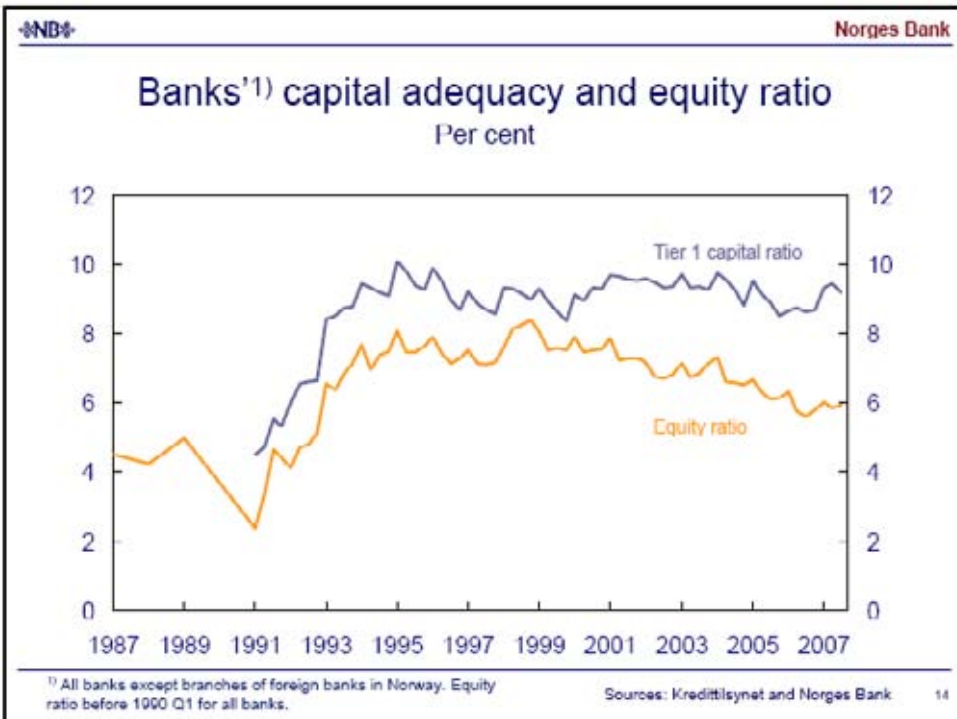
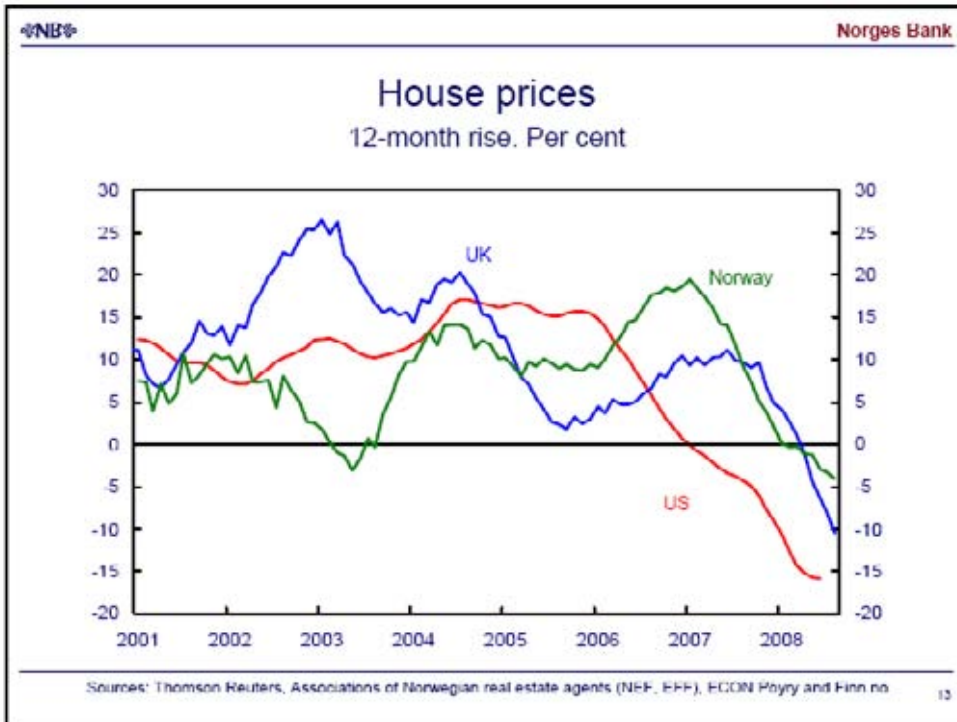


Sources: Northern Rock, Roskilde Bank, Norges Bank 11

Credit to households and enterprises 12-month growth. Per cent



Sources: Statistics Norway and Norges Bank 12





### Branches of foreign banks' membership in the Norwegian Banks' Guarantee Fund

Member 2007	Member 2008	Applied per September 2008	Has not applied
Nordnet Bank (Sweden) Fokus Bank (Denmark) Kaupthing Bank (Iceland)	Swedbank (Sweden)	Handelsbanken (Sweden) Skandiabanken (Sweden) Landsbanki (Iceland)	SFB (Sweden) GE Money Bank (Sweden) Citibank (UK) BNP Paribas (France)

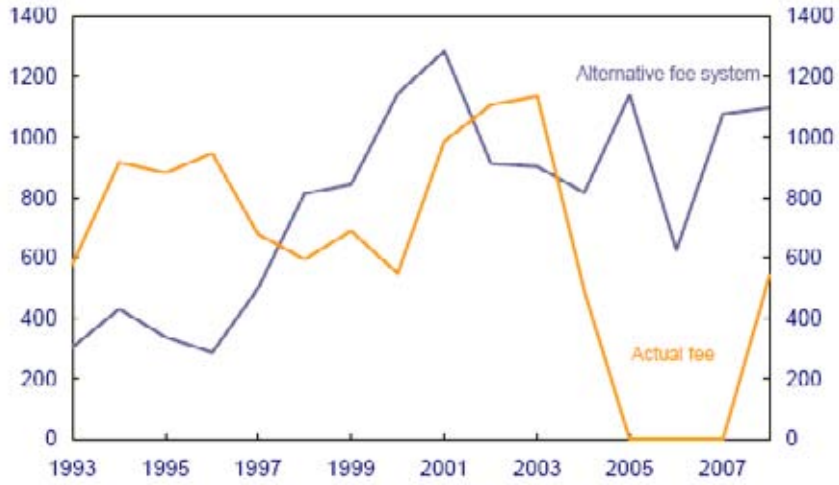
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### Norges Bank's recommended revisions in the Norwegian guarantee scheme:

- Member banks must always pay a fee
- The membership fee is differentiated more clearly according to banks' risk exposure
- ...and thus becomes counter-cyclical by using growth in banks' activity as a supplemental measure of risk exposure
- A reduction in the guaranteed amount per customer
- An increase in the notice of withdrawal for voluntary members from one to two years
- Branches of foreign banks pay to the extent possible a membership fee according to the same rules as Norwegian banks

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### Fees to the Norwegian Banks' Guarantee Fund In millions of NOK



Sources: Kreditilsynet and Norges Bank