Svein Gjedrem: The conduct of monetary policy

Introductory statement by Mr Svein Gjedrem, Governor of Norges Bank (Central Bank of Norway), at the hearing before the Standing Committee on Finance and Economic Affairs of the Storting (Norwegian parliament), Oslo, 14 May 2009.

Please note that the text below may differ slightly from the actual presentation. The statement is based on Norges Bank's Annual Report for 2008, Monetary Policy Report 1/2009 and the Executive Board's assessments in the period to the monetary policy meeting on 6 May.

* * *

I would like to thank the Chairman of the Committee for this opportunity to report on monetary policy in connection with the Storting's deliberations on the Government's Credit Report. My statement is based on Norges Bank's Annual Report, but is also updated based on the Executive Board's assessments in the period to the previous monetary policy meeting and new information received to date. I also refer to this year's report from Norges Bank Watch, a group of experts that evaluates Norges Bank's conduct of monetary policy.

Monetary policy in Norway is oriented towards maintaining low and stable inflation. The operational target is annual consumer price inflation of close to 2.5 per cent over time. The inflation target is an anchor for inflation expectations in the foreign exchange market, for the social partners in connection with wage settlements and for those setting prices for goods and services. In recent years, average inflation has been fairly close to, but somewhat lower than, the target of 2.5 per cent.

Consumer price inflation peaked in October 2008, and has since receded. In April this year, CPI inflation was 2.9 per cent. Inflation measured by the CPI varies somewhat from month to month, primarily reflecting wide fluctuations in energy prices, but also other temporary disturbances amplify the variations.

CPIXE inflation shows developments in the consumer price index adjusted for tax changes and excluding temporary changes in energy prices. This indicator provides a better picture of underlying inflation. By this measure, underlying inflation peaked at 3 per cent last autumn. Underlying inflation has since slowed somewhat and was 2.7 per cent in April.

Interest rates increase in favourable periods when inflation is expected to rise and when growth and inflation recede. The interest rate is a rough instrument that we can use to keep inflation in check over time and thereby contribute to smoothing fluctuations in output and employment. We have seen that when the interest rate is increased to curb the rise in prices for goods and services, interest rate-setting also contributes to stabilising asset prices. The task of steering inflation is in itself a demanding one. The instrument at our disposable must not be overburdened by too many tasks.

There is a division of responsibility for economic policy. Wage formation and economic structures and incentives lay the basis for how efficiently labour and other real economic resources are used in the long term. Monetary policy steers inflation in the medium and long term and can in addition contribute to smoothing fluctuations in output and employment. The central government budget – growth in government expenditure – influences the real krone exchange rate and the size of the internationally exposed sector in the long term. The fiscal rule – the fiscal policy guidelines – enhances the predictability of petroleum revenue spending in the Norwegian economy even when the budget from one year to the next is used to stabilise economic developments and even when the automatic stabilisers are allowed to operate. A fairly steady phasing-in of petroleum revenues over time curbs the impact on the krone and reduces the risk of abrupt and sizeable structural shifts between the international exposed and sheltered sectors. In this way, the framework contributes to more stable expectations concerning, among other things, developments in the krone exchange rate and competitiveness.

The krone floats and fluctuates somewhat, and has shown a tendency to appreciate in favourable times and fall in value in response to negative shocks. Nonetheless, budgetary policy and the petroleum fund mechanism contribute to stability in the krone. This can be seen clearly when comparing movements in the krone in recent years with currencies of other open economies with substantial exports of raw materials, such as Australia and New Zealand.

The economic turnaround in Norway occurred just over a year ago. House prices had started to fall, growth in consumption subsequently came to a halt and housing starts declined. Up to autumn 2008, it appeared that capacity utilisation in the Norwegian economy would most likely decline to a normal level, inflation would stabilise around 2½ per cent and the key rate ahead could be held at what we consider to be a normal level – between 5 and 6 per cent. But the outlook was regarded as uncertain. Commodity prices rose and pushed up inflation in many countries. At the same time, wage growth in Norway had become high and productivity growth was slowing. On the other hand, the financial turbulence, if it gained momentum, could have a severe impact on the global economy and our exports.

In September 2008, the turbulence in financial markets erupted into a full-blown global crisis. The failure of Lehman Brothers on 15 September last year triggered a confidence crisis in financial markets.

The turnaround hit hard, with synchronised effects on virtually all financial and goods and services markets, not only in the US but also in Europe, Asia, Latin America and Oceania.

The crisis abroad rapidly fed through to the Norwegian economy. Our banks and the flow of credit and funds are tightly interwoven with foreign markets. Banks' foreign funding became expensive and almost dried up. In response, banks increased interest rates on loans to businesses and households, and they tightened the lending tap.

As autumn progressed, an increasing number of business sector segments were feeling the impact of contraction. In August 2008, manufacturing enterprises in our regional network reported that they expected growth to remain high. In November, they described the turnaround as a "heart attack".

Government authorities worldwide have taken comprehensive measures designed to improve banks' liquidity and solidity, boost demand for goods and services and restore the smooth functioning of credit markets. In several countries, central bank benchmark rates have been set at close to zero.

In Norway, a series of measures have also been implemented to mitigate the impact of the financial crisis. Norges Bank has supplied more liquidity to banks and eased the collateral requirements for loans. We have provided liquidity at longer maturities, introduced foreign exchange swaps involving both the US dollar and the euro in order to supply Norwegian krone liquidity, and loaned US dollars to Norwegian banks, which we ourselves procured from the Federal Reserve. Norges Bank's key policy rate has been reduced by 4.25 percentage points to 1.5 per cent since 15 October 2008. To facilitate banks' access to funding, the government has provided banks with access to liquid government securities in exchange for covered bonds issued by mortgage companies. Moreover, the government has increased loans and guarantees for Norwegian exports and raised state bank lending quotas. At the same time, Folketrygdfondet has increased its bond purchases. In order to bolster banks' solidity, the government plans to supply risk capital to Norwegian banks through the Norwegian State Finance Fund. To restrain the decline in activity in the Norwegian economy, central government expenditure will be increased by 10 per cent this year.

Pursuant to Chapter 1, § 3 of the Act on Norges Bank and the Monetary System, "the Bank shall inform the ministry when, in the opinion of the Bank, there is a need for measures to be taken by others than the Bank in the field of monetary, credit or foreign exchange policy".

On the basis of this provision, Norges Bank, in a letter of 6 October to the Ministry of Finance, took the initiative to establish a swap arrangement. In a letter of 18 December, we also proposed measures to strengthen banks' solidity.

The chart shows events and the measures and proposals at the initiative of Norges Bank. A critical period was the end of September and the beginning of October with the collapse of the investment bank Lehman Brothers, the savings bank Washington Mutual and the insurance company AIG.

The extensive measures that have been implemented have worked.

The difference between Norges Bank's key rate and the money market rate – the premium – has narrowed, but is still higher than prior to the crisis. The flow of interbank liquidity appears to have been restored to some extent, but the money market is still segmented and the central bank an important meeting place.

Even if premiums in the money market and credit market have been high and volatile, the changes in central bank key rates have fed through to money market rates. Money market rates, which were higher than 8 per cent for a period, are now around 2½ per cent. Bank lending rates have also been reduced markedly.

Monetary policy has influenced the level of economic activity through the real interest rate.

The real interest rate is equal to the key interest rate plus a risk premium less expected inflation.

The anchoring of inflation expectations enables changes in the key rate to have an impact. In some countries, there are prospects that inflation will approach zero. This causes the real interest rate to remain high even though the key rate is reduced. In small countries where confidence in stable inflation is lacking, the authorities have had to increase the key interest rate substantially to prevent an uncontrolled currency depreciation. This amplifies the effects on production.

Lower inflation abroad and lower capacity utilisation in the Norwegian economy will have a dampening impact on inflation ahead. There are prospects that inflation will remain below 2.5 per cent for a period. It is therefore appropriate to set the interest rate at a low level so that inflation does not fall too far below the target, and to prevent inflation expectations from losing their anchor. It is also appropriate to set the interest rate at a low level to curb the decline in activity.

We have already lowered the interest rate substantially. In the time ahead, we will take a more gradual approach in order to assess the impact of the measures that have already been introduced. If developments move in line with our projections, the key interest rate may be reduced to 1 per cent in the latter half of this year.

However, the projections are uncertain. An economic turnaround may occur faster than expected. The low interest rate level may lead to a situation where saving in Norway does not pick up as expected or that the krone depreciates markedly. In that case, the key rate may be set higher than projected at this time. On the other hand, there is a risk that the downturn in Norway will be more pronounced and longer, or that krone appreciates markedly. In that case, a stronger use of instruments may be appropriate.

The downturn abroad and the unusual conditions in the credit market will mark the Norwegian economy for a period ahead. Mainland GDP is projected to decline by 1 per cent between 2008 ad 2009.

Unemployment has increased since autumn 2008, but is still low. Unemployment is projected to continue to rise to the end of the year and into next year. Pay increases are moderate as a result of weaker corporate profitability, rising unemployment and lower inflation. Wage growth will show a considerable decline between 2008 and 2009.

Households have a dimmer view of the future than earlier, but the pessimism is no longer intensifying. This influences private consumption. Housing investment has also declined over a period, but house prices now seem to have stabilised, and perhaps started to rise again.

Household saving is now rising rapidly from a negative level.

Banks' willingness to lend to households has stabilised after the tightening last autumn. However, they are still tightening lending to enterprises. Banks are increasing their margins and fees, and require higher equity capital levels of corporate loan applicants.

At the same time, funding in the securities market is expensive. The Government Bond Fund facilitates funding primarily for enterprises with a moderate or high credit rating.

As a result of extensive official measures the banks now have fairly good access to short-term and medium-term funding. Norges Bank has supplied ample short-term liquidity to banks. Loans with longer maturities have been widely used, and an increasing number of banks are participating in the credit swap arrangement.

We see here an overview of various banks' and mortgage companies' use of this arrangement as a percentage of their total assets. So far, there are 15 banks and mortgage companies participating in the arrangement. Several participants report that the credit swap arrangement is a good source of funding in today's market. The government receives, which is reasonable, compensation for making Treasury notes available. The rate has been in the order of a half per cent.

With a large volume of Treasury notes in circulation, we see the possibility of the formation of an interbank market for loans in NOK, where government securities are used as collateral. In the event, this would provide the Norwegian money market with greater insulation from the shifting weather conditions in the US dollar market. We are not there yet.

Banks' equity capital accounts for 6 per cent of total assets. This is low from a historical perspective, but not compared with banks in other countries. Banks are procyclical. They amplify business fluctuations. During an expansion, loan losses are low and bank earnings increase due to higher turnover. Capital is readily available. During a downturn, bank losses increase, and earnings and access to equity capital may deteriorate, forcing banks to tighten lending.

Norwegian banks need more capital in the period ahead to enable them to absorb expected and any unexpected losses and to satisfy tighter counterparty capital requirements. The government's offer to supply core capital through the Government Finance Fund will now allow banks to improve their financial strength without rationing credit. There must be no doubt that the banks have the capital they need.

The measures I have discussed have been implemented to lessen the effects of the financial crisis. Another question is which lessons we can draw. The authorities in many countries are now working towards increasing the robustness of financial markets. Four points stand out.

First, for a given risk assessment, banks must be subject to higher equity capital requirements. Banks calculate their capital requirements based on internal risk models. The models capture historical loan performance. The capital requirements are determined by the degree of credit risk exposure as derived from this historical performance. One drawback is that the historical basis for the models, and hence for the risk assessments, is too limited. Banks must not be able to reduce capital below a minimum level even if they extend loans that, according to the models, seemingly involve low risk.

Second, regulation must to a lesser extent contribute to amplifying cyclical fluctuations. With losses now rising, as a result of the abrupt and pronounced turnaround, banks must increase equity capital. Consequently, the rules governing capital requirements amplify cyclical fluctuations. The rules must therefore require banks to build up strong capital buffers over and above the minimum requirement in normal times. Then the banks would not have to increase capital when a turnaround occurs, but on the contrary be able to absorb losses. This will counteract the need for banks to ration credit in adverse periods.

Many Norwegian banks do not have sufficient buffers today to safeguard their own, their shareholders' or the economy's best interests.

Third, banks' funding methods make them vulnerable. Earlier, the two main sources of bank funding in Norway were retail and wholesale deposits. In recent years, banks have borrowed heavily in both domestic and foreign markets. During the crisis, this proved to involve high liquidity risk for banks. In the future, in regulations and in practice, deposits must again take precedence as the largest funding source for banks. We also anticipate that bonds collateralised by high quality mortgages will become important. The credit swap arrangements can be seen as building a bridge to such a market.

Fourth, government authorities may be reluctant to apply stricter requirements to domestic banks, fearing that their competitiveness may weaken. Such a drift in regulation towards a – too low – minimum level is important to avoid. For Norway, it is essential that rules are applied both strictly and equally in the Nordic countries.

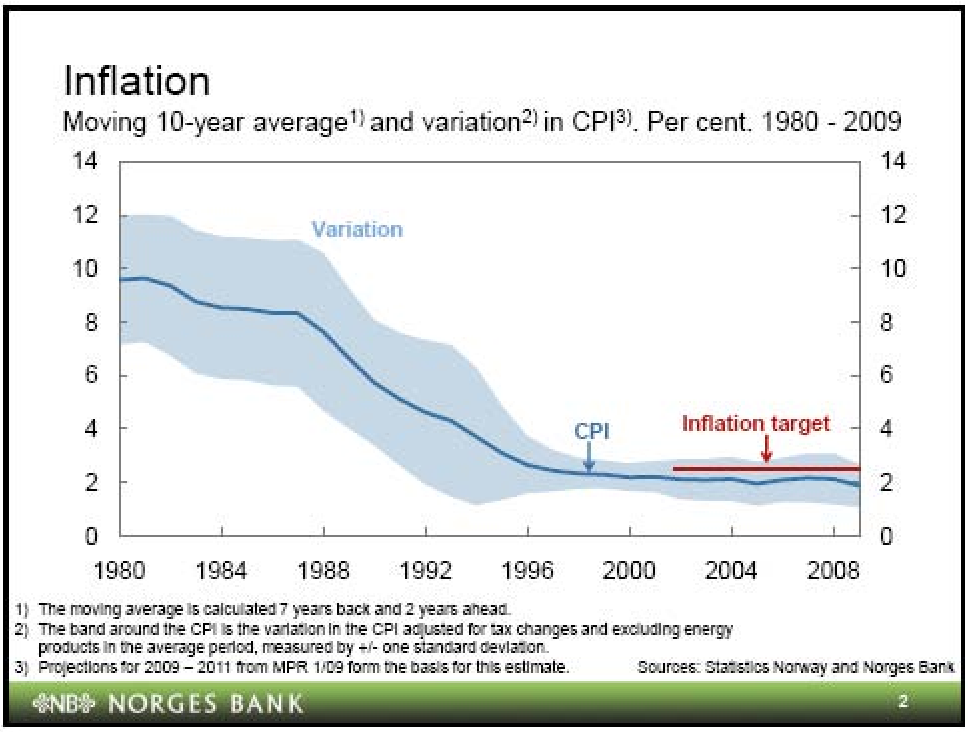
Allow me to conclude.

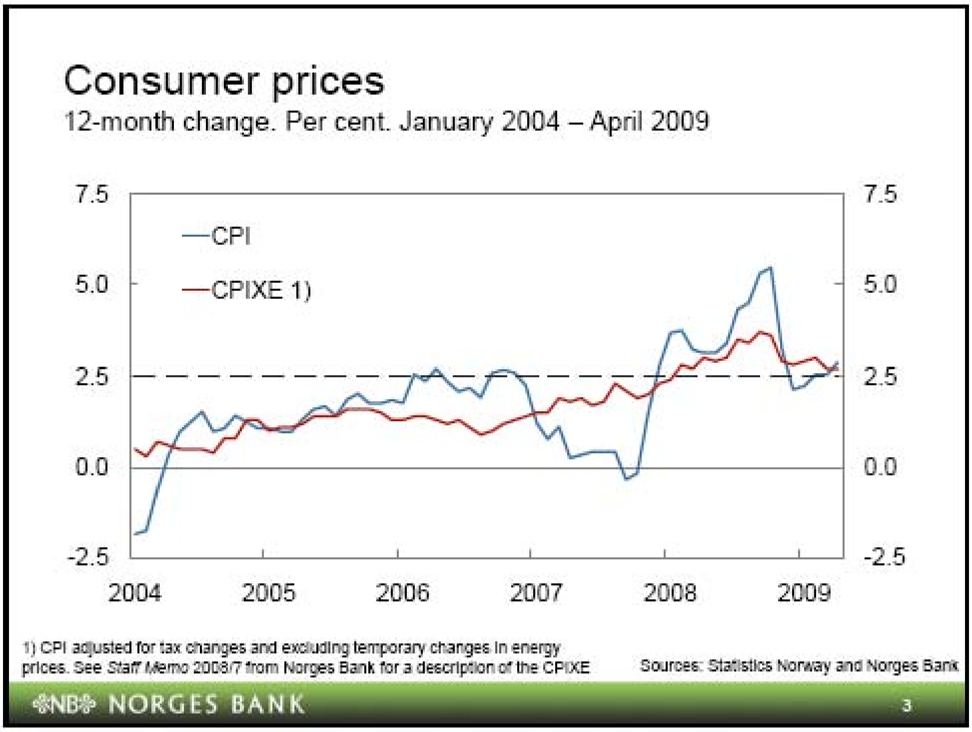
The world economy is these days in the deepest recession in the post-war period, in spite of the strong use of various measures. Most markets and countries, including Norway, have been hit by the crisis.

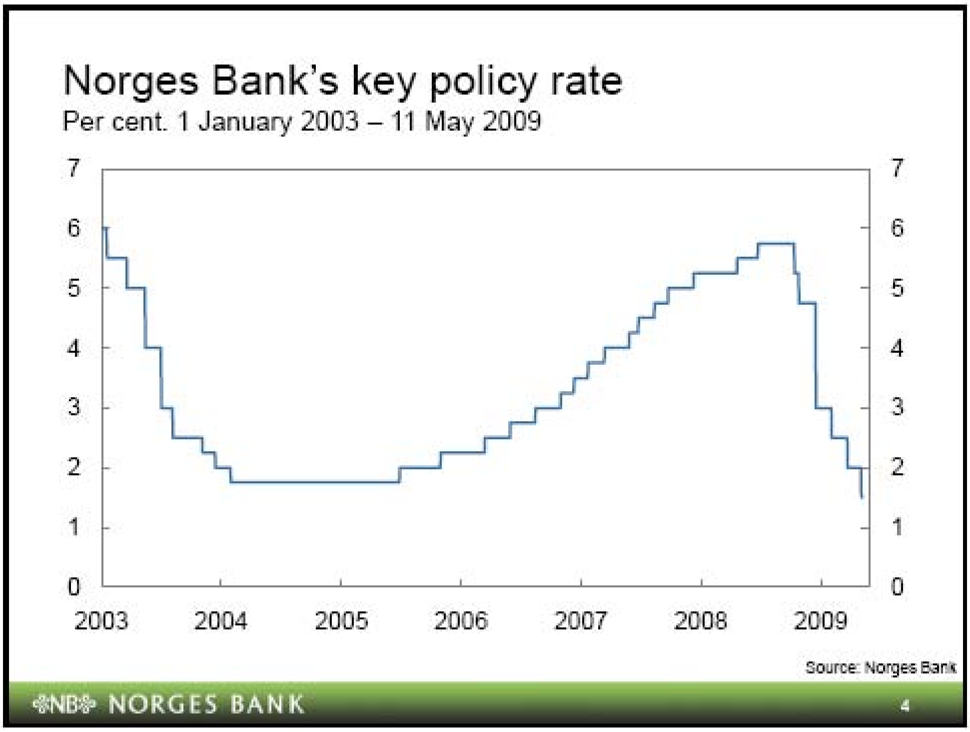
Norges Bank has set the interest rate at a low level to curb the decline in activity and counteract an excessive fall in inflation.

In accordance with its mandate, Norges Bank has given weight to anchoring and strengthening expectations that inflation will be low and stable ahead. This enhances the effectiveness of monetary policy.

Thank you for the opportunity to present these opening remarks.




Consumer prices
12-month change. Per cent. January 2004 – April 2009
CPI
CPIXE 1)
7.5
5.0
2.5
0.0
-2.5
2004
2005
2006
2007
2008
2009
1) CPI adjusted for tax changes and excluding temporary changes in energy prices. See Staff Memo 2008/7 from Norges Bank for a description of the CPIXE
Sources: Statistics Norway and Norges Bank
NORGES BANK
3

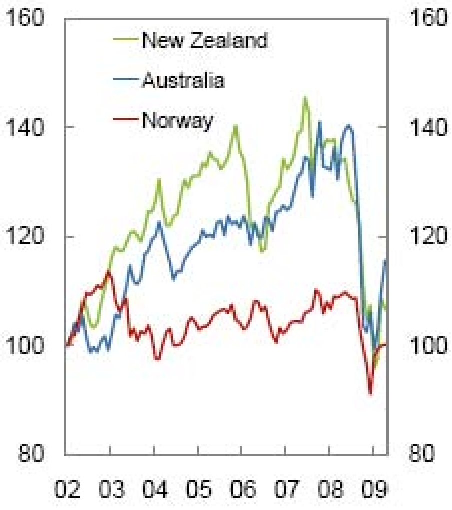

Norges Bank's key policy rate
Per cent. 1 January 2003 – 11 May 2009
7
6
5
4
3
2
1
0
2003
2004
2005
2006
2007
2008
2009
Source: Norges Bank
NORGES BANK
4

Division of responsibility in economic policy

Wage formation, structures and incentives	➡	Employment and growth
Monetary policy	➡	Price stability
Fiscal policy	➡	Krone exchange rate

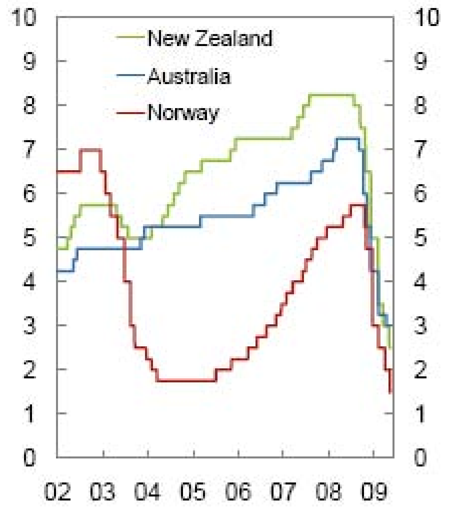
NORGES BANK 5

Effective exchange rates
Index[1]. Jan. 2002 = 100. Monthly figures. Jan. 2002 – Apr. 2009



1) A rising curve denotes a stronger exchange rate

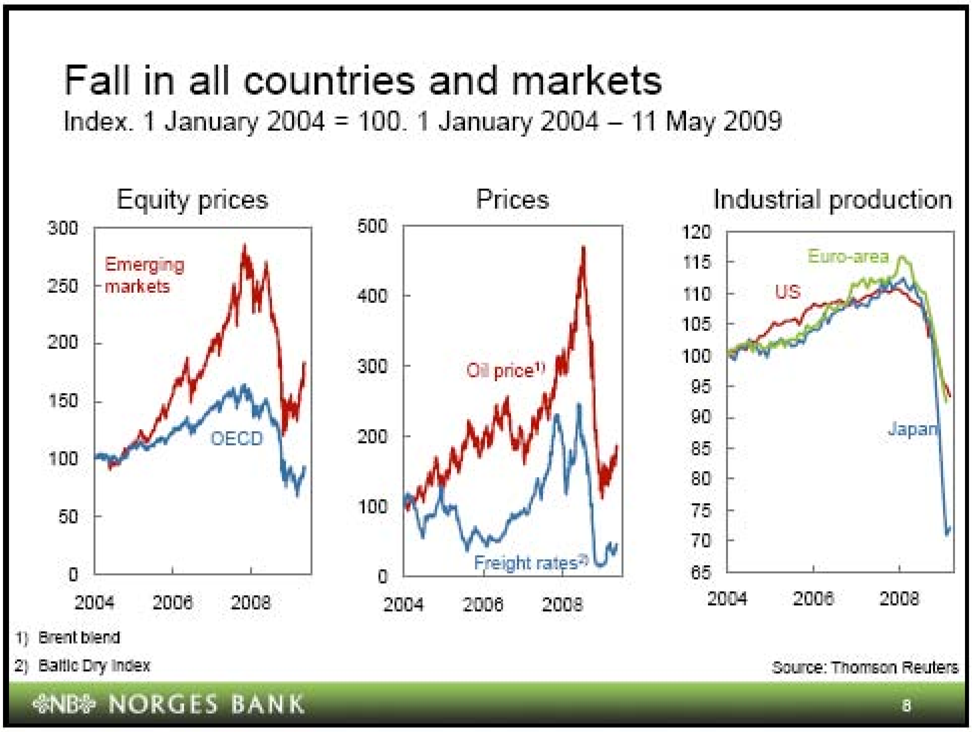
Key policy rates
Per cent. Daily figures.
1 Jan. 2002 – 11 May 2009



Source: EcoWin / OECD

NORGES BANK 6


Consumer spending, house prices and housing starts 1)
Index. 1 January 2004 = 100. January 2003 – April 2009
Housing starts
House prices
Consumer spending
180
170
160
150
140
130
120
110
100
90
80
2003
2004
2005
2006
2007
2008
2009
1) 5-month centred average
Sources: Norwegian Association of Real Estate Agents, Association of Real Estate Agency Firms, FINN.no, ECON Pöyry, Statistics Norway and Norges Bank
NB NORGES BANK


Fall in all countries and markets
Index. 1 January 2004 = 100. 1 January 2004 – 11 May 2009
Equity prices
Emerging markets
OECD
Prices
Oil price1)
Freight rates2)
Industrial production
Euro-area
US
Japan
2004
2006
2008
1) Brent blend
2) Baltic Dry Index
Source: Thomson Reuters
NB NORGES BANK
8

Measures

- Liquidity measures
  - Larger and longer loans
  - Easing of collateral requirements
  - Exchange rate swaps
- Monetary measures
  - Interest rate cuts
- Financing measures
  - Swap arrangement
- Measures to boost financial strength
  - Supply of risk capital
- Fiscal measures
  - Government package

NORGES BANK 9

Financial events and measures

15 Sep	**Lehman Brothers** bankruptcy – money markets collapse
15 Sep	**More liquidity** – increased supply through F-loans
16 Sep	**Exchange rate swaps** supply USD for NOK – money markets reactivated
17 Sep	**AIG** emergency loan
24 Sep	**Monetary policy meeting** – widespread uncertainty
25 Sep	**Washington Mutual** into receivership – bond markets collapse
	Longer loans – 3-month F-loan
29 Sep	**Credit arrangement with Federal Reserve** – loan of up to USD 15bn
6 Oct	**Easing of collateral requirements** Submission proposing **swap arrangement** sent to Ministry of Finance
8 Oct	**Exchange rate swaps** supply NOK for EUR and USD
10 Oct	**Loans for smaller banks** – 6-month F-loan
15 Oct	**Key policy rate** reduced by 50bp
20 Oct	**Longer loans for all banks** - 6-month F-loan
24 Oct	**Swap arrangement** – Storting decision
29 Oct	**Key policy rate** reduced by 50bp
14 Nov	**Swap arrangement** – circular **Longer loans for small banks** – 2-year F-loan
24 Nov	**Swap arrangement** – first auction held
27 Nov	**Swap arrangement** – submission with adjustment proposal sent to Ministry of Finance
28 Nov	Ministry of Finance adjusts **swap arrangement**
17 Dec	**Key policy rate** reduced by 175bp
18 Dec	Submission to Ministry of Finance proposing government supply of Tier 1 capital
22 Dec	**Swap arrangement** – submission proposing extension of term from 3 to 5 years sent to Ministry of Finance

NORGES BANK 10

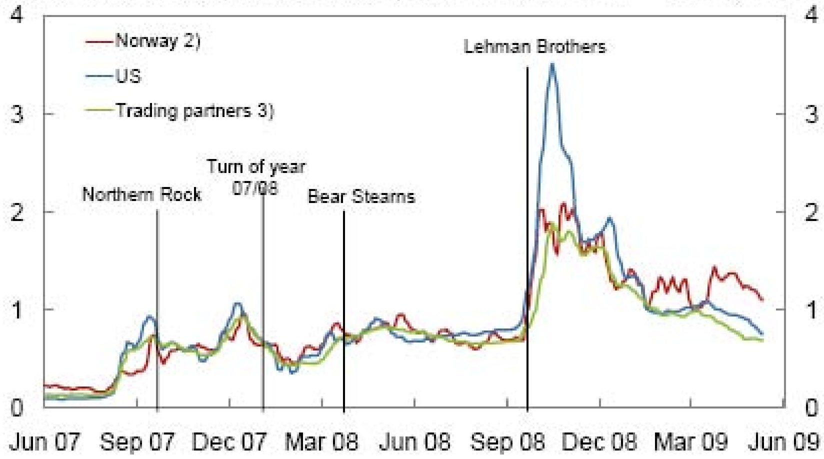
"[…] *The Bank shall inform the ministry when, in the opinion of the Bank, there is a need for measures to be taken by others than the Bank in the field of monetary, credit or foreign exchange policy."*

Chapter 1, Section 3 in the Norges Bank Act

NB NORGES BANK 11

Difference between money market rates and expected key policy rates [1)]

5-day moving average. Percentage points. 1 June 2007 – 11 May 2009



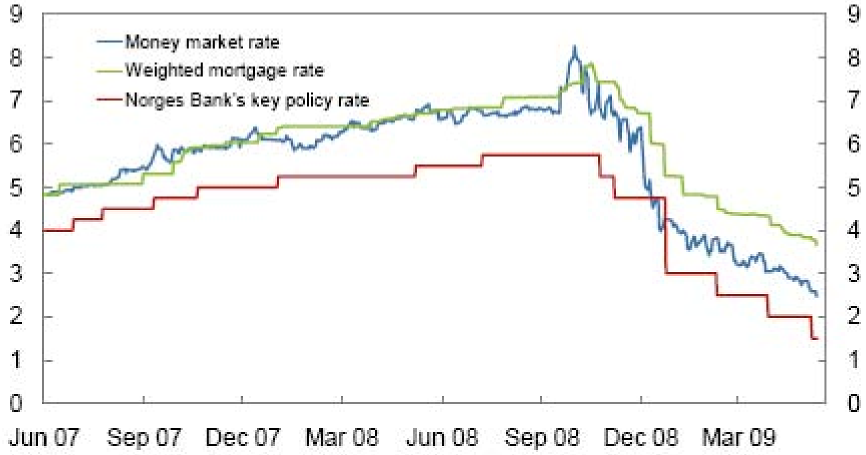
1) Expected key rates are derived from Overnight Indexed Swap (OIS) interest rates.
2) Projected
3) UK, euro area, Japan, Sweden and US

Sources: Thomson Reuters, Bloomberg and Norges Bank

NB NORGES BANK

Key policy rate, money market rate and banks' lending rate on new loans[1)]

Per cent. 1 June 2007 – 12 May 2009



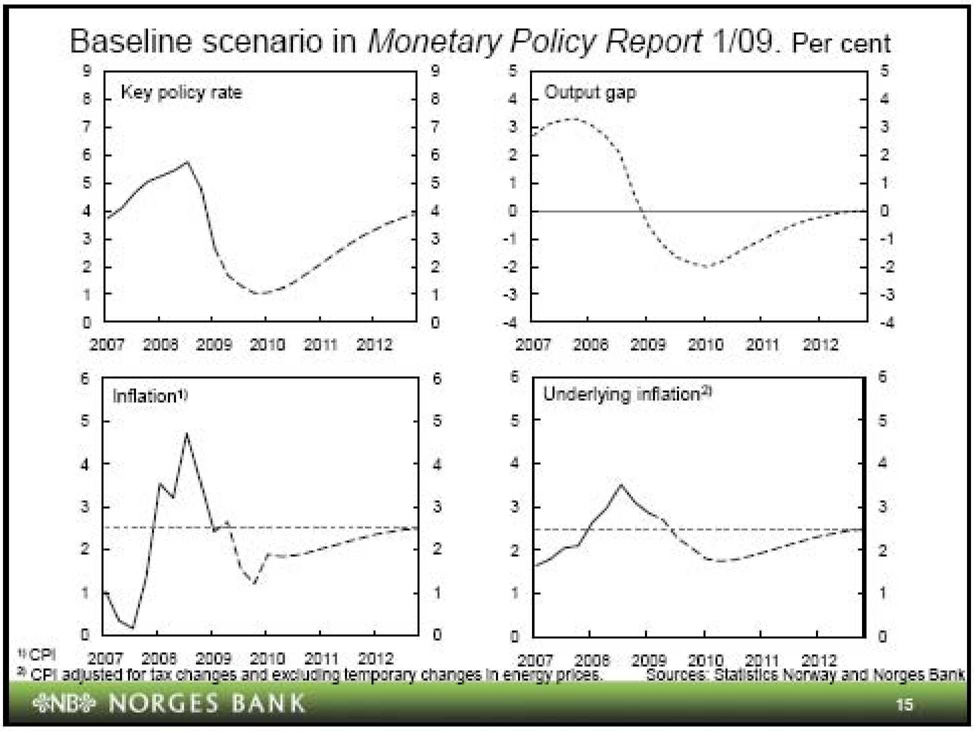
1) Nominal interest rates on new mortgage loans of NOK 1 million with floating interest rate and within 60% of purchase price. Figures for the 20 largest banks, weighted according to market share.

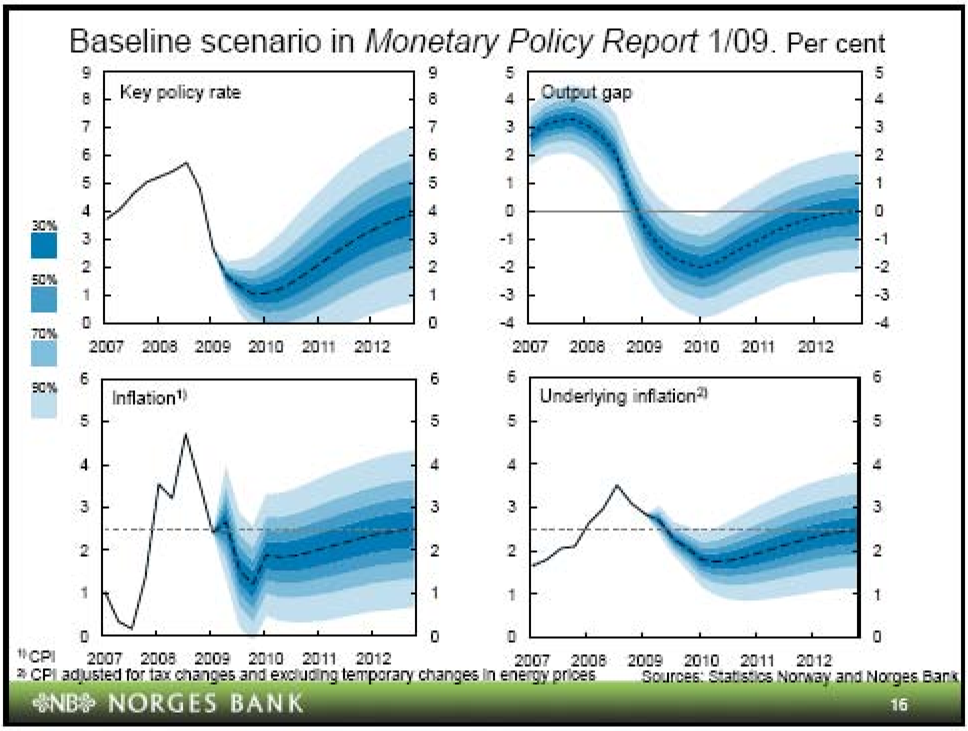
Sources: Norsk familieøkonomi AS and Norges Bank

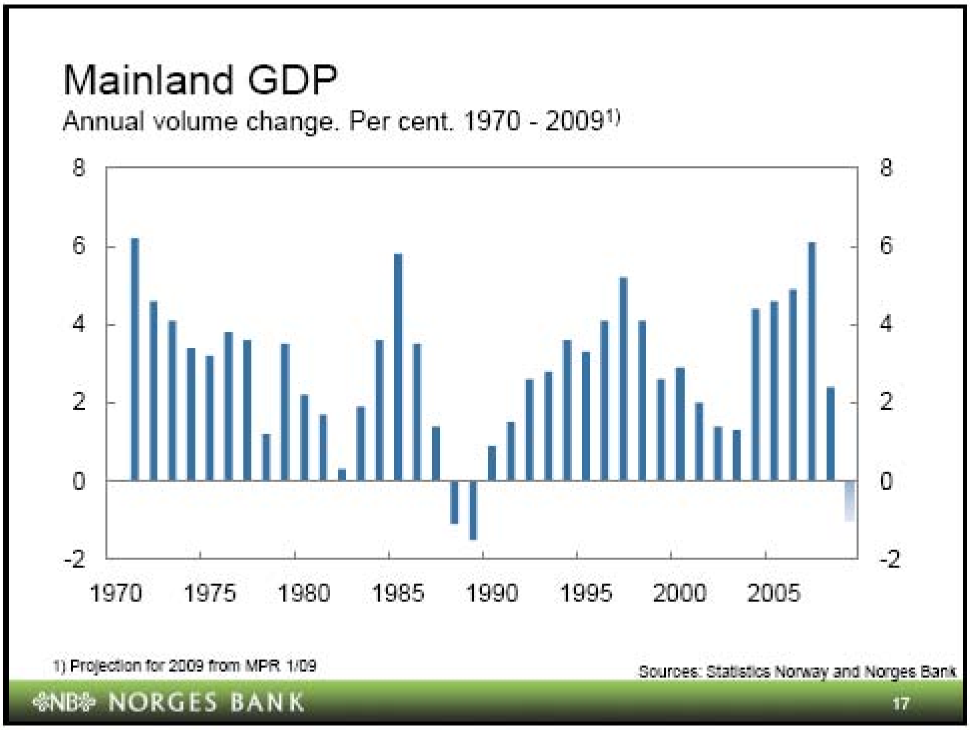
NB NORGES BANK 13

Real interest rate = key policy rate + interest rate premium – expected inflation

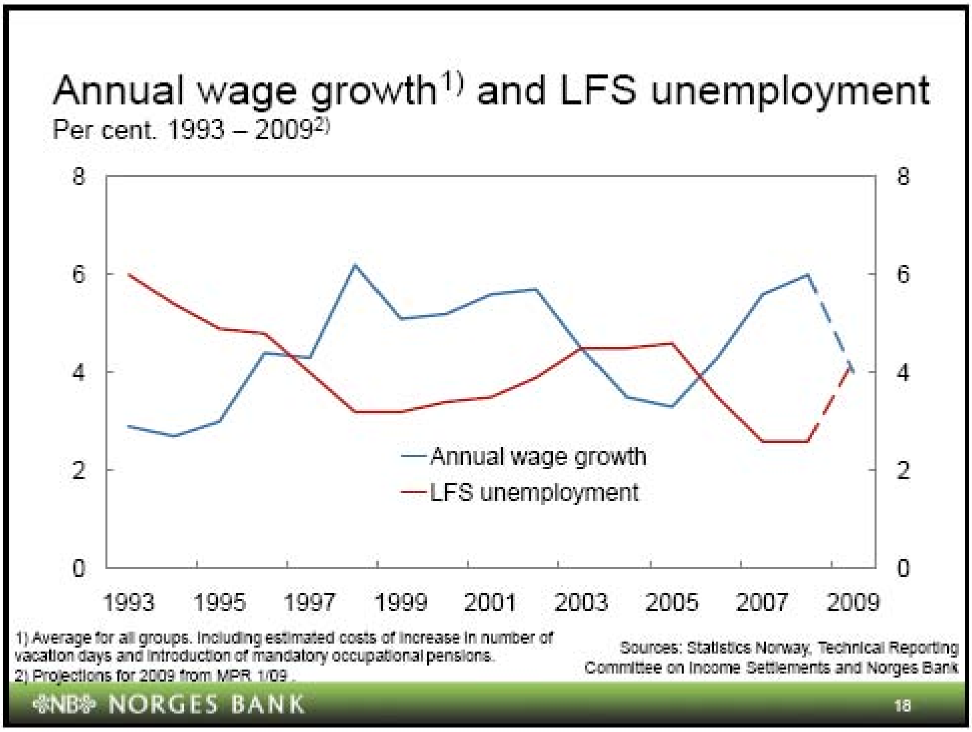
NB NORGES BANK 14


Baseline scenario in *Monetary Policy Report* 1/09. Per cent
Key policy rate
Output gap
Inflation1)
Underlying inflation2)
2007 2008 2009 2010 2011 2012
1) CPI
2) CPI adjusted for tax changes and excluding temporary changes in energy prices.
Sources: Statistics Norway and Norges Bank
NB NORGES BANK
15

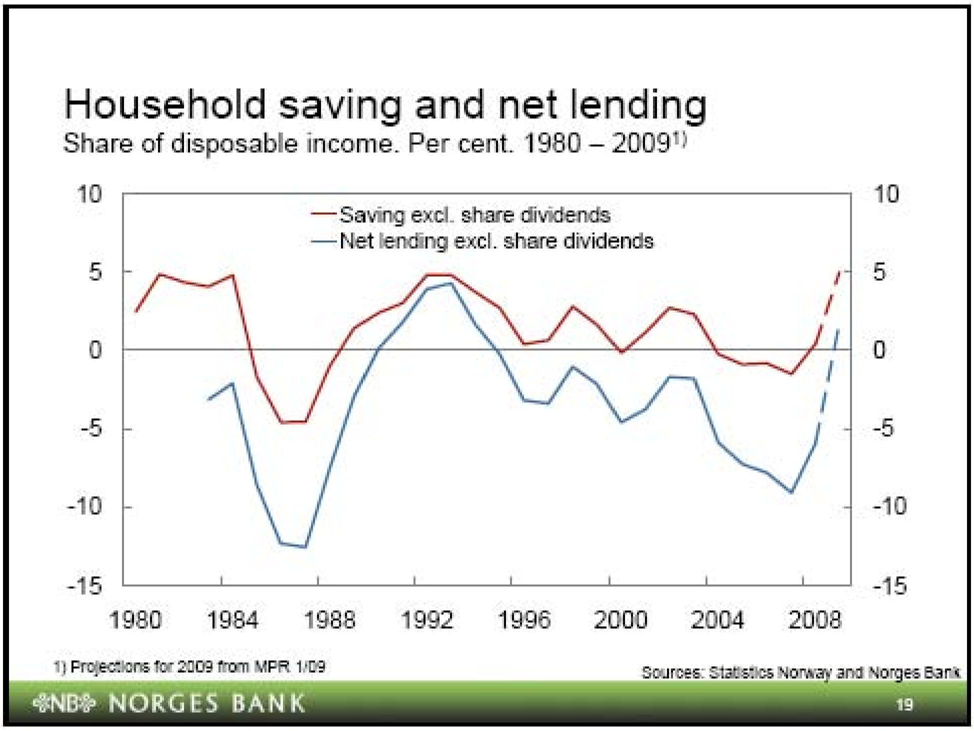

Baseline scenario in *Monetary Policy Report* 1/09. Per cent
Key policy rate
Output gap
Inflation1)
Underlying inflation2)
30%
50%
70%
90%
2007 2008 2009 2010 2011 2012
1) CPI
2) CPI adjusted for tax changes and excluding temporary changes in energy prices
Sources: Statistics Norway and Norges Bank
NB NORGES BANK
16



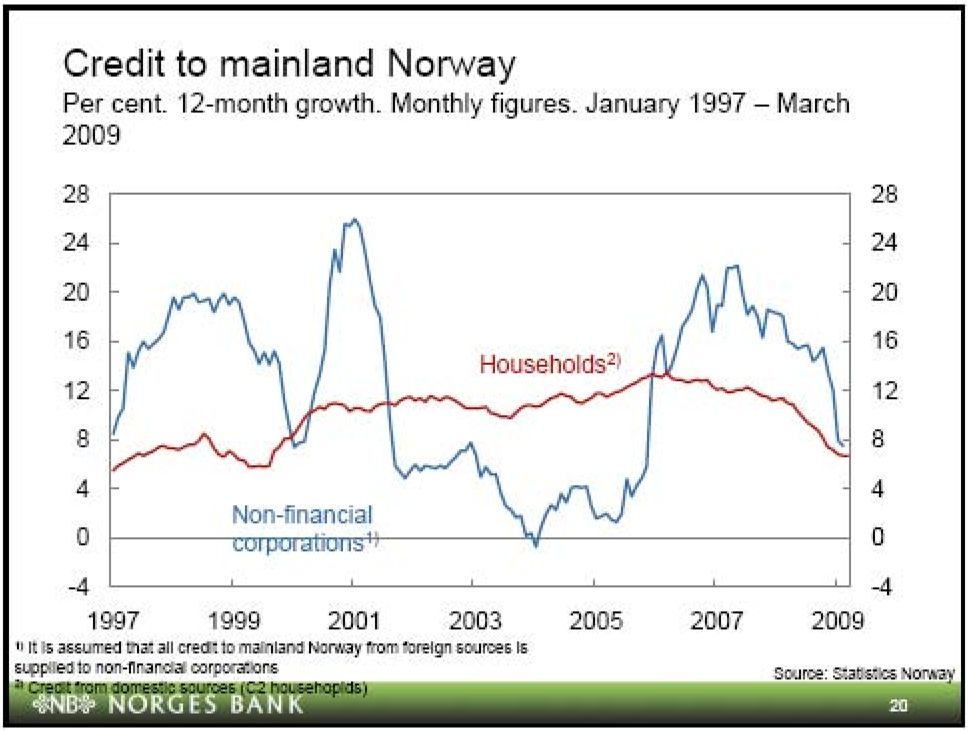
Mainland GDP
Annual volume change. Per cent. 1970 - 2009 1)
8
6
4
2
0
-2
1970
1975
1980
1985
1990
1995
2000
2005
1) Projection for 2009 from MPR 1/09
Sources: Statistics Norway and Norges Bank
NORGES BANK
17



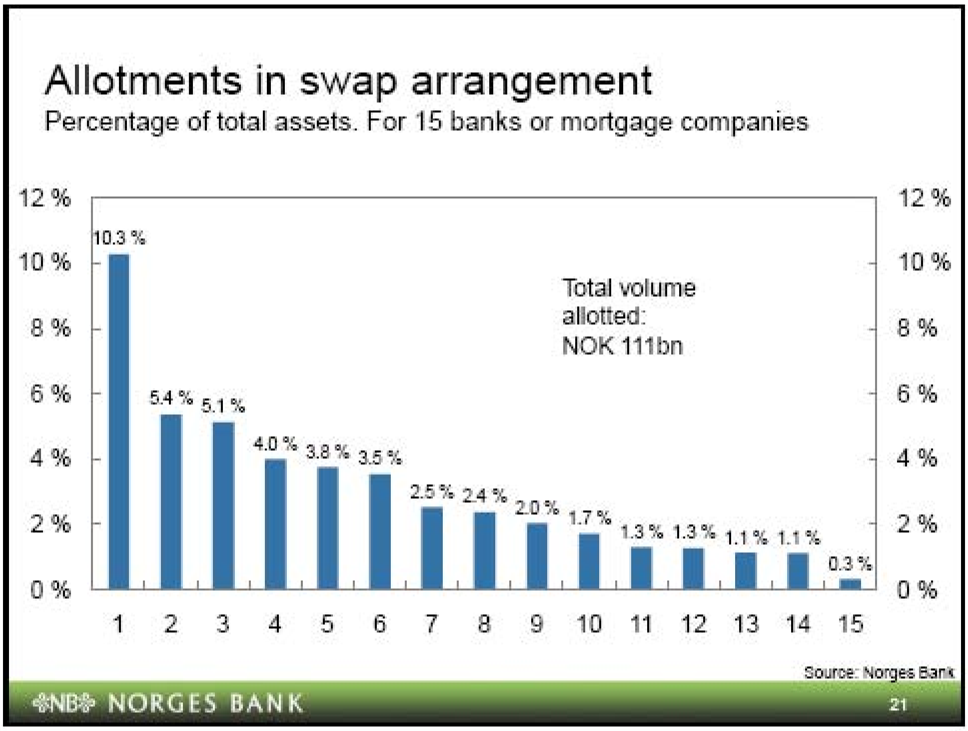
Annual wage growth 1) and LFS unemployment
Per cent. 1993 – 2009 2)
8
6
4
2
0
1993
1995
1997
1999
2001
2003
2005
2007
2009
Annual wage growth
LFS unemployment
1) Average for all groups. Including estimated costs of increase in number of vacation days and introduction of mandatory occupational pensions.
2) Projections for 2009 from MPR 1/09 .
Sources: Statistics Norway, Technical Reporting Committee on Income Settlements and Norges Bank
NORGES BANK
18

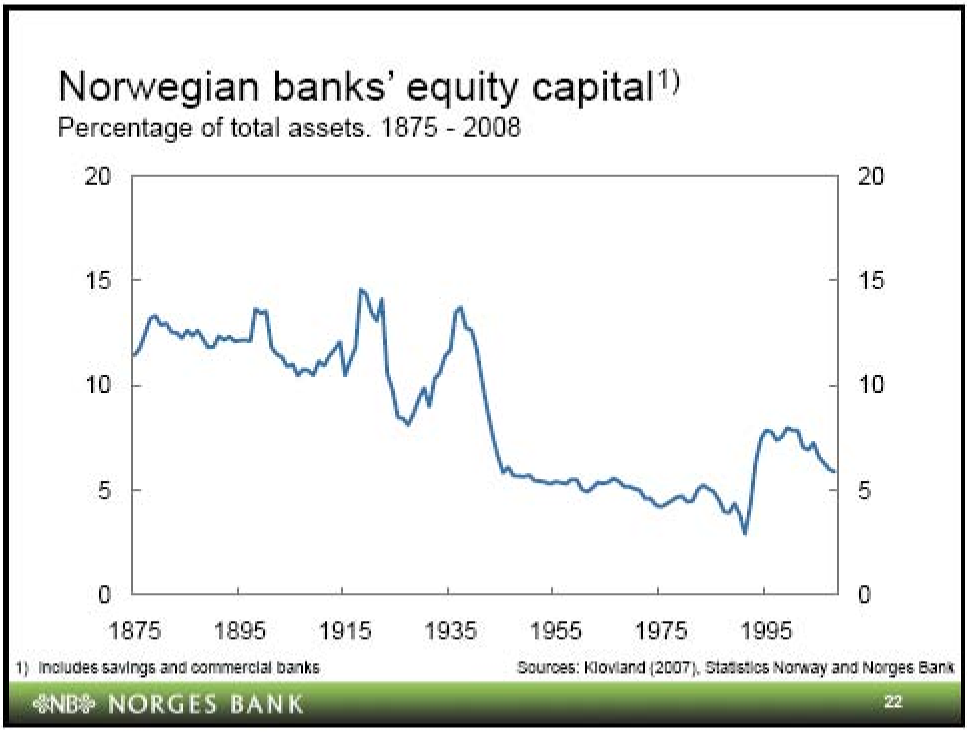


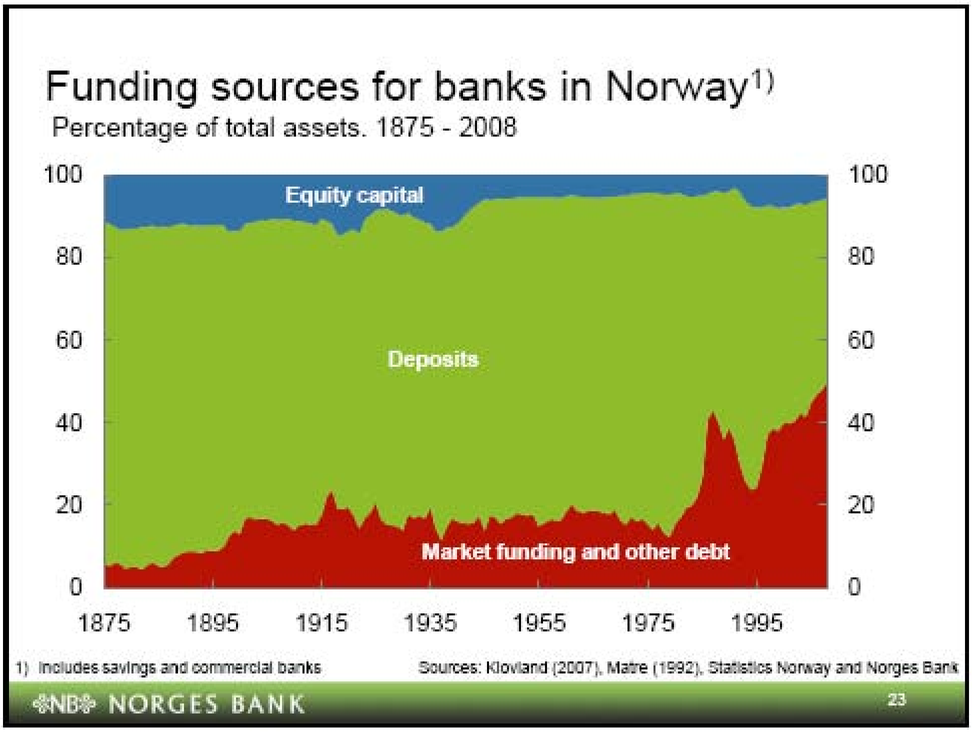
Household saving and net lending
Share of disposable income. Per cent. 1980 – 2009[1)]
Saving excl. share dividends
Net lending excl. share dividends
10
5
0
-5
-10
-15
1980
1984
1988
1992
1996
2000
2004
2008
1) Projections for 2009 from MPR 1/09
Sources: Statistics Norway and Norges Bank
NORGES BANK
19



Credit to mainland Norway
Per cent. 12-month growth. Monthly figures. January 1997 – March 2009
28
24
20
16
12
8
4
0
-4
Households[2)]
Non-financial corporations[1)]
1997
1999
2001
2003
2005
2007
2009
1) It is assumed that all credit to mainland Norway from foreign sources is supplied to non-financial corporations
2) Credit from domestic sources (C2 households)
Source: Statistics Norway
NORGES BANK
20


Allotments in swap arrangement
Percentage of total assets. For 15 banks or mortgage companies
12 %
10 %
8 %
6 %
4 %
2 %
0 %
10.3 %
5.4 %
5.1 %
4.0 %
3.8 %
3.5 %
2.5 %
2.4 %
2.0 %
1.7 %
1.3 %
1.3 %
1.1 %
1.1 %
0.3 %
Total volume allotted: NOK 111bn
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
Source: Norges Bank
NB NORGES BANK
21


Norwegian banks' equity capital1)
Percentage of total assets. 1875 - 2008
20
15
10
5
0
1875 1895 1915 1935 1955 1975 1995
1) Includes savings and commercial banks
Sources: Klovland (2007), Statistics Norway and Norges Bank
NB NORGES BANK
22



Funding sources for banks in Norway1)
Percentage of total assets. 1875 - 2008
100
80
60
40
20
0
Equity capital
Deposits
Market funding and other debt
1875
1895
1915
1935
1955
1975
1995
1) Includes savings and commercial banks
Sources: Kloviand (2007), Matre (1992), Statistics Norway and Norges Bank
NORGES BANK
23