Economic perspectives

Address by Governor Svein Gjedrem to the Supervisory Council of Norges Bank and invited guests on 11 February 2010

NORGES BANK

Economic perspectives

Address by Governor Svein Gjedrem to the Supervisory Council of Norges Bank and invited guests on Thursday 11 February 2010

This current global crisis had its origins in an abundant supply of credit, market participants who took steadily higher risk and a lack of oversight on the part of banks, companies and authorities.

This is reminiscent of a play by Bjørnstjerne Bjørnson's entitled *"A Bankrupt"*. In a conversation between the main character, Tjælde, a businessman, and his daughter Valborg, she says that no man of honour would keep his family or his creditors in ignorance of the events that foreshadow a crisis. Her father rebukes her[1]:

"… you don't understand what a business-man's hope is from one day to the other—always a renewed hope. That fact does not make him a swindler. He may be unduly sanguine, perhaps—a poet, if you like, who lives in a world of dreams—or he may be a real genius, who sees land ahead when no one else suspects it."

The conversation is also reminiscent of current discussions about accounting principles. Then, as now, the mark-to-market value of assets was under debate.

Tjælde says: *"[…] values are fluctuating things; and [a businessman] may always have in hand some venture which, though it cannot be specified, may alter the whole situation."*

Valborg has little regard for ventures at creditors' expense. She thinks accounts should be transparent. A businessman who owes more than he owns should be honest about it, she says.

"… But what do you want [the businessman] to do?" asks Tjælde. *" To lay all his cards on the table, and so ruin both himself and the others? … In that case we should see a thousand failures every year, and fortunes lost one after the other everywhere! No, you have a level head, Valborg, but your ideas are narrow."*

And this play by Bjørnson was written in 1875.

Three imbalances in the world economy

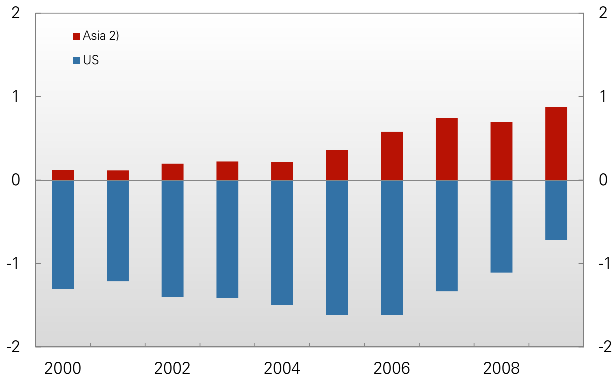
The financial crisis triggered the largest decline in output in advanced economies since the Second World War.

The financial crisis erupted after a period of substantial debt accumulation among households and banks, combined with a real estate boom in the US and in some European countries. There were numerous examples of creative accounting as practised by Bjørnson's businessman, Tjælde.

The bubble burst, but extensive government measures helped put banking systems more or less back on their feet. Interest rates are close to zero in advanced economies, and governments have increased purchases of goods and services and reduced taxes. Many emerging market economies are exhibiting vigorous growth. But imbalances are building up, making the recovery fragile (see Chart 1).

First, after the Asian crisis and the ensuing capital flight from the region in the 1990s, a number of emerging market economies in Asia sought to build up larger currency reserves. Following the earlier pattern of Japan and South Korea, emerging market economies pursued a policy of export-driven growth based on a low cost level and a stable exchange rate. Combined with the US market's willingness and capacity to import and consume, this led to substantial balance of payments imbalances. And glo-

Chart 1 Current account. As a percentage of world GDP. 2000 - 2009[1)]



1) IMF's estimates for 2009
2) Bangladesh, Bhutan, Cambodia, China, Fiji, India, Indonesia, Kiribati, Lao People's Democratic Republic, Malaysia, Maldives, Myanmar, Nepal, Pakistan, Papua New Guinea, Philippines, Samoa, Solomon Islands, Sri Lanka, Thailand, Tonga, Vanuatu and Vietnam
Sources: IMF World Economic Outlook Database April 2009 and Norges Bank

bal capital markets failed to channel surplus savings in emerging market economies into investment in wealthier countries.

Over the past year, falling demand for goods and services in western economies has reduced US imports and Asian exports. However, unless Asian countries change course, these imbalances may quickly reemerge as the US gradually manages to boost growth in its economy.

Second, a number of countries are approaching or experiencing a sovereign financial crisis. In addition to the cost of rescuing banking systems, tax revenues have decreased and social welfare expenditure has increased. Large deficits are resulting in elevated government debt levels, with rising interest payments adding to the deficits (see Chart 2). Sovereign creditworthiness is deteriorating and higher credit risk premiums are exacerbating the situation.

OECD government debt will grow for several years ahead and may increase from 80 per cent of GDP in 2008 to almost 120 per cent later this decade (see Chart 3). Cuts in social welfare expenditure and public service production and higher taxes will be necessary for many years ahead to bring debt down to a level that will restore governments' fiscal space. And should the need arise, governments' capacity and appetite for intervening with new measures and rescue operations will probably have diminished in the meantime.

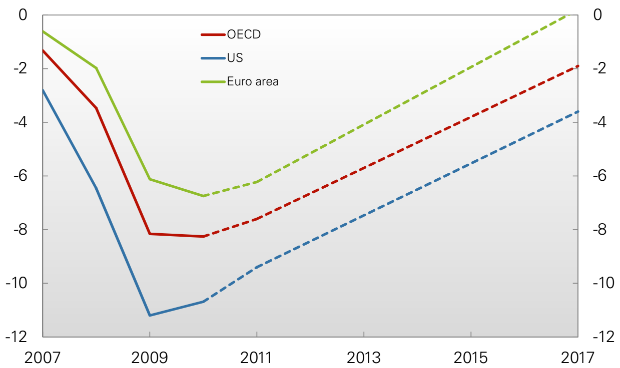
Markets are now focusing on the four euro area countries Portugal, Ireland, Greece and Spain. Ireland may have broken the circle – by reducing nominal wages and showing the ability to cut government spending sharply. The other countries have not yet managed to regain the confidence of funding markets. The challenge they face is not only high deficits and substantial debt today, but also limited potential to grow out of their debt problems. The only remedy in that case is spending cuts.

Icelandic banks were particularly vulnerable and their collapse had a severe impact on Iceland's economy. The real economic environment in Iceland, with income levels now down to UK and Swedish levels, is conducive to growth. However, the problems left by the banks must be resolved before the economy can start to pick up.

Third, in the US, the euro area countries and the UK, there is again almost double-digit unemployment. Unemployment is likely to become entrenched – particularly in Europe where the labour market is less fluid and the ability to adapt weaker.

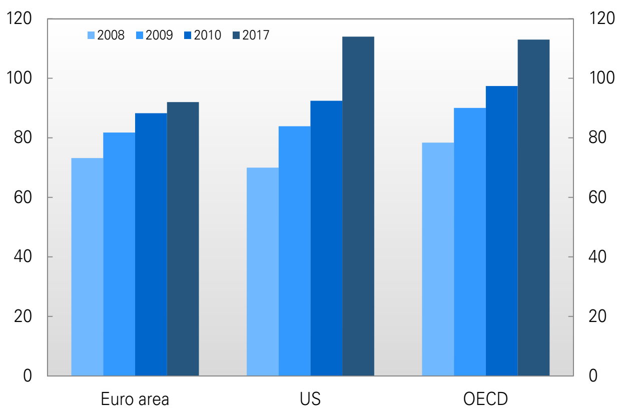
This can be illustrated by comparing unemployment developments in the 1980s with current developments. Unemployment fell back fairly quickly in the US, while it remained high in the UK and other European countries through the decade (see Chart 4). Entire youth cohorts did not achieve labour force attachment.

Chart 2 General government financial balances. As a percentage of GDP. 2007 – 2017[1]



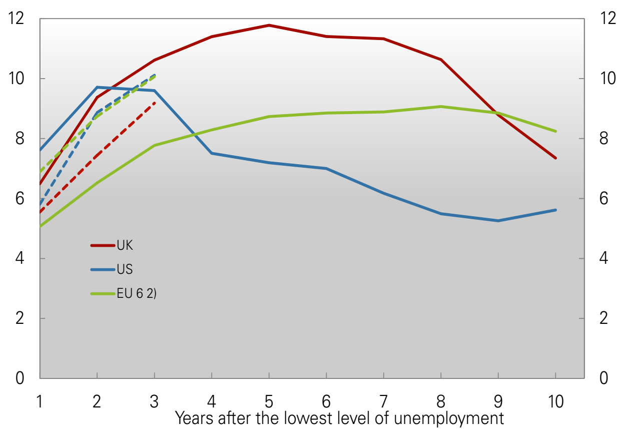
1) Estimates for 2009-2011 and 2017
Source: OECD Economic Outlook 86

Chart 3 Government debt. As a percentage of GDP. 2008 – 2017[1]



1) Estimates for 2009, 2010 and 2017
Source: OECD Economic Outlook 86

Chart 4 Unemployment. Developments in recessions. Per cent. From the 1980s (solid lines) and 2008 - 2010 (dotted lines)[1]



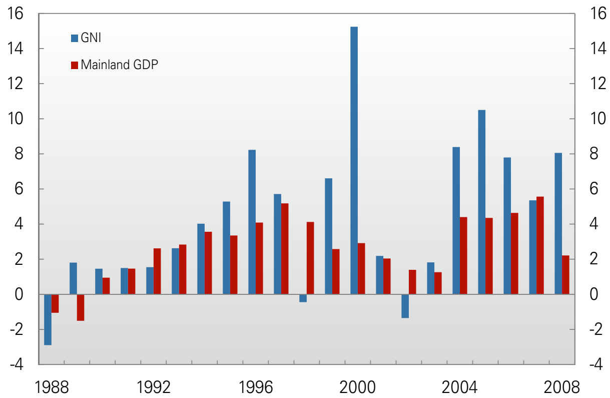
1) Estimates for 2009 and 2010
2) Belgium, France, Germany, Italy, Luxembourg and the Netherlands. GDP-weighted
Sources: IMF World Economic Outlook Database April 2009 and Norges Bank

Small countries such as Norway are dependent on a growing global economy with free trade and free capital movements. There is a risk of a renewed weakening in financial markets. Some countries may be caught in a continuous downward spiral. But so far the IMF has been able to provide support.

There is also a risk that countries experiencing deficits and substantial unemployment resort to protectionism when their businesses are not sufficiently competitive. However, the rules of the World Trade Organisation, the WTO, have generally been respected so far.

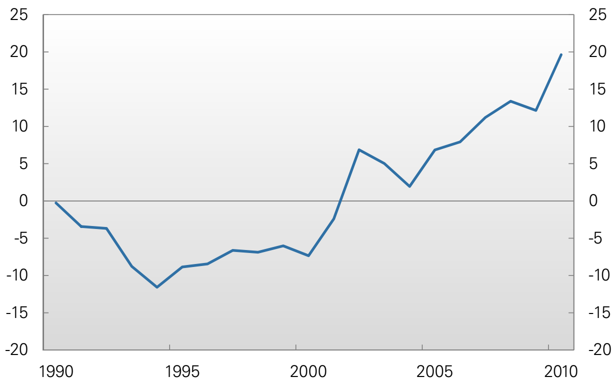
Mercantilist attitudes may also gain ground in surplus countries. Investment behaviour in these countries may be motivated by broader strategic considerations, which may prompt retaliatory measures and result in restrictions on cross-border capital flows.

Chart 5 Growth in Gross National Income and Gross Domestic Product for Norway. Per cent.1988 - 2008



Sources: Statistics Norway and Norges Bank

Chart 6 Relative labour costs. Deviation from the average for the period 1970 – 2009. Per cent. 1990 – 2010[1)]



1) The figure for 2010 is the average for the period 1 January - 9 February 2010. A rising curve indicates weaker competitiveness
Sources: Statistics Norway, Technical Reporting Committee on Income Settlements, Ministry of Finance and Norges Bank

The Norwegian economy – two golden decades

The downturn in Norway has proven to be mild.

Norway has not experienced a pronounced economic downturn since the crisis around 1990, when a cost crisis, an employment crisis with a sharp increase in unemployment and a decline in output, a currency crisis, a fall in property prices and a banking crisis all occurred around the same time.

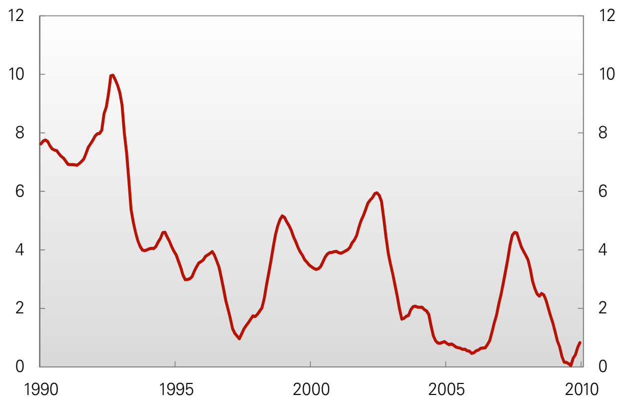
A long upturn followed in the period from 1992 to 2008. National income rose by an annual 5.4 per cent in this period, far higher than the rate of output growth in the mainland economy (see Chart 5). Income growth has been higher than in the 1950s and 1960s.

Behind these favourable developments were the major structural reforms of the 1980s and 1990s that resulted in higher production capacity in the Norwegian economy. The Norwegian business sector experienced a long period of high productivity growth.

Shifting forces have otherwise driven the economy – during the crisis around 1990, labour costs decreased to a low level compared with Norway's trading partners and wage settlements were moderate. In 1995, the cost level was 10-12 per cent below Norway's average for the oil age from 1970 to today (see Chart 6).

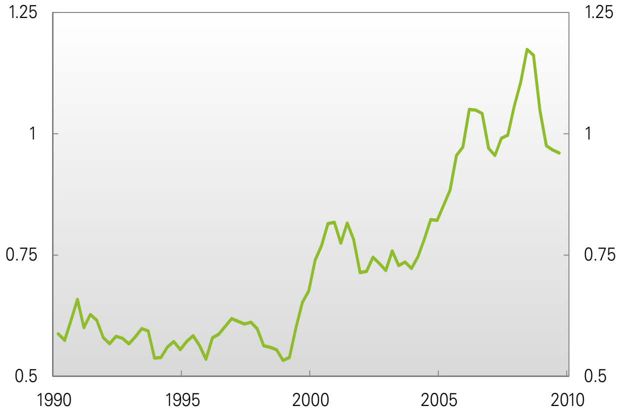
In addition, real interest rates in Norway fell markedly through the 1990s from high levels (see Chart 7). This was because the fixed krone exchange rate regime maintained through the crisis period managed to bring down inflation and inflation expectations.

Chart 7 Real interest rate.[1)] Nine-month centred moving average. Per cent January 1990 – December 2009



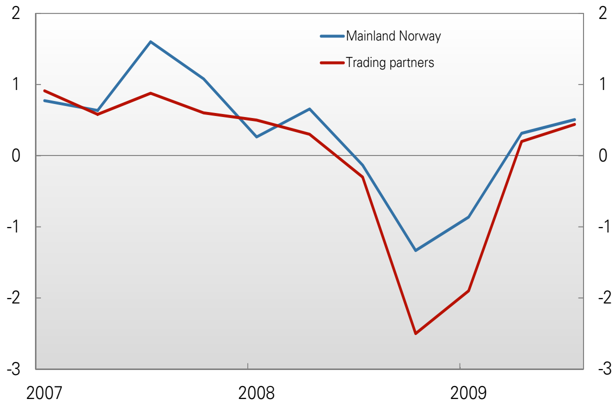
1) Three-month money market rate deflated by the CPI
Source: Statistics Norway and Norges Bank

Chart 8 Terms of trade. Index, 2007 = 1. 1990 Q1– 2009 Q3



Source: Statistics Norway

Chart 9 GDP growth on previous quarter. Norway and trading partners. Seasonally adjusted. Per cent. 2007 Q1 – 2009 Q3



Sources: Statistics Norway and Norges Bank

Moreover, growth in public spending was rapidly reduced once business sector activity had recovered.

Norway experienced an economic shift in the 2000s. The cost level began to rise, although this was related to the sharp improvement in Norway's terms of trade at that time and a gradual pickup in growth abroad (see Chart 8). Prices for Norwegian exports such as oil, gas, metals, minerals, fish and freight, rose markedly, while prices for imported goods fell. From 2003 to 2008, terms-of-trade gains alone pushed up national income by more than 20 per cent, or a good 4 per cent per year.

Institutions and mechanisms had also been put in place to manage the sharp increase in income. Norway's sovereign wealth fund, which is now called the Government Pension Fund Global, and the fiscal guidelines were established with the express purpose of preventing fluctuations in oil prices from feeding through to the mainland economy. Improved terms of trade, higher revenues and increased government spending contributed to a shift in real resources towards sheltered sectors and to a stronger krone, but at the same time the fiscal rule provided a basis for growth in business sectors other than just the oil industry and the public sector through the decade. Norway had a plentiful supply of labour from new EU countries and experienced several years of high output growth. At the same time, the inflation target for monetary policy provided a sound anchor for inflation expectations.

In 2008 the expansionary period was drawing to a close. Costs had risen sharply, credit growth had been strong, the interest rate had been raised and house prices had started to fall. Petroleum revenue spending over the central government budget had increased, but employment in traditional industries was still high. Despite Norway's high cost level, merchandise exports and supplies of goods and services to the oil industry held up due to high demand.

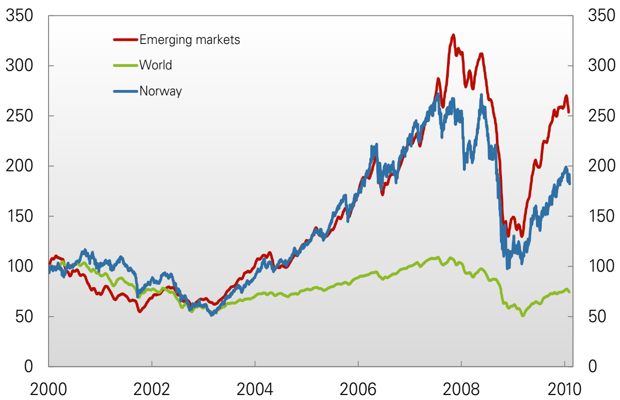
Instead of a gradual slowdown, economic growth came to an abrupt halt in autumn 2008 when the global financial crisis came to a head. Demand for Norway's export goods fell markedly. Norwegian banks proved to be highly vulnerable to the credit freeze in global money markets and stopped providing new loans.[2]

However, Norwegian banks were not as exposed to loan losses – at home and abroad – as banks in other countries. The downturn proved to be milder in Norway, but the banking industry may also have performed its craft fairly well. Government and central bank liquidity provision measures were effective. The liquidity crisis passed quickly and did not turn into a solvency crisis in Norway's banking system.

The rapid rebound in oil prices and a weaker krone provided a boost to the economy. The interest rate was lowered and public spending markedly increased. The downturn turned out to be milder than we had expected when the interest rate was reduced to a low level – partly because oil prices proved to be higher than expected and partly because the measures implemented were more effective than we had dared to assume. We therefore now expect to be able to raise the interest rate again at a gradual pace to more normal levels.

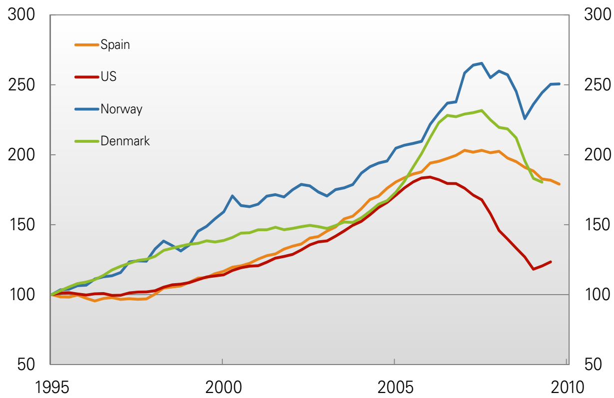
The emerging economies were hardest hit by the previous global crisis in the late 1990s. This time OECD countries were the most severely affected. But Norway seems to have largely escaped the crisis. Overall, output has fallen to a lesser extent in Norway than in other countries and it recovered more quickly (see Chart 9). Unemployment has remained low. One might almost believe that Norway was immune to crises and that the country is unique.

Chart 10 Equity prices. Index, 3 January 2000 = 100
3 January 2000 – 29 January 2010



Source: Thomson Reuters

Chart 11 Real house prices.[1)] Index, 1995 Q1 = 100
1995 Q1 – 2009 Q4[2)]



1) Deflated by the CPI
2) US to 2009 Q3. Denmark to 2009 Q2
Kilde: Ecowin

But this is not the case. It is dangerous to believe that we will be able to manage every crisis as successfully.

Norway is not unique.

We cannot expect driving forces to be as beneficial in the future. Real interest rates cannot be expected to fall. Another sharp boost to export prices is not likely. In addition, Norway's economy is now vulnerable. Norwegian labour has never been as costly as it is today. Norwegian businesses may be at a disadvantage in tenders and competitions given the current high level of spare capacity in other countries. Moreover, it has never been more profitable to relocate activities abroad.

During the upturn, Norwegian firms fared well in spite of high costs thanks to efficiency gains, high turnover volumes and price increases. The cost of Norwegian labour has been very high, but there has been full employment. Markets will be more demanding ahead. Despite Norway's floating exchange rate, our cost level cannot be expected to fall to any great extent as economic conditions are even weaker in other European countries.

The industry structure in Norway's small economy is different from that of other advanced economies. The emergence of new Asian market economies is beneficial for Norway owing to its sizeable commodity exports and freight transport. This is also reflected in Norway's equity market.

The value of Norwegian listed companies correlates closely with the value of companies in emerging market economies (see Chart 10). Norway is vulnerable to a slowdown in growth in Asia. Commodity prices may then fall and the terms of trade may deteriorate. Norway's high cost level may at the same time make it difficult for the business sector to shift to new markets.

High house prices and substantial household debt add to the economy's vulnerability. The downturn abroad was triggered and amplified by the drop in house prices and deleveraging. House price inflation and household debt growth have been sharper in Norway than in several of the hardest-hit economies (see Chart 11).

Tighter banking regulation and a better tax system

Credit growth tends to be self-reinforcing. During an upturn, banks' loans losses are low and profits increase. Capital is in ample supply. This leads to strong growth in lending and higher house and property prices. Borrowers' collateral increases, which triggers new rounds of borrowing and price rises. With a few taps on the keyboard, people can make home equity withdrawals that are deposited in an online bank and are used to finance new purchases and current consumption. During a downturn bank earnings fall, losses rise and banks tighten lending. This can trigger several rounds of decline. This is the mechanism whereby fluctuations in the economy are amplified.

The global banking crisis shows that credit cycles and property market bubbles that burst represent one of the greatest challenges to economic policy. They can build up over a long period. They are difficult to identify in real time and even after they burst there is doubt as to the causes. The fall in prices is abrupt and costly.

It is particularly important to develop structures and mechanisms that better enable the economy to regulate itself.

New equity capital and liquidity requirements for banks can promote financial stability. The requirements should probably be tighter in Norway than the minimum requirements that are likely to be agreed internationally. Norway's economy is small, with concentrated risk for the banks. It is also important to cooperate with the other Nordic countries to avoid a situation where more lightly regulated banks aggressively market loans in Norway.

Owing to flaws and major shortcomings, the tax treatment of capital and property in Norway amplifies credit cycles and house price fluctuations.

The 1992 reform resulted in a tax system for Norway that is based on sound principles. The basis for calculating income tax was expanded, rates were reduced and corporate and personal income taxation was better integrated. Distortions were remedied, bringing business and economic returns more closely into line in the case of business investment. More neutral tax rules reduced the scope for companies and industries to obtain special tax advantages. The reform contributed to solid economic growth in the 1990s and a substantial increase in government tax revenues even with appreciably lower tax rates.

But the wave of reform ebbed out before the work was completed. There is now a striking contrast in the quality of various components of our tax system.

There are major weaknesses in the taxation of wealth and property.

First, income and the value of various types of capital are taxed differently. The return on and value of financial capital and business capital are fully taxed. Rental income is fully taxed, while owner-occupied dwellings are exempt from a corresponding tax. Mortgage interest is tax deductible while capital gains on dwellings and the benefit of home ownership are not taxed. Housing is taxed as an asset, but not at its market value.

Table 1 shows the distortionary effects of the tax system. Housing investment is considerably more profitable than repaying debt or investing in a business. This is the case for those who pay wealth tax and for those who are not liable to wealth tax.

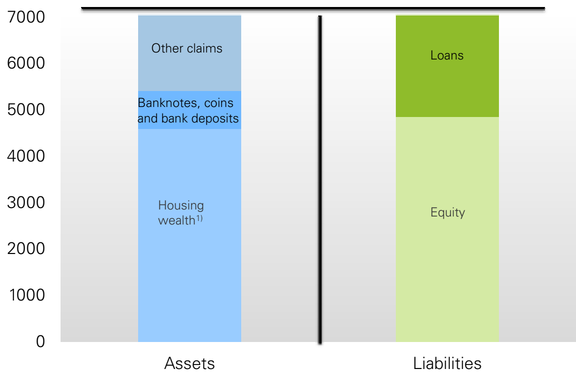
Second, property is taxed differently across municipalities. Moreover, the valuation of property as a basis for wealth tax has been completely arbitrary. The new property valuation system is a small but is the right step towards applying market valuation as a basis for housing taxation.

Tabel 1 Return on alternative investments

	Invest in housing	Repay debt	Invest in business
Before tax	4.0%	4.0%	4.0%
After tax			
- without wealth tax	4.0%	2.9%	2.9%
- with wealth tax	3.7%	1.8%	1.8%

Source: Norges Bank. See Staff Memo 2010/1 from Norges Bank

Chart 12 Household wealth and debt as per 2009 Q3. In billions of NOK



1) Norges Bank's estimates
Sources: Statistics Norway and Norges Bank

Third, property is an effective tax vehicle but property taxes are low. Property cannot be relocated. Nor does property tax distort the use of resources in the way that taxation of labour and entrepreneurship does.

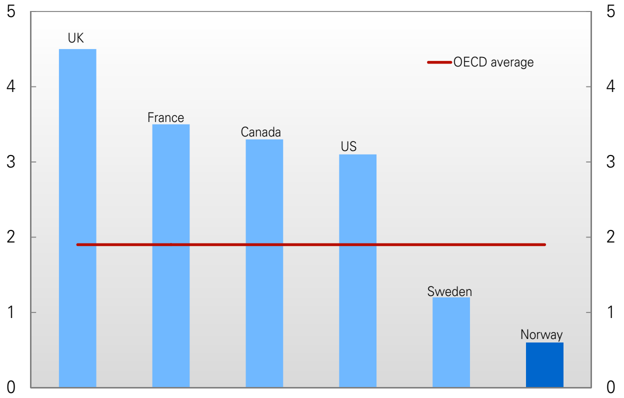
An increase in property tax will dampen fluctuations in house prices and credit cycles, reducing the magnitude of both gains and losses. Tax on capital gains on housing, and deductibility of losses, would in particular make a considerable contribution to attenuating price spirals in the housing market. The result would be a more stable economy.[3]

Driven by the tax system, housing accounts for a large share of household wealth. On an uncertain basis, the value of housing capital can be estimated at over NOK 4.5 trillion, more than one and half times the size of Norway's sovereign wealth fund (see Chart 12).[4] The high degree of concentration on housing investment crowds out business investment. Higher property taxes would increase growth potential because business investment would become more profitable.

Property taxes account for about two per cent of GDP in OECD countries. In Norway, the share is slightly higher than a half per cent.[5]

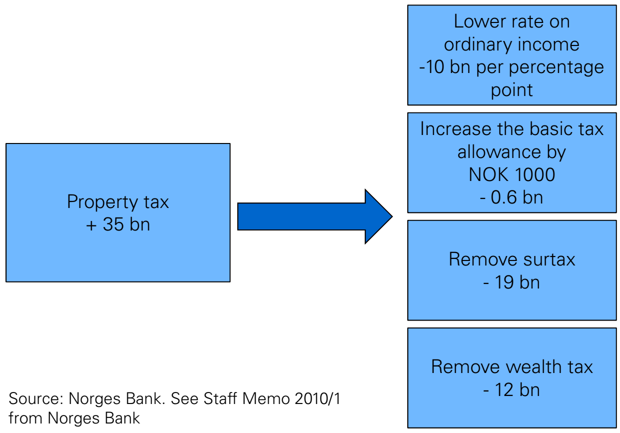
It would be reasonable to introduce property tax rates and

Chart 13. Taxes on property. As a percentage of GDP. 2007



Sources: OECD Revenue Statistics 2009 and Norges Bank. See Staff Memo 2010/1 from Norges Bank

Chart 14 Menu for changes in the tax system



Source: Norges Bank. See Staff Memo 2010/1 from Norges Bank

revenues on a par with that of other countries (see Chart 13). This would generate additional annual tax revenues of around NOK 35 billion.[6]

When evaluating the tax system, an increase in property taxes will be matched by a reduction in the tax on labour and entrepreneurship. As shown in the menu of options in Chart 14, an increase in property taxes will provide a basis for reducing the tax on ordinary income. The cost in terms of reduced government revenues of lowering the rate by one percentage point is NOK 10 billion, while the costs of increasing the basic allowance by NOK 1000 is NOK 0.6 billion. The tax rate for ordinary incomes can for example be reduced from 28 to 26 per cent, combined with an increase of NOK 25 000 in the basic allowance. Another option would be to use the revenues to remove wealth tax and the surtax on higher incomes. There would still be some room left for a reduction in the tax on ordinary income.

Monetary policy

It costs 34 øre to produce a 50 krone note. But we expect to exchange this piece of paper for larger real values, for example a litre of milk or a loaf of bread. Most of the money we spend is not paper money but online banking figures. We can exchange the electronic figures for baskets of goods from the shop. Norges Bank issues paper money, but is also behind – as the banks' bank – deposits on accounts in commercial and savings banks.

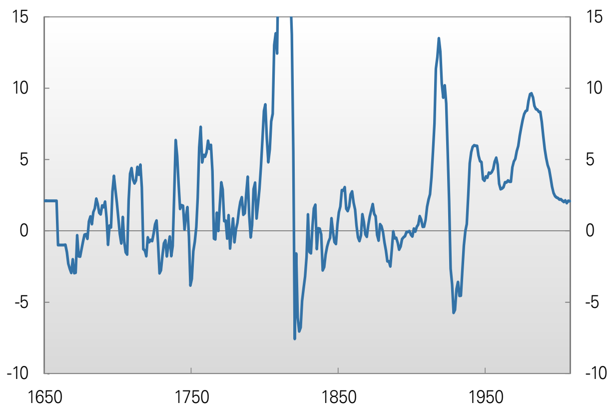
The value of money tends to be taken for granted when we pay our bills, receive wages and plan trips and large purchases, draw up budgets and keep accounts. But if prices rise, money loses value. If inflation varies, the purchasing power of money becomes arbitrary.

Moreover, decisions based on an arbitrary value of money cannot be sound, which is why stable and low inflation is a precondition for solid growth in the economy. The profitability of an investment project can only be calculated correctly when inflation is in line with expectations. Accounts tend to be misleading and equity prices uncertain if the purchasing power of money is not stable. The tax system, with its rates and thresholds in krone terms, impairs the distribution of resources to a greater extent when inflation is high and variable.

The value of money and inflation have now been stable for almost 20 years. In earlier times, the value of money was more variable, and periods of high inflation tended to be followed by a fall in prices (see Chart 15). The value of money fell sharply and permanently around the time of the two World Wars and earlier wars. In the 1970s and 1980s, the value of money also fell rapidly, but as a result of economic policy. The interest rate was kept at a low level and public spending was high in an attempt to achieve very low unemployment.

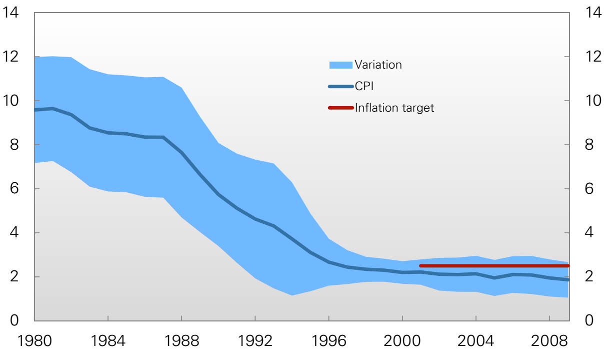
Not only in Norway, but worldwide, there was a crisis in the monetary system in the 1970s. After the Second World War, the US dollar was pegged to gold while other countries held a fixed but adjustable exchange rate against

Chart 15 Inflation in Norway.[1)] Per cent. 1650 - 2007



1) Moving average. Calculated 7 years back and 2 years ahead
Source: Norges Bank

Chart 16 Inflation. Moving 10-year average[1)] and variation[2)] in the CPI[3)].
Per cent. 1980 - 2009



1) The moving average is calculated 7 years back and 2 years ahead
2) The band around the CPI is the variation in the CPI adjusted for tax changes and excluding energy products in the average period, measured by +/- one standard deviation
3) Projections for 2009 - 2011 from MPR 3/09 form the basis for this estimate
Sources: Statistics Norway and Norges Bank

the dollar. But inflation gradually became too high for the dollar to maintain its gold value and at the beginning of the 1970s the system unravelled. Inflation increased and was unstable in most western countries until well into the 1980s.

For a 50 krone note in the 1970s, we could buy ten litres of milk and ten loaves of bread. The value of money fell sharply when inflation surged and later in the 1990s – after the period of inflation - we had to pay five 50 krone notes for the same goods.

The metal standard and fixed exchange rate regime were not able to safeguard the value of money.

This is why most countries have given the central bank and the interest rate the role of securing low and stable inflation. This ensures that money - which is so cheap to produce - retains its value. In order to avoid setting aside the objective of price stability, the central bank must be independent in interest rate setting as it may be tempting to seek new objectives and tasks when inflation has been anchored for a time. It would not be the first time that there would be excessive optimism with regard to managing the economy. In the early 1970s – after 20 years of solid growth - we believed the ghost of unemployment had definitively been laid to rest and new objectives were drawn up.

We cannot – as in the 1970s – allow the interest rate to remain low over a long period of time in an attempt to achieve permanently higher output. This would lead to wide fluctuations and high inflation.

Seldom are the considerations underlying interest rate setting pulling in such different directions as today. In many quarters, it is now argued that the interest rate should be raised rapidly to restrain house price inflation. This is understandable in the light of the severe effects that house price inflation and high debt have had on many countries. In other quarters, it is argued that the interest rate should be lowered to keep down the krone exchange rate. This also seems well founded in view of the substantial challenges facing Norwegian enterprises.

However, we cannot raise the interest rate and lower it at the same time.

The interest rate is set to secure low and stable inflation. With strong growth in spending on goods and services or with falling demand, the interest rate can at the same time stabilise developments in output and employment. In this case, there are no conflicting objectives. When inflation expectations are firmly anchored, we can give weight to the path for output and employment when we set the interest rate. In the assessment of the outlook for inflation and output, we also look at house prices, total credit and the krone exchange rate. In this respect, these variables are taken into account when we set the interest rate.

Norges Bank only has one instrument, and the interest rate alone is too crude an instrument. Hence, financial regulation, the tax system and fiscal policy have to contribute more to promote other economic policy objectives.

In the past year, very low key rates have been necessary to prevent inflation from falling too far. Over the past decade, inflation has remained at around 2 per cent, or close to, but somewhat below the target of 2.5 per cent (see Chart16).

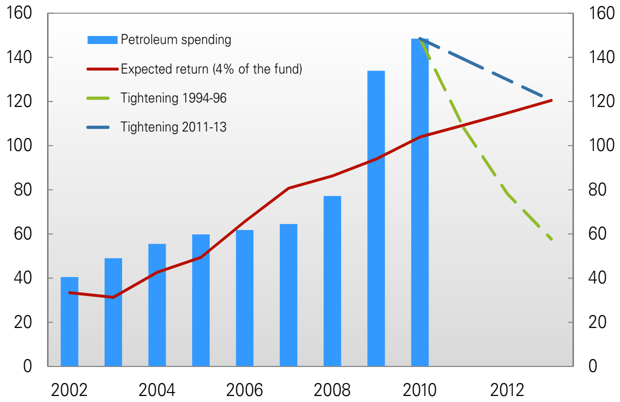
Division of roles in economic policy

The division of roles in economic policy will now be put to the test:

- Monetary policy steers inflation in the medium and long term and can contribute to smoothing fluctuations in output and employment.

- The central government budget – growth in public expenditure – influences the krone and the size of the internationally exposed business sector in the medium term. This is important because the growth capacity of the economy – the fundament for learning, innovation and development – can be undermined if the portion of the business sector exposed to intense international

Chart 17 The fiscal rule. In billions of NOK. 2002 - 2013



Sources: Ministry of Finance and Norges Bank. See Staff Memo 2010/1 from Norges Bank

competition is reduced.

- Wage formation and economic structures and incentives lay the basis for the effective and efficient use of labour and other real economic resources, and for economic growth.

With concurrently lower inflation and activity prospects, Keynesian demand management was an appropriate policy response to the crisis in autumn 2008. Norway has room for manoeuvre since there is confidence in state finances and inflation expectations are firmly anchored. We have been able to draw lessons from both positive and negative outcomes of such a policy in the 1970s and around 1990. There may be material here for a "handbook" of effective Keynesian use of instruments.

First, when demand for goods and services and inflation prospects fall, the interest rate is lowered. At the same time, the automatic stabilisers in the budgets will work when tax revenues fall and benefit payments increase.

When the fall in demand for goods and services is so steep that an interest rate close to zero is not sufficient, tax rates are reduced or government measures are applied. The measures should not influence long-term public sector priorities such as the size of the welfare state or the permanent tax level.

When the economy turns, as it now has in Norway, the rule is that fiscal policy should be tightened fairly rapidly. This provides room for growth in the business sector. When public expenditure has been reduced, the key rate can then be increased to a normal level.

According to the fiscal policy guidelines, petroleum revenues should be phased in gradually into the economy, approximately in pace with the expected real return on the Government Pension Fund Global, which is estimated at 4 per cent. In periods of high or rapidly rising unemployment, petroleum revenue spending can be increased, and inversely fiscal retrenchment is needed during periods of high economic activity and resource shortages.[7]

It now appears that capacity utilisation in the Norwegian economy may return to a normal level in one and a half to two years – and with a somewhat lower unemployment rate than today. A different path can be met with an interest rate response. Our understanding of the fiscal rule is that the government budget for 2012 or at the latest for 2013 should be planned with a view to bringing down petroleum revenue spending to 4 per cent of the size of the wealth fund.

This does not seem demanding compared with the situation in the years between 1994 and 1996. The tightening at that time started directly after the economy had turned and while unemployment was still high. Should policy now be tightened to the same extent that history in retrospect indicates was the case at that time, 4 per cent would be reached in the course of one year (see Chart 17).

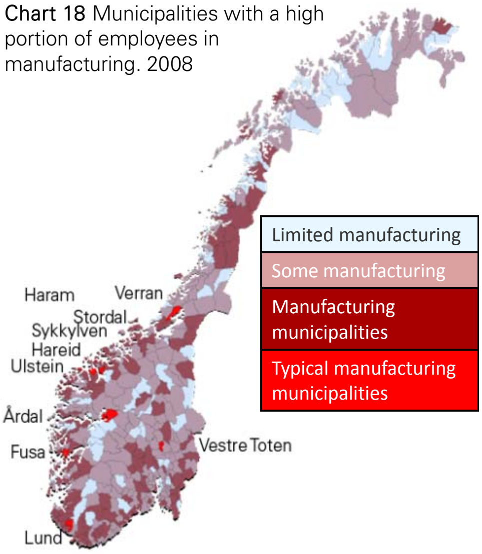
It must, however, be added that in real time the tightening was not planned to be that strong. After the tax reform, government revenues from the corporate sector were higher than expected.[8] But even measures on a par with those planned at that time would now rapidly bring down petroleum revenue spending.

The rate of petroleum revenue spending – growth in public expenditure – is important for developments in competitiveness, which is also referred to as the real krone exchange rate, in the long term. But, in the short term the krone exchange rate can vary widely, and it depreciated in autumn 2008 because capital sought safe havens. This helped Norwegian manufacturing in the first phase of the downturn. Since then, the krone has appreciated considerably.

In 2009 and 2010, government petroleum revenue spending shows a substantial increase and foreign investment via the wealth fund a decrease. This increases commercial demand for NOK, which directly contributes to an appreciation of the krone.

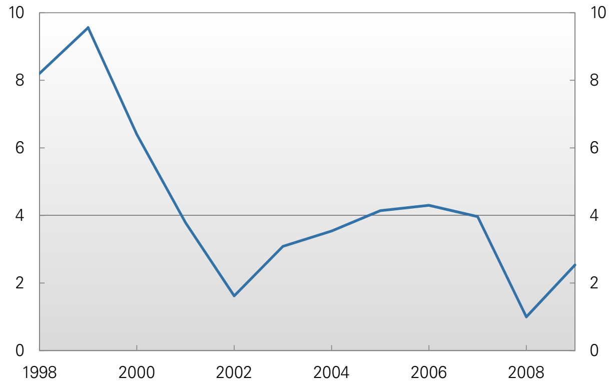
More fundamentally, the krone is influenced by the difference in activity at home and abroad and how fast the interest rate has to be increased in Norway to keep inflation low and stable.

Chart 18 Municipalities with a high portion of employees in manufacturing. 2008



Sources: Statistics Norway and Norges Bank

Chart 19 Average return since 1998 on the Government Pension Fund Global. 1998 – 2009[1)]



1) To the end of 2009 Q3
Source: Norges Bank

The economic geography of Norway will change over the next 10-15 years. The domestic cost level and the real economy crisis abroad will bring pressure to bear on jobs and businesses in manufacturing communities.

Job losses may have the most severe effects in areas where manufacturing has the highest concentration. In the ten most typical manufacturing municipalities Vestre Toten in Oppland, Lund in Rogaland, Fusa in Hordaland, Årdal in Sogn and Fjordane, Ulstein, Hareid, Sykkylven, Stordal and Haram in Møre and Romsdal and Verran in Nord-Trøndelag, local manufacturing accounts for more than a third of total employment (see Chart 18). Times will become more demanding for the clusters of oil suppliers in Sørlandet, Nord-Jæren, Haugalandet and Stord and for manufacturing in Kongsberg, Grenland, Helgeland, Salten and Ofoten.

Fortunately, manufacturing districts have shown the ability to adapt. Research shows that the degree of geographical and occupational mobility is high for the Norwegian labour force. Few people remain permanently outside the labour force after a period of restructuring.[9] But the communities are small and vulnerable and may disappear if the industry structure becomes too narrow.

And as mentioned, the most important, perhaps the only, instrument available to the authorities in addressing this challenge is to restrain petroleum revenue spending in the Norwegian economy.

The management of petroleum revenues

It took a generation from the time the first oil field was discovered in the North Sea until the government began to set aside economic rent. The Government Petroleum Fund was established in 1990 and the first transfer to the wealth fund was made in 1996.

Each year since that time, as a savings plan, the government has transferred a portion of current income from petroleum activities as deposits in the fund. Today, the value of the fund is around NOK 2.6 trillion, or slightly higher than annual GDP in Norway. There are prospects that new annual transfers to the fund will be made for perhaps a little longer than another decade. The fund will in that case continue to grow and may reach twice its current size. The actual building up of the fund may span a short generation.

The fund will thereafter enter into a new phase. With lower revenues from oil and gas activities, the fund will no longer receive capital transfers from the government. When oil and gas revenues no longer provide the government with economic rent, only the annual real return on the fund can be used on a permanent basis.

In the mid-1990s, oil prices were around USD 20 per barrel and income was set aside. This year the oil price must be over USD 50 to generate sufficient oil revenues to make transfers to the fund. We must be prepared for wide variations in oil prices, and the first year without transfers of oil revenues – but rather withdrawals – may be near.

The government has stated that the annual return on the fund will be close to 4 per cent over time. Since its establishment, the average return has been 2¾ per cent see

Chart 19). It is only one year ago that we witnessed the steepest fall in global capital markets in our time. By maintaining the fund's risk profile it is fairly probable that the average return will gradually approach 4 per cent again.

The government can choose the composition, required rate of return and risk profile for its investments without taking into account the funding needs of Norwegian enterprises. Norwegian enterprises can choose their debt and equity capital structure independently of the government's financial investments. There is a capital market between the government as investor and corporate capital needs. The government's foreign savings plans do not therefore influence Norwegian companies' access to capital and required rate of return on their investments.

The profitability of government investments is based on a discount rate of 4 per cent. This secures the same required rate of return as the government expects to achieve on its wealth fund investments over time. One question that nevertheless arises is whether there is a queue of sound and profitable projects that have to wait because of an excessively tight fiscal policy.

It is difficult to find support for this.

In the National Transport Plan for 2010-2019, which can perhaps be considered representative of government spending, spending on road investments is set at around NOK 140 billion.[10] The profitability of about two-thirds of the investments has been evaluated. The calculations capture time saved and reduced costs related to accidents and the environment. Investment costs and future operating expenses are deducted. The projects show a total loss of NOK 20 billion.

There seems to be few road projects that are economically profitable. A rare example is the Finnfast tunnel project that connects the mainland to the beautiful island group in Ryfylke.

The Bjørvika tunnel project is not profitable according to these criteria. Since the existing traffic interchange "Bispelokket" is so efficient, drivers will not save time when they take the tunnel between the east and west side of Oslo in the future.

The economic return, as calculated here, cannot be the only criterion for selecting projects. The Bjørvika tunnel will make Oslo a better city in which to live and work for one million people and create values that are not easy to quantify. The same also applies to other government investments that provide benefits and satisfaction beyond an easily measured rate of return.

On the other hand, when the projects cannot be expected to increase the future revenue base in society, it is important the investments are financed within a long-term and sustainable framework or financed by user fees. Infrastructure or research reports for that matter can provide benefits and satisfaction over time, but they are not liquid and do not generate cash returns that can be use for spending. If the investments are made at the expense of the savings plan for the sovereign wealth fund, future generations will have to bear the cost.

Conclusion

Allow me to conclude. This is my twelfth address entitled "Economic Perspectives". Allow me to conclude with a somewhat different perspective this time.

Claes Gill was born in Odda a hundred years ago this year. Many of you will remember Claes Gill as an actor when television was still in its infancy. He lived in New York during the depression in the early 1930s, but was arrested as an illegal alien, brought in for questioning at Ellis Island, deported from the US and sent back to Norway. He wrote his two collections of poems at that time, which have remained his legacy and which were an early expression of Norwegian modernism.

The Governor reads a poem by the Norwegian poet Claes Gill, describing the beauty of his home region on the west coast of Norway.

Footnotes

[1] Bjørnstjerne Bjørnson, *Three Dramas. The Editor--The Bankrupt--The King.* 2009. This eBook is for the use of anyone anywhere at no cost and with almost no restrictions whatsoever. You may copy it, give it away or re-use it under the terms of the Project Gutenberg License included with this eBook or online at www.gutenberg.org

[2] IMF Country Report No. 10/24, January 2010. *Norway: Staff Report for the 2009 Article IV Consultation.*

[3] See Paul van den Noord (2005) "Tax incentives and house price volatility in the Euro area: Theory and evidence." *Economie international* 101, pp. 29-45.

[4] The figures are based on the model documented in Staff Memo 2006/4, Norges Bank.

[5] The tax on housing can be regarded as neutral when the return on housing investment relative to other investments is the same as it would have been without tax. In that case, mortgage interest deductibility must be matched by taxation of ownership and use of a dwelling. With a tax rate of 28 per cent and a mortgage rate of 7 per cent, this requires an annual tax that at the margin comes to about 2 per cent of the value of the dwelling. Denmark has a property tax at about this level.

[6] A fully neutral taxation of property in relation to other capital will generate considerably higher tax revenues, cf. National Budget for 2010, Table 4.8, p. 124.

[7] See for example the National Budget for 2010, box 3.1, p. 53

[8] The historical figures are based on trend calculations. The figures for these years are therefore based on economic developments later in the 1990s. The degree of tightening may therefore also appear greater in retrospect.

[9] Kjell G. Salvanes, Jarle Møen and Kristiina Huttunen (2009): "Bedriftsnedlegging, omstillingsevne og regional mobilitet i norsk økonomi" (Enterprise closures, adaptability and regional mobility in the Norwegian economy). Appendix to the Ministry of Finance's *Long-term perspectives for the Norwegian economy* 2009 [Report no. 9 (2008-2009) to the Storting].

[10] Including road toll funding, cf. National Transport Plan 2010-19, tables 5.2 and 6.6.