

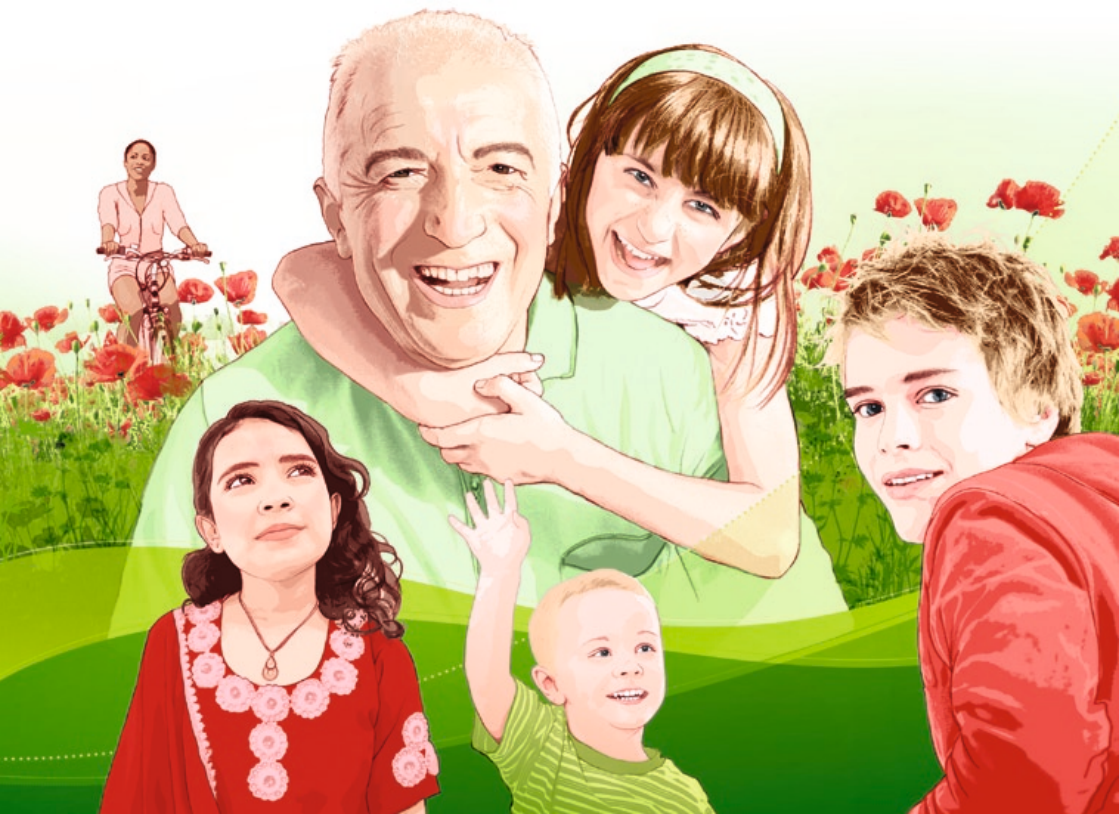


FINANSDEPARTEMENTET

Ministry of Finance

Long-term perspectives for the Norwegian economy

English summary



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The Norwegian Economy

General

Norway forms the western and northern part of the Scandinavian Peninsula and has common borders with Sweden, Finland and Russia. Norway's area is 323,802 square kilometers (approximately 125,100 square miles), excluding the Svalbard Island group in the Arctic Ocean and other overseas territories. The population of Norway was estimated at 4,801,100 as of January 1st, 2009. Oslo, the capital and largest city of Norway, had an estimated population of 576,000.

Norway is a constitutional monarchy, originally adopted in 1814. The executive power of the Government is vested in the King, who exercises his authority through a cabinet. The legislative power is vested in the Storting (Norwegian parliament). Members of the Storting are elected for four-year terms through general elections based on universal suffrage. The Storting has 169 members and cannot be dissolved by the King or otherwise during its four-year term.

Economic sectors

Norway is a diverse industrial society with a free market economy and generally low trade barriers. A significant share of the Norwegian economy consists of service industries, including wholesale and retail trade, banking, insurance, engineering, transport and communications and public services. In 2007, the service sector as a whole accounted for approximately 47 per cent of GDP. Norway's petroleum industries, including crude oil and gas extraction, accounted for close to 24 per cent of GDP and about 48 per cent of exports in 2007. Manufacturing accounted for approximately 9 per cent of GDP in 2007.

The exploration and production of petroleum resources on the Norwegian continental shelf has had a major impact on the Norwegian economy. In 2007, Norwegian petroleum production totalled approximately 238 million standard cubic meters of oil equivalents (scm oe.). Norway ranks as the world's fifth largest oil exporter, and the eleventh largest producer.

Memberships in International Organizations

Norway is a party to the Agreement on the European Economic Area (EEA), which generally includes Norway in the internal market of the European Union (EU). Norway is a founding member of the United Nations and its affiliate organizations and has been a member of the North Atlantic Treaty Organization (NATO) since 1949. Norway is a member of the European Free Trade Association (EFTA), an international free trade partnership.

Norway is a member of a number of other international organizations, including the International Monetary Fund (IMF), Organization for Economic Cooperation and Development (OECD), International Bank for Reconstruction and Development (World Bank) and the World Trade Organization (WTO). Norway is also a member of the Inter-American Development Bank (IADB), African Development Bank (AfDB), Asian Development Bank (ADB), European Bank for Reconstruction and Development (EBRD), Council of Europe Development Bank (CEB), Nordic Investment Bank (NIB), Nordic Development Fund (NDF), Nordic Council, Nordic Project Fund (Nopef) and Nordic Environment Finance Corporation (NEFCO).

1. Summary and policy strategy

1.1 Introduction

The main objective of the Government's economic policy is to contribute to high employment, sustainable development, fair distribution of income and well-functioning welfare schemes. This requires sound policies with emphasis on the handling of environmental challenges, long-term management of the national wealth and the development of a strong and sustainable public sector.

Norway and the other Scandinavian countries enjoy high levels of prosperity, a high labour force participation rate and an equitable income distribution. The model is characterised by a comprehensive public welfare state, high public investments in education and close cooperation between the government and the social partners. Linked with a policy that place emphasis on equality and equal opportunities, this has set the stage for a society based on cooperation and trust.

The standard of living in Norway is one of the highest in the world. This is primarily due to a productive and adaptable economy and the high labour force participation rate. Women's entry into the labour market from the 1970s onwards has substantially boosted growth in the labour force and production. The low level of unemployment in Norway is largely explained by rapid growth in production and demand, and by a well-functioning labour market. Successful management of the petroleum resources on the Norwegian continental shelf has also been important for the development of our economy. Central government revenues from oil and gas production have benefited the entire population, and have not weakened the foundation for growth in the mainland non-oil economy.

Norway has enjoyed substantial gains from being part of the global economy. International trade has allowed us to specialise and to exploit our relative advantages. Increased international integration has first and foremost improved the productivity in Norway and not been a threat to employment or standard of living. Exploiting the potentials ahead will require firms to make further long-term profitable adjustments. This will

demand high participation, efforts and creativity in the labour force, and sets requirements in terms of a good education system and an inclusive working life.

Income disparities are small in Norway compared with most other countries. This is largely explained by small wage differentials, high labour force participation and a strong welfare state. Furthermore, health care and education, among others, are virtually free of charge. Although such benefits are not normally included in international comparisons, they contribute substantially to equalizing living conditions. The emphasis put on ensuring equal opportunity for all, including publicly financed education, enhances social mobility.

This report presents analyses which point out the long-term challenges and the choices we are faced with, including the implications they make for the economic policy ahead. Light is shed on how to achieve sustainable development given the challenges in terms of global environmental considerations, an ageing population and increased globalisation. The ongoing financial crisis calls for strong focus on measures to improve the functioning of financial markets and to deal with weaker economic growth and an uncertain short-term economic outlook. However, when responding to these short-term challenges, we must also ensure that we follow the path towards sustainable solutions to the long-term challenges.

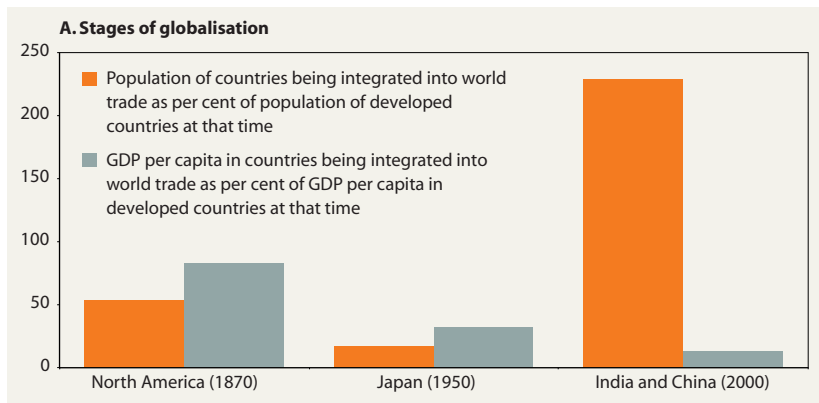
1.2 Challenges to sustainable development

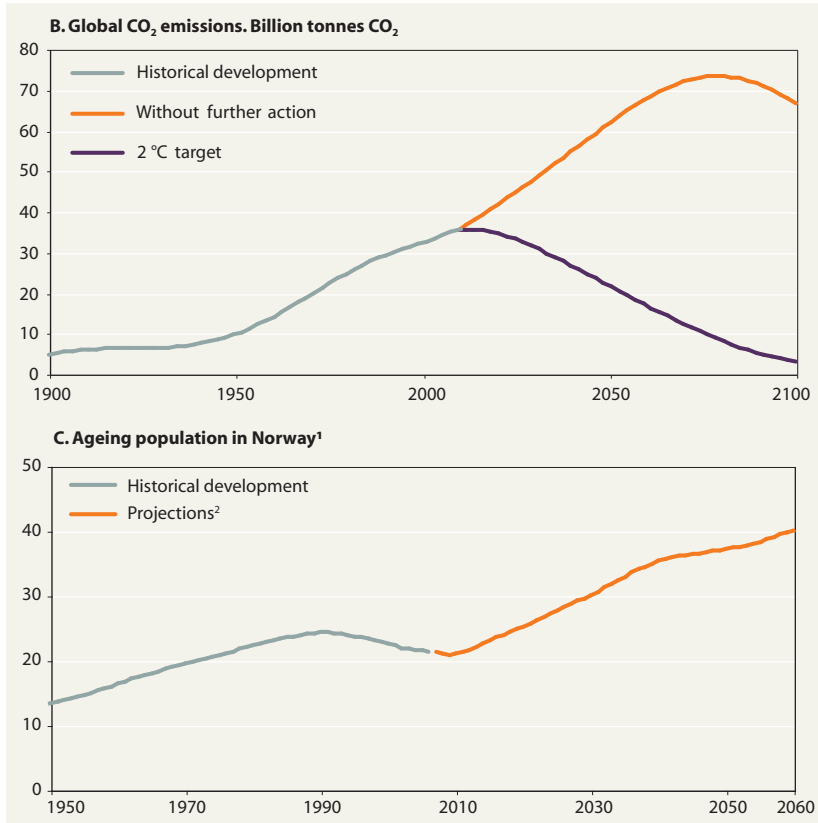
The world economy has grown strongly over the past 10 to 15 years. There has been a substantial rise in living standards worldwide, and millions have been lifted out of poverty. The importance of China and India in the world economy has increased, and also brought about a significant increase in the international labour force. The current phase of globalisation is the most comprehensive since the industrial revolution, both in terms of population and income differentials, see Chart 1.1A. Developments in international financial markets in recent years have shown how closely integrated economies around the world have become, including how negative events spread across national borders.

Given the current production and consumption patterns, economic growth brings with it substantial environmental problems. Human-induced climate change is probably the largest of these, and must be met with a broad-based and ambitious international agreement. In order to limit the increase in global temperature to 2 °C from pre-industrial levels, as advocated by the EU and Norway, greenhouse gas emissions will need to be substantially reduced in the course of this century, see Chart 1.1B.

Whereas future increases in greenhouse gas emissions are mainly expected to come from emerging and developing economies, most of the greenhouse gases already accumulated in the atmosphere can be traced back to emissions from developed countries. This gives Norway and other developed countries a particular responsibility in ensuring that necessary emission reductions can be achieved without limiting developing countries' growth potential. Arriving at a sufficiently ambitious and binding climate agreement will not be easy, but without such an agreement the consequences of global warming may well be very serious. Norway has declared its intention, as a part of a global and ambitious climate agreement in which other developed countries also take on major obligations, to become carbon neutral by 2030 at the latest.

Chart 1.1 Three long-term challenges: globalisation, global CO₂ emissions and ageing population in Norway





¹ Number of persons older than 66, in per cent of persons age 20-66.

² Median scenario in Statistics Norway's population projection from 2008.

Sources: UN, IMF, Statistics Norway and World Bank.

Over the last 50 years there has been a gradual, sustained development in public welfare schemes in Norway. Equal access to basic public services is an important aspect of the Nordic welfare model. Together with comprehensive benefit schemes, this guarantees for high standard of living in old age and during periods of illness, disability and unemployment.

From about 2010 onwards the working population in Norway will grow at a slower rate than the population as a whole and the proportion of elderly will rise steeply, see Chart 1.1C. With this ageing of the population, growth in public expenditures on pensions and on health, nursing and care services is estimated to be higher than growth in production. Long-term projections indicate a need to either curb public spending or increase revenues, even if standards and coverage in publicly-financed welfare schemes are maintained as today.

The challenges associated with offering sufficiently good welfare services are compounded by the fact that demands are likely to rise in response to the increasing level of income. Therefore, it is imperative to ensure that public sector resources are utilised in a targeted and effective manner, and that measures are taken to adapt production of services to people's needs. In areas where human care and personal contact are important parts of service provision, there are limits to what can be achieved by efficiency measures.

A large labour force is important in order to maintain comprehensive public welfare schemes. Hence, welfare schemes and the tax system need a design where employment should be the natural first choice to increase income for each individual. The potential for a general increase in an already high tax level is limited.

Given the projected oil price, central government revenues from the petroleum activity can be expected to give a rapid increase in the capital of the Government Pension Fund – Global in the next few years. Current fiscal policy guidelines entail that:

- Petroleum revenues shall be gradually phased into the economy, in line with expected real return on the Government Pension Fund – Global, estimated at 4 per cent a year (4 per cent rule).
- Fluctuations in economic activity shall be countered in order to ensure high capacity utilisation and low unemployment.

The fiscal guidelines ensure that the petroleum wealth will make a lasting contribution to financing public welfare schemes, to the benefit of today's young people and future generations. The Pension Fund's contribution to financing welfare schemes will nonetheless be relatively modest compared with overall taxes and excise duties generated from the mainland economy. In the long run, the Fund's contribution will also be gradually reduced in relation to both public spending and petroleum production.

Economic policy must be sustainable and motivated by a long-term perspective. Norway's fiscal policy is based on the 4 per cent spending rule, but the guidelines allow for fiscal policy to be used actively to stabilise economic developments. However, if spending of oil revenue over time systematically is higher than the 4 per cent rule, the real value of the Government Pension Fund – Global would be reduced. Such a policy would lower future return on the Fund and cause greater need for adjustments ahead.

1.3 A policy to tackle the long-term challenges

To assure a sustainable development ahead is the paramount global challenge. The environmental challenges need to be met through national policies and by pressing forward for the implementation of ambitious international agreements. Countries with dynamic economies, such as Norway, are fit to meet new patterns in production that will follow the attempts to curb environmental damages. As regards public finances, Norway must, as other advanced economies, take measures to ensure long-term sustainability in the face of an ageing population.

To meet these challenges, the government will give emphasis to:


- *further develop and improve our social model.* This is important in order to ensure equal opportunity for everyone and equitable income distribution. An adequate safety net will, as in the past, enhance our ability to restructure, also when faced with changes in the composition of the population. The Government will continue the fruitful cooperation with the social partners.

- *work for strong global institutions.* It is particularly important to put in place a new ambitious climate agreement. Moreover, the world economy, developing countries and Norway will all be well served by strengthened international rules for financial institutions and rules that ensure long-term predictability for international trade.
- *make Norway a leading country in the field of environmental and climate policy.* This requires that we conduct an offensive environmental and climate policy domestically, inter alia through strong and targeted public support to research and development of new climate technology, and that we overfulfil our international climate obligations.
- *invest in human capital.* This means focusing on children's and young people's formative environment, on the primacy of knowledge and on good research and education. Education and research of high international quality and relevance are also important to future value creation.
- *develop the population's capacity for work and give incentives to increase labour input.* The government will set the stage for inclusive employment and a good working environment, and it must pay to work. Getting all groups into employment is desirable, and steps should be taken to facilitate high employment frequencies among both women and men.
- *invest in infrastructure* that secures high economic return and increases future capacity for growth in all parts of the country. This includes profitable investments in roads, railways and electronic communication.
- *improve the functioning of the economy.* The Government will inter alia combat tax evasion, give increased emphasis to green taxes and further develop a tax system that provides for egalitarian distribution and high labour utilisation. Moreover, the stage must be set for effective competition in the area of the economy that is suited to market solutions. Some markets need to be specially regulated to protect critical social functions, others to achieve effective competition. Where the public authorities are producer and owner, targeted and efficient control must be ensured.

- *renew and increase public sector efficiency.* The Government will give emphasis to improved service provision and to ensuring more efficient resource use in the public sector.
- *pursue a coherent industry policy* that promotes innovation, ability to restructure and high economic growth. As the petroleum activity on the continental shelf is set to decline, measures to channel idle and new resources to other high-growth activities become vital. In general, targeted policy instruments must be applied to set the stage for industry development throughout the country.
- *shift resource inputs from repairs to prevention.* The Government will work to prevent injuries and give greater focus to measures able to prevent the exclusion of many people from working life. There may, for example, be much to be gained from early assistance to weak pupils in primary lower secondary education, and to early follow-up of vulnerable young people by the authorities and voluntary organisations. Preventive measures will improve the quality of life for many people and curb expenditures on a number of welfare schemes.

Economic policy must be sustainable. The fiscal policy guidelines ensure that today's young people and future generations will also benefit from the petroleum revenues. Economic policy should contribute to continued economic growth and to ensure that growth takes place within environmental tolerance levels.

An ageing population is a major concern for public finances. The Government considers that a key response to these challenges is to stimulate high labour force participation by focusing on an activation approach in welfare policy and by pursuing a proactive labour market policy. Measures to set the stage for more people to opt for work rather than social security can contribute significantly to easing the financing burden. The pension reform as well as the labour and welfare reforms, including a new labour and welfare administration, are central elements of this strategy. If transition from work to social security is to be countered, it is important to ensure inclusive employment for everyone, regardless of gender, age,



disability and ethnic background. The individual's resources and capacity for work must be developed and put to use in active work.

The Government believes the best response to the challenges posed by a more closely integrated world is to further develop the core features of the Norwegian social model. An active labour market policy and well-functioning welfare schemes will make it easier to cope with the necessary adjustments required by changing economic conditions. At the international arena, it is important to aim for strong global institutions which advocate uniform rules and regulations.

Cooperation between the government and the social partners allows a common understanding of the needs for adjustments when necessary. The Government will continue to cooperate with the social partners and other segments of the society. There is a need to reach an agreement on sustainable solutions to future challenges and to avoid conflicts that might impair the basis for growth and solidarity. The welfare system is built not only on high production of market goods and a strong public sector, but also on a well-functioning society in which families, neighbourhoods and voluntary organisations make significant contributions.

2. Long-term challenges and policy options

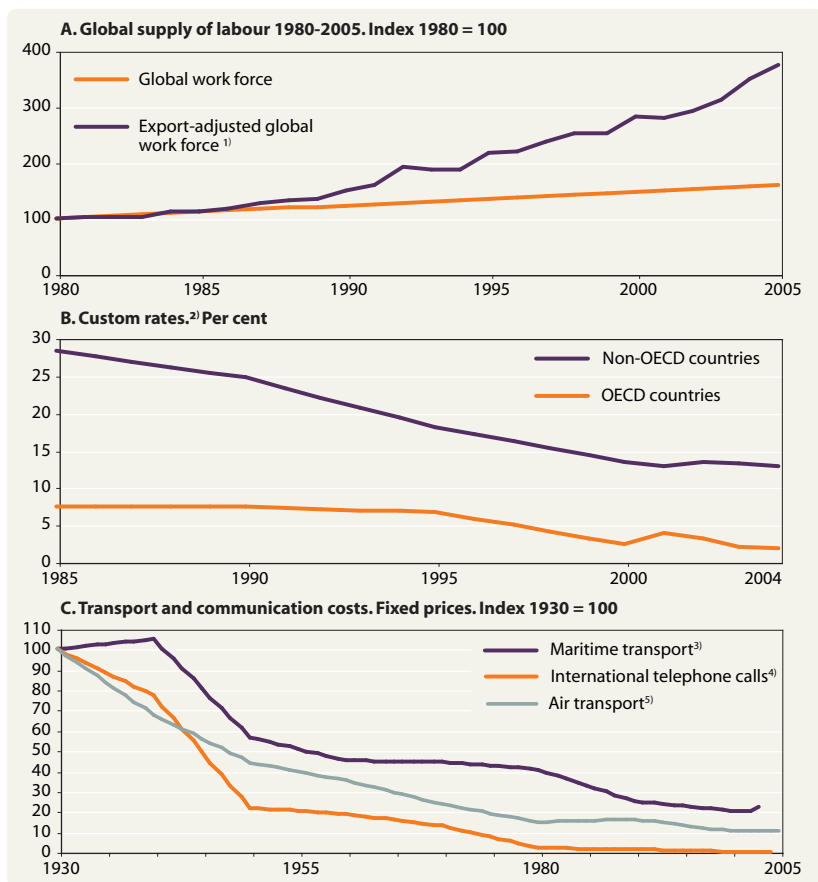
2.1 International development trends

Between World War II and the early 1970s the world economy grew more rapidly than at any time before. After a period of weak economic growth in the 1970s and 1980s, growth picked up again. Population growth has been high in the entire post-war period. Although this growth has slowed somewhat, world population is expected to rise from 6.7 billion in 2007 to 9.2 billion in 2050.

The strong global economic growth over the past 50 years has considerably improved the standard of living for many people. Significant disparities between countries persist, but the gap has narrowed somewhat the past 10 years. A number of countries in Asia have experienced strong economic growth, whereas development in African countries has been much weaker. The weak growth in Africa is of particular concern, not least since much of the population growth over the next 50 years is expected to take place in that region.

Increased productivity is the key to long-term economic growth. In the past 20 years, closer economic ties between countries and regions have contributed to technological spill-over and improved utilisation of available resources. Globalisation has brought about a significant increase in the labour force which produces goods and services for international markets, see Chart 2.1A. Both the dismantling of trade barriers, see Chart 2.1B, and reduced costs of transport and other means of communication, see Chart 2.1C, have further augmented economic integration.

Chart 2.1 Globalisation indicators



¹ Total of all countries' labour force weighted with each country's exports as a share of GDP.

² Median of average "bound" tariffs for OECD and non-OECD countries.

³ Average international freight charges per tonne.

⁴ Average earnings per passenger kilometre up to year 2000, thereafter price index for international air transport for the USA.

⁵ Charge for a three minute telephone call, London – New York.

Sources: IMF and OECD.

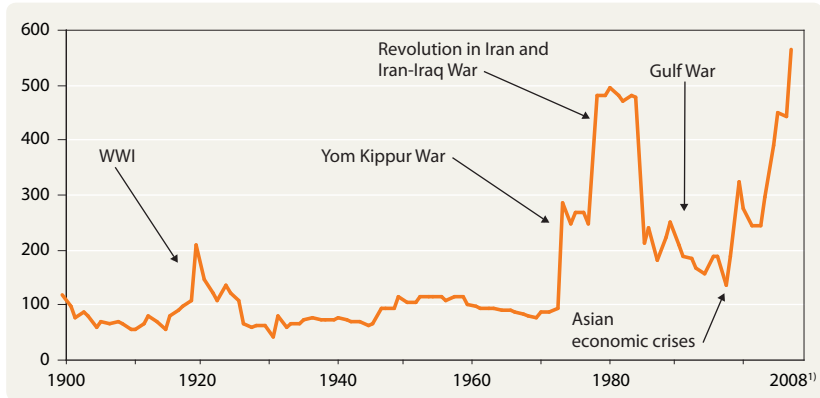
One of the characteristics of globalisation is the relocation of labour-intensive production to low-wage countries. The introduction of China and India into the world economy has further enhanced this development. For Norway, stronger economic integration with countries in the EEA area, through increased trade in services and increased labour immigration, has also been an important feature.

Norway has benefited significantly from globalisation. Extensive international trade has enabled us to reap the gains by gradually specialising production patterns. The Norwegian economy has proven itself to be flexible and adaptable. The industries have succeeded in implementing forward-looking, profitable adjustments, simultaneously as businesses with lower earning capacity have been phased out.

The international financial crisis shows how closely countries' financial markets have become intertwined, including how negative events spread across national borders. Developments in the past year have revealed shortcomings in corporate governance and risk management at financial institutions, and a need for greater international cooperation on issues regarding supervision and regulation of financial markets. The crisis has also demonstrated the importance of mutually supportive measures across many countries.

Among other factors, the leeway for economic policy in Norway is affected by crude-oil and natural-gas prices and by rates of return in international capital markets. Globalisation will influence the developments in these markets. China's strong expansion is one reason behind the steep rise in the price of crude oil in recent years. Oil prices have been very volatile, particularly since 1970, see Chart 2.2. Both supply and demand side factors in the international energy market lead to great uncertainty for future oil and gas prices. The financial crisis has shown that the annual return on the capital in Government Pension Fund – Global is uncertain, although, by its nature, the Fund has a long investment horizon.

Chart 2.2 Crude oil price. Fixed 2008 NOK per barrel. Annual average



¹ Average up to and including 14 November 2008.

Sources: Thompson Reuters and Ministry of Finance.

2.2 Sustainable development – the environmental and climate challenges

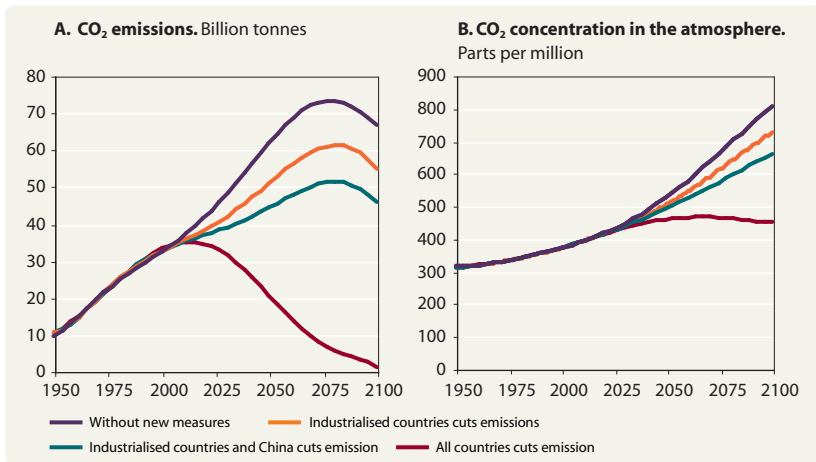
The strong growth in the world economy over the past 10 to 15 years has brought millions of people out of poverty. However, the combination of population growth and increased material prosperity has kindled environmental problems that may threaten the future basis for human life. The impact of higher greenhouse gas concentrations in the atmosphere, loss of biodiversity and the spread of health- and environmentally hazardous chemicals are today the greatest threat to the environment. These problems can only be solved by committed cooperation between countries with the objective of changing the world's consumption and production pattern. Norway intends to play a leading role in bringing about such changes, both through an ambitious national environmental policy and through our efforts to achieve ambitious, binding and cost-effective international agreements. The main goal is to achieve sustainable development where economic progress takes place within the carrying capacity of the environment.

The greatest environmental challenge relates most likely to human-induced emissions of greenhouse gases. Unless necessary action is taken, the consequences of climate change will be severe for the coming generations. Sea levels will rise, the weather may become stormier and more frequent floods and droughts will likely have negative impact on food production in some parts of the world.

The Kyoto Agreement entailed a commitment to reduce emissions of greenhouse gases in participating countries by 5 per cent on average in the period 2008-2012 compared to 1990 levels. Negotiations for a new international climate agreement started in Bali in December 2007 and are due to be completed in Copenhagen in December 2009. The challenge of climate change is global and can therefore only be solved through international cooperation and far-reaching measures in all countries of the world. Norway supports a new ambitious agreement involving all countries and all sectors, preferably applicable from 2013.

Global greenhouse gas emissions could almost double towards 2050 unless further action is taken, see Chart 2.3A. About three-quarters of this growth is expected to come from developing countries and emerging economies. In order to limit the increase in global temperatures to 2 °C from pre-industrial levels, as advocated by Norway and the EU, reductions in global emissions must start by 2015 and be reduced by more than half from today's level by 2050. If substantial emission reductions are confined to developed countries, the effect on the concentration of greenhouse gases in the atmosphere will be fairly limited, see Chart 2.3B. All countries will need to apply wide-ranging measures speedily in order to avoid a strong increase in the concentration of greenhouse gases in the atmosphere. Combating deforestation in the Tropics may be a rapid and cheap measure to curb net emissions of CO₂. In the longer run, capture and storage of CO₂ could make an important contribution to solve the challenge of global warming.

Chart 2.3 Emissions and concentration of CO₂ without climate measures and in various scenarios



Source: Statistics Norway.

Using the macroeconomic projections in this report, the Ministry of Finance has in consultation with the Norwegian Pollution Control Authority prepared new projections of environmentally hazardous emissions to the atmosphere. The projections are based on today's use of policy instruments and can therefore neither be considered a forecast of developments ahead nor an expression of the Government's climate policy goals.

The projections show a slight increase in greenhouse gas emissions from Norwegian territory in the years immediately ahead, and thereafter a gradual decline towards 2030 to a level somewhat lower than in 2007, see Table 2.1. This path is primarily due to the expected emissions from petroleum activities, which will peak some years after 2010 and thereafter fall. In the period to 2030 this results in lower emissions from the Norwegian territory, despite an increase in emissions from the mainland non-oil economy. The projections assume continued technological progress and a continued shift towards service industries.

Table 2.1 Greenhouse gas emissions by sector. Millions of tonnes of CO₂ equivalents

	1990	2006	2007 ¹	2010	2020	2030
Total greenhouse gas emissions	49,7	53,5	55,0	57,3	56,5	54,0
- Petroleum and electricity production	8,2	13,7	15,1	16,7	14,1	9,2
- Mainland Norway without elec. prod.	41,5	39,8	39,9	40,6	42,5	44,9
- Manufacturing ²	19,5	15,2	..	14,7	15,2	16,1
- Domestic transport	4,5	7,7	..	8,5	9,5	10,9
- Households ²	6,1	5,6	..	5,8	6,2	6,8
- Other activities ²	11,5	11,3	..	11,7	11,5	11,1

¹ Figures for greenhouse gas emissions by sector in 2007 are not yet published.

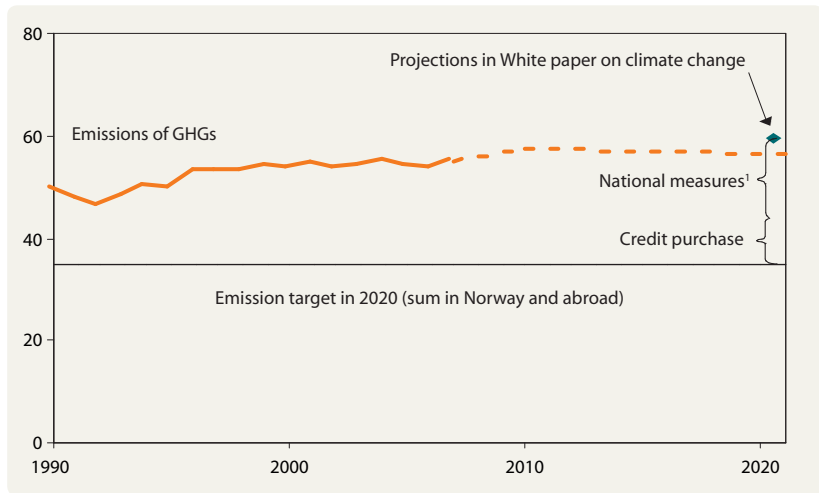
² Includes own transport.

Sources: Statistics Norway, Norwegian Pollution Control Authority and Ministry of Finance.

The projections entail some downward adjustments of emissions in 2010 and 2020 compared with earlier calculations. This is related to several factors, including new measures introduced to reduce greenhouse gas emissions. The projections show emissions in 2020 to be higher than the targets set by the Storting (Norwegian parliament). Therefore, further climate policy measures may be needed in order to reach Norway's ambitious climate goals, see Chart 2.4.

The world's biodiversity is under heavy and growing pressure, species are being lost far more rapidly than in the past. Conservation of the biodiversity is an important concern and an international responsibility. The safeguarding of the diversity of plants, animals and their natural habitats maintains ecosystems that form the basis for human life. Relevant measures, in Norway as elsewhere, include protection of vulnerable areas, curbing land use, and halting the fragmentation of animal and plant habitats. Measures to combat tropical deforestation will also be effective in conserving the world's biodiversity.

Chart 2.4 Emissions of greenhouse gases and emission targets in 2020. Millions of tonnes of CO₂ equivalents



¹ Includes absorption of 3 million tonnes of CO₂ by Norwegian forests.

Source: Statistics Norway, Norwegian Pollution Control Authority and Ministry of Finance.

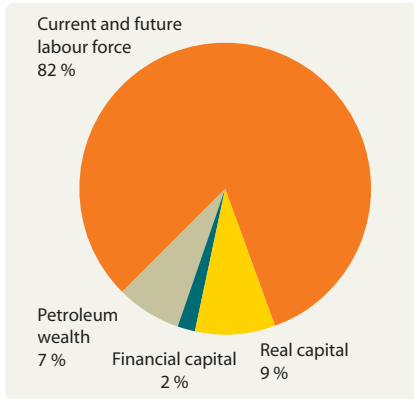
Several chemicals used in a large number of products may constitute an unacceptable risk to health and to the environment. The quantity and number of chemicals have grown substantially in recent years. Environmental toxins are particularly hazardous and, since they break down very slowly, may accumulate in food chains and constitute a serious threat to the food supply and health of coming generations. A national goal is to ensure that emissions and use of health- and environmentally hazardous substances are reduced to a level that does not cause damage to health, impairment of ecosystems or damage to nature's capacity for reproduction and self-renewal. Increased international efforts are imperative since many toxins spread across national borders.

2.3 Driving forces behind the development in production and income

Norway's high standard of living is primarily due to an efficient and modern mainland non-oil economy, which over time has laid the basis for high production given available resources. In addition, the petroleum production on the Norwegian continental shelf provides substantial revenues above the normal return on labour and capital. However, there are many examples of countries where high revenues from natural resources have not made a positive contribution to the prosperity for the country's population. Hence, Norway's strong economic progress should also be viewed in the context of a successful management of petroleum revenues.

The sustainable use of petroleum revenues has played its part in ensuring that the basis for growth in the mainland economy is not impaired. In a long-term perspective the ability to utilise the overall resources of the economy will determine the development of prosperity and welfare. Calculations show that the overall labour input far exceeds the petroleum resources in significance to future welfare, see Chart 2.5. The development and application of new technology and products together with the development of new forms of organisation and cooperation are key factors to increasing productivity.

Chart 2.5 National wealth per capita 2007. Per cent



Sources: Statistics Norway and Ministry of Finance.

Table 2.2 Growth account for mainland industries in Norway¹, 1970-2007. Average annual growth (per cent) and contribution to growth (percentage points).

	1970-2007	1970-1980	1980-1990	1990-2000	2000-2007
Gross product per capita	2,3	2,7	1,1	2,7	2,9
Contribution from:					
Productivity²	2,8	3,5	2,0	2,7	2,9
- Capital intensity	0,8	1,3	0,9	0,2	0,6
- Total factor productivity	2,0	2,2	1,1	2,5	2,3
Labour utilisation³	-0,5	-0,9	-1,0	0,0	0,0
- Hours worked per employee	-0,6	-1,3	-0,4	-0,2	-0,5
- Employment rate	0,1	0,5	-0,5	0,2	0,5

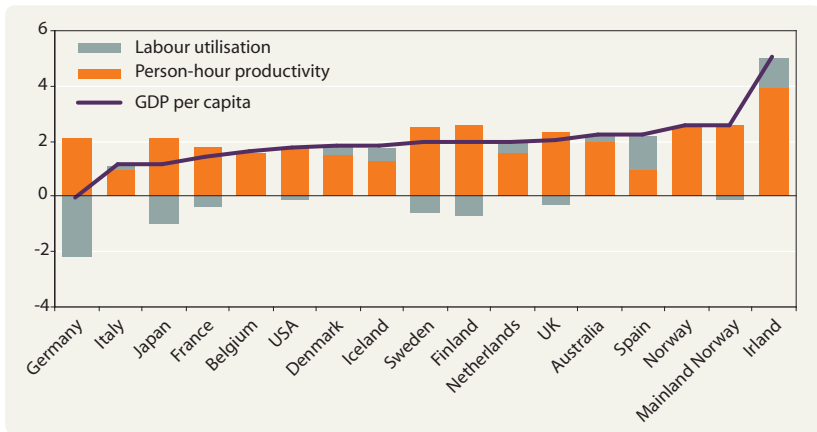
¹ Total GDP except oil, foreign trade and the public sector.

² Gross product per hour worked.

³ Hours worked per capita.

Sources: Statistics Norway and Ministry of Finance.

Chart 2.6 Contribution to GDP growth per capita from person-hour productivity and labour utilisation. Average growth rates 1990-2006. Fixed prices



Sources: OECD and Ministry of Finance.

The education level, openness to trade and competition along with institutional and cultural factors are of great importance to an economy's capacity for growth. Compared with other OECD countries, productivity growth in Norway's mainland economy has been high since the early 1990s, see chart 2.6.

The labour force participation rate in Norway is among the highest of the OECD countries. At the same time average hours worked are low by international comparison. One reason behind this is that both women and older persons are more likely to be in paid employment than in many other countries, but have lower average working hours than the rest of the labour force. Good welfare schemes for families with children, such as parental leave, day care facilities and flexible working time arrangements, enable both women and men to retain their affiliation with the labour market when they have children. This is also a reason why the number of childbirths per woman in Norway is among the highest in Europe.

High employment is important to maintain the welfare schemes in the future, although inducing everyone to do as much work as possible is not a goal in itself. But for people with capacity to work, the most natural way to raise their own standard of living should be to increase their labour supply. For the society as a whole, high labour utilisation is paramount in order to exploit the potentials for economic growth and to finance public services. Unemployment is a waste of society's resources and may also undermine the working capacity of those affected.

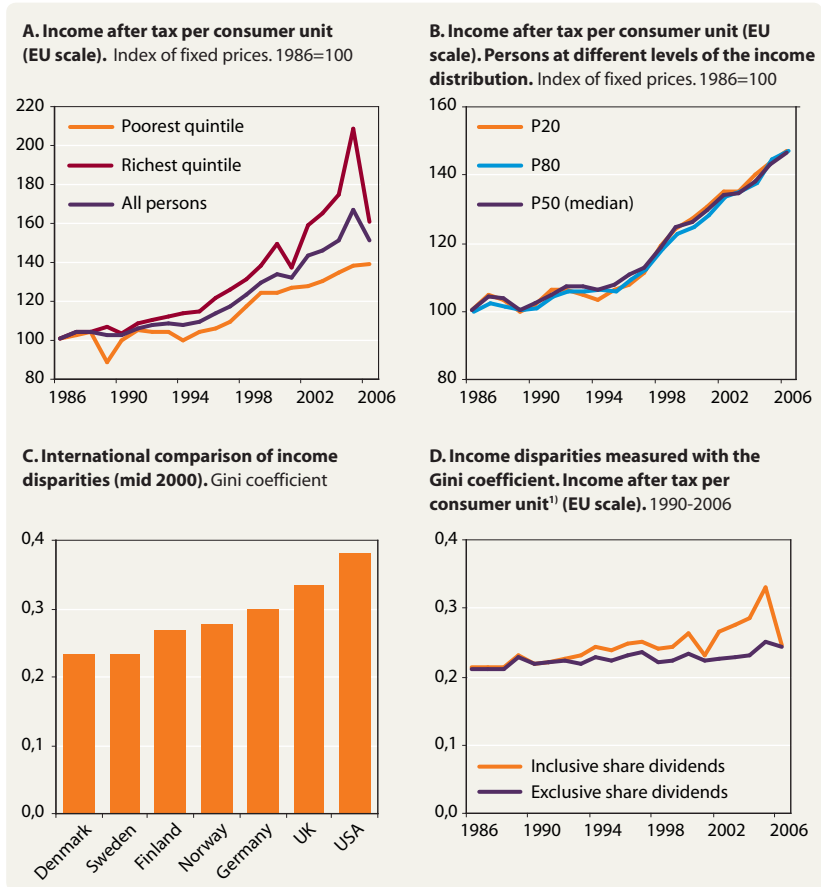
2.4 Income distribution in Norway

Compared to other countries, Norway has an even income distribution, see Chart 2.7C. The tax system and various benefit schemes have a substantial effect on income distribution. The wide-ranging welfare schemes in the areas of day care provision, education and health care also serve to even out the consumption between individuals.

Since the beginning of the 1990s, there has been a strong growth in real incomes, see Charts 2.7A and 2.7B. However, this has particularly benefited higher income brackets, a trend observed in several other countries as well. In Norway this can mainly be explained by an increase in the highest earners' registered capital income. This trend may, however, be exaggerated as a larger portion of capital incomes has been recorded as a result of changes in the tax system. The strong rise in the Gini coefficient in the period 2002-2005, see Chart 2.7D, is related to tax adjustments. Sizeable share dividends were distributed by the companies in 2004 and 2005 in anticipation of dividend taxation from 2006 onwards. Nevertheless, wage differentials have also widened somewhat. Hence, there appears to be a slight tendency for increasing differences since the end of the 1980s. If such a trend is allowed to continue over time, it may prove difficult to maintain the key elements of our welfare model.

Most individuals with particularly high income live in the Oslo area, and the largest income inequalities are accordingly found in this region. Income distribution is much more even in other parts of the country.

Chart 2.7 Various measures of income distribution



¹ Negative amounts are set at 0.

Sources: OECD and Statistics Norway.

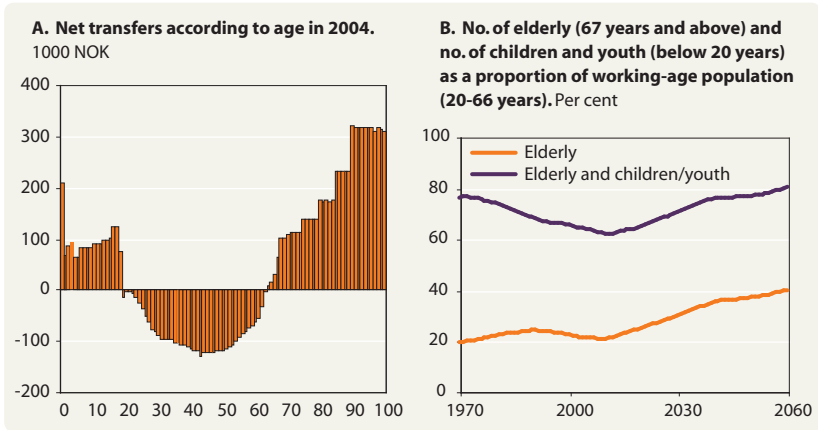
There is a clear correlation between no affiliation or weak affiliation to the labour market on the one hand and persistent low income on the other. Low income over several years is very unusual among households where at least one member earns an income from employment. Hence the most important policy instrument for reducing the low-income segment of the population is to ensure high employment rates.

The analyses in this report do not indicate a significant change in the relationship between wage and capital income the coming decades. However, the growing proportion of elderly in the population may promote a more even distribution of income, since pensioners generally have fairly stable incomes and are largely situated in the mid range of the income distribution. The number of immigrants, and how well they and their children integrate in the labour market, is also highly significant for the overall income distribution. Lastly, both the degree of equality in the income distribution and the size of the population with persistent low income depend on how well we succeed in ensuring high employment rates and good adaptability and flexibility.

2.5 Driving forces behind the development of public welfare provision

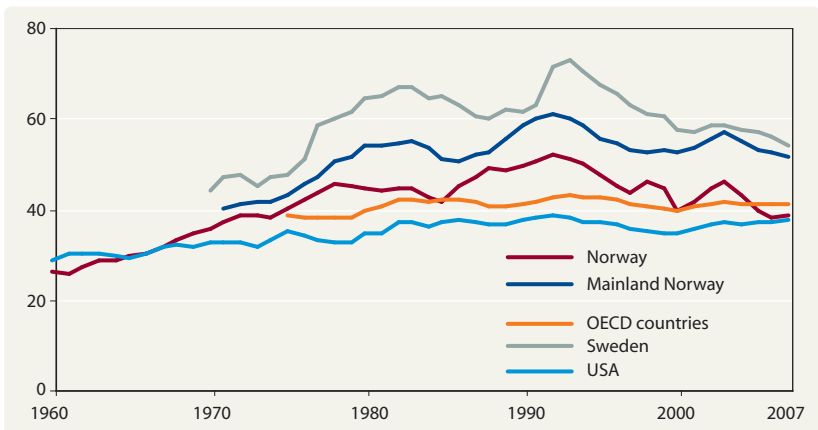
During the last 50 years there has been a major expansion of public welfare provision in Norway. This includes financing and production of services in areas such as education, health care and a transfer system that guarantees the individual an income in old age and during illness, disability or unemployment. The welfare schemes are mainly financed by the working age population, while children, young people and the elderly are net recipients of publicly financed services and transfers, see Chart 2.8A. A favourable age composition of the population, see Chart 2.8B, and a strong growth in women's labour force participation have enabled the improvement of welfare schemes without imposing an excessive burden on public finances. Public expenditure has nonetheless risen as a share of total production, from a level corresponding to 25 per cent of Mainland Norway's GDP in 1960 to 51 per cent in 2007, see Chart 2.9.

Chart 2.8 Demographic trends



Sources: Statistics Norway and Ministry of Finance.

Chart 2.9 Trend in overall public expenditure. Per cent of GDP

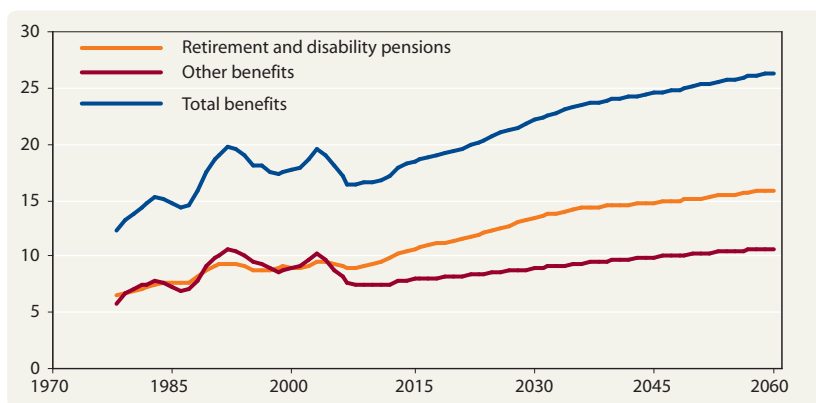


¹ Break in time series in 1970.

Sources: OECD, Statistics Norway and Ministry of Finance.

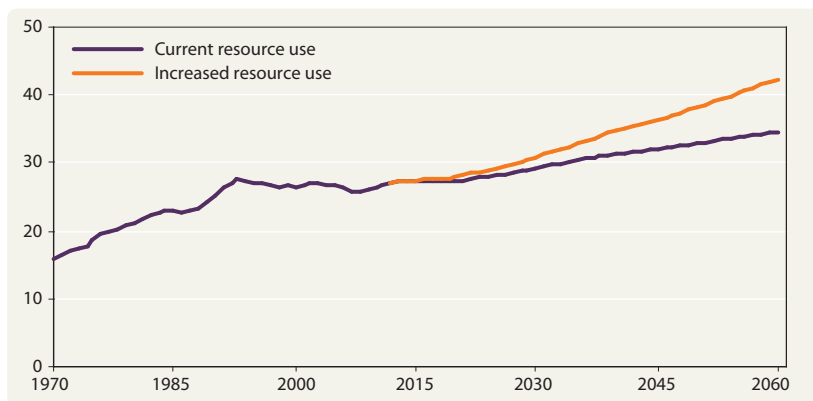
The gradually improving longevity of the population will over time bring a large increase in the number of recipients of age-related benefits. The long-term projections described in Section 2.6 incorporate a 175 per cent increase in the number of old-age pensioners in the period to 2060. Although the projections take into account that the recently adopted pension reform will reduce expenditure on old-age pensions, benefits to households may rise from 16.2 per cent of Mainland Norway GDP in 2007 to above 26 per cent in 2060, see Chart 2.10. Resources used in the health care sector will also rise steeply as a result of changes in the age composition of the population. Given the present scope and standard of public education and health care services, the public administration's share of overall hours worked may increase from 25.5 per cent in 2007 to more than 34 per cent in 2060, see Chart 2.11. In addition, demand for services from these sectors may increase as a result of the general rise in prosperity, as seen in recent decades. Chart 2.11 includes an alternative scenario where annual growth in hours worked within the health care sector is 1 per cent higher than in the baseline scenario. This indicates substantial challenges in terms of financing the production of public services ahead.

Chart 2.10 Transfers to households. Per cent of GDP for Mainland Norway



Sources: Statistics Norway and Ministry of Finance.

Chart 2.11 Hours worked in the public sector. Per cent of total hours worked



Sources: Statistics Norway and Ministry of Finance.

With constant use of health service resources per capita by age and sex, public spending within the health care sector may increase from 10 per cent of Mainland Norway's GDP in 2006 to about 14½ per cent in 2060. Assuming a continuation of previous patterns, where use of resources in the health care sector rises with the development of new forms of treatment, growth may prove even stronger. On the other hand, improved health provision and longer life expectancy may bring an improved state of health. This could dampen the growth in resource use at the respective age levels. In addition, more efficient use of health sector resources could enable more services from the funds provided.

Comprehensive welfare provision and well-functioning income guarantee schemes are important for smoothing out consumption over the lifecycle and in shielding the population against loss of income resulting from unemployment and illness. In addition, welfare schemes may promote the economy's capacity to adjust. However, the share of the working age population receiving health-related benefits in Norway is high by international standards. This limits labour supply while increasing public expenditure. A key challenge is therefore to curb the tendency to early withdrawal

from working life. Thus, the rules governing health-related benefit schemes must give people incentives to be employed. The recently adopted pension reform will play an important role in bringing about a more sustainable pension system that also stimulates employment.

The public sector also supplies public goods such as defence, police, legal system, public administration and infrastructure. Although public spending on such goods has risen as a share of GDP over the last 50 years as well, the increase has been considerably slower than in the case of spending on services targeting the individual. Some of this development probably reflects large productivity gains in the production of some public goods, for example in parts of the public administration.

2.6 Long-term perspectives for the Norwegian economy

The political choices made today must be based on an understanding of the needs and challenges we will face in the somewhat longer term. Long-term projections using macroeconomic models help charter key developments in the Norwegian economy.

Given an average annual growth rate in labour productivity of about 2 per cent, see Table 2.3, the projections show that income per capita in Norway will more than double in the period to 2060, see Table 2.4. Future generations will enjoy a substantially higher material standard of living than today's generations. At the same time, the projections show that we face substantial challenges related to the sustainability of public welfare schemes and to environmentally-hazardous emissions.

The ageing population will gradually put greater pressure on public finances in the decades ahead. According to the median growth scenario in Statistics Norway's latest population projections, the proportion of over-67s in the population will roughly double in the period to 2060. Public spending on pensions will rise more rapidly than GDP, even when the effects of the pension reform are taken into account, see Section 2.5. Assuming a continuation of current coverage rates and use of resources per recipient, expenditure on health and care services will also increase as a share of the total economic output.

Table 2.3 Contribution to growth in GDP per capita. Per cent

	1971-2007	2008-2060
GDP per capita	3,1	1,4
- Contribution from oil prod. and foreign trade	0,6	-0,3
= Mainland GDP per capita	2,4	1,7
Labour force productivity ¹	2,5	2,1
Labour input per capita	-0,1	-0,3
Average working hours	-0,7	0,0
Labour force participation	0,5	-0,2
Population composition	0,1	-0,1

¹ Mainland GDP in relation to total labour input measured in hours.
Sources: Statistics Norway and Ministry of Finance.

Table 2.4 Indicators of income growth. Per cent

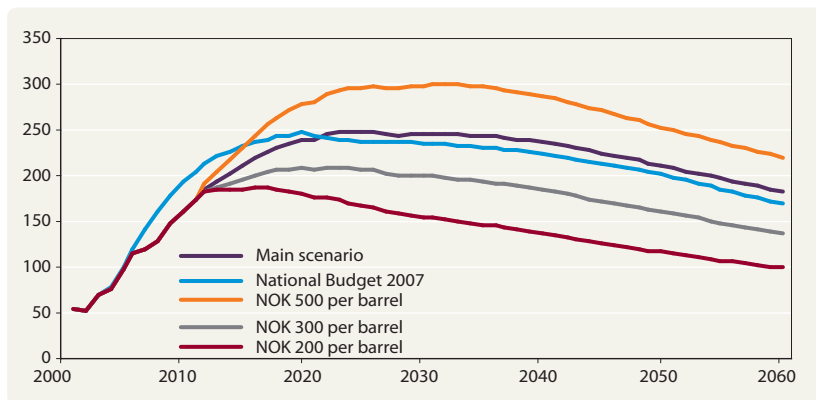
	Average annual growth 2007-2060	Percentage change 2007-2060
Real disposable income per capita	1,6	128
GDP per capita	1,4	109
Mainland GDP per capita	1,7	149

Source: Ministry of Finance.

The ability to manage the long-term budgetary consequences of ageing depends partly on how rapidly the oil revenues are phased into the Norwegian economy. Calculations in this report assume that fiscal policy complies with the guidelines. Whereas central government's current revenues from the petroleum sector are added to the Government Pension Fund – Global, the guidelines require the expected real return on the Fund over time to be returned to public budgets to cover the non-oil budget deficit. This shields the current budget policy from fluctuations in oil revenues, and at the same time ensures that the revenues will benefit future generations.

This report assumes, albeit with much uncertainty, that the price of crude oil will remain at a historically high level, i.e. NOK 400 (2009 prices) per barrel in the long run. High revenues from the oil sector are expected to produce a rapid increase in the fund capital over the next few years leading to a higher level than previously envisaged. The capital in the Government Pension Fund – Global may rise from 118 per cent of GDP for Mainland Norway at the end of 2007 to around 240 per cent at the start of the 2020s, see Chart 2.12. Assuming that budget policy follows the fiscal policy guidelines, the real value of the capital in the Fund will stabilise in the long term, enabling the return on the Fund to make a lasting contribution to financing public welfare schemes. However, this contribution is relatively modest compared to taxes and excise duties from the mainland economy and will in due course also diminish as a share of both public spending and GDP.

Chart 2.12 Government Pension Fund – Global. Per cent GDP for Mainland Norway



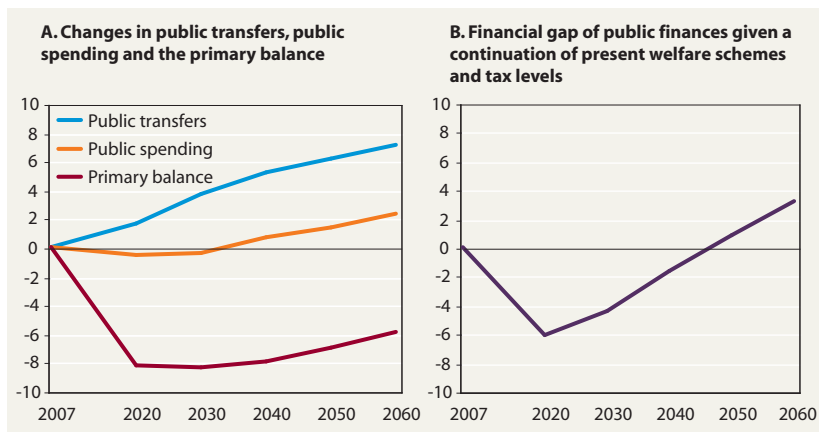
Sources: Statistics Norway and Ministry of Finance.

Chart 2.12 also illustrates the significance of alternative oil prices for the capital in the Government Pension Fund – Global. There is a great uncertainty with regard to future oil prices, as illustrated by the major

shifts, both up and down, in the oil price over recent decades. It is therefore clear that assessments of the room for manoeuvre in budgetary policy should not be based on overly optimistic expectations on future oil prices.

The long-term budget projections incorporate a continuation of current coverage rates and use of resources per recipient by age and sex in publicly financed services. The trend in public disbursements on pensions and other benefits is based on a continuation of current rules, apart from in the case of the National Insurance Scheme old-age pensions where the effects of the pension reform on public expenditure are taken into account. Furthermore, average working hours and labour participation rates for different groups are kept constant at today's level. The projections show that with a continuation of today's welfare schemes and tax levels, the public sector will face an increasing financing gap in the long term, see Chart 2.13B. Growth in pensions and other benefits is the main contributor to this development, see Chart 2.13A. This means that action must be taken either to curb public expenditure or to increase public revenues in the long run.

Chart 2.13 Long-term trends in public finances. Per cent of GDP for Mainland Norway



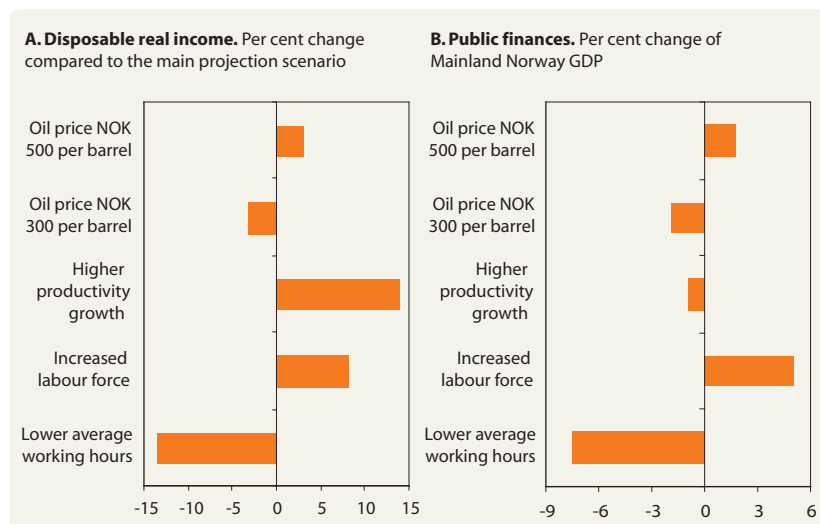
Source: Ministry of Finance.

In order to maintain the Norwegian welfare model, solutions probably need to be developed to meet the requirements and expectations that accompany increased prosperity. Higher income levels will be followed by increased demand for education, health and other important services that are financed by the public sector. Continued development of public welfare provision, as desired by the Government, will confront budgetary policy with further challenges with regards to maintaining sustainable public finances in the long term.

While increased private sector productivity makes for higher overall prosperity, it does not in itself contribute to stronger public finances, see Chart 2.14A and 2.14B. This is because public spending on wages, pensions and other benefits increases with the level of wages in the economy, which in turn is determined by the trend in productivity. The growth in overall expenditure will therefore be roughly in line with the growth in tax and excise duty revenues that follow from higher incomes in the private sector. On the other hand, increased productivity in the public sector will mean that the services offered can be produced using fewer resources. This will bolster public finances and/or provide more leeway to offer more and better welfare services. The above underlines the importance of the Government's effort to renew and increase public sector efficiency.

The overall labour input is crucial to ensure a sustainable welfare provision. Projections suggest that labour input per capita must be increased beyond the current level in order to finance the rising expenditure stemming from an ageing population. The projections are based on a continuation of present work patterns. This means that average working hours are assumed to remain at their present level, although they have now been falling for several decades. If the trend decline in average working hours since 1990 were to continue, it could bring a noticeable reduction in real income, see Chart 2.14A, and a significant weakening of public finances, see Chart 2.14B.

Chart 2.14 Significance of alternative assumptions for disposable real income and public finances.¹ 2060



¹ Measured by the reduction in the financing gap

Source: Ministry of Finance.

The adopted pension reform is highly important with a view to countering the effects of any decline in average working hours. The reform creates a closer link between individual pensions on the one hand and length of working life and hours worked on the other. By stimulating the labour supply the new pension system will make a substantial contribution to strengthening public finances. The size of its effect on labour supply is, however, uncertain. Statistics Norway estimates that increased average working hours and postponed retirement could raise hours worked per person by approximately 10 per cent in 2060. The calculations in this report show that such a marked increase in labour input will make a very important contribution to a sustainable development of public finances, see Chart 2.14B.

2.7 Resource utilisation, stability and restructuring

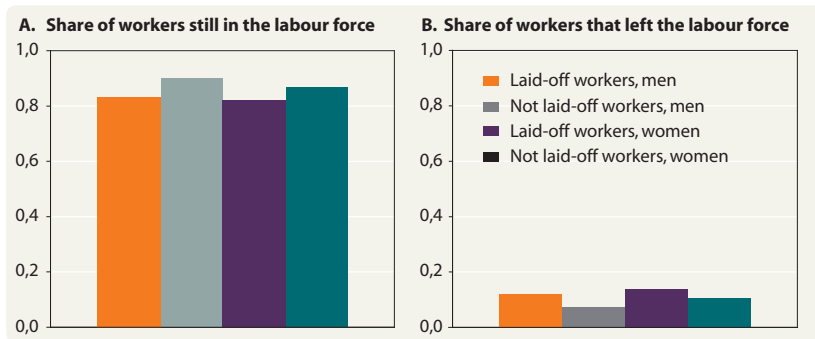
In the long term, economic welfare depends on technological progress and the supply and utilisation of production resources. However, experience shows that economic growth and resource utilisation do not develop evenly over time. Short-term volatility may cause weaker long-term welfare growth, primarily as a result of reduced labour utilisation as some people leaves the working force and do not return.

Variations in resource utilisation over time are usually due to changes in overall demand. There are many examples showing how fluctuations in household demand and in investment in the oil sector and in mainland industries are reflected in variations in production and employment. As a small, open economy Norway is also affected by changes in demand and prices on the world market and by developments in financial markets. The international financial crisis may affect the Norwegian economy both through weaker demand from abroad and through falling prices of important Norwegian export products. Moreover, activity levels in the economy can be affected by tighter access to credit.

Long-term economic growth depends on the economy's ability to adjust in order for idle resources to rapidly find alternative employment. Strong productivity growth suggests that Norway has had reasonable success in redistributing resources to sectors where they achieve the greatest return.

Experience shows that restructuring leading to downsizing and company closures do not normally affect the future job and income potentials of those who lose their jobs. For people who lost their jobs due to company closures in Norway in the period 1991-2000, a new study shows that the likelihood of being outside the labour force five years after the closure was only 3-4 percentage points higher than for persons who were not affected by company closures, see Chart 2.15. Still, especially older employees may leave the labour force for good after such a restructuring process. An active labour market and inclusion policy, together with tripartite cooperation at both the local and national level, are important elements in counteracting exclusion from the labour market and facilitating the restructuring process to successfully boost the long-term trend growth.

Chart 2.15 Proportion of employees and proportion that leaves the labour force before and after downsizing. Data from the period 1988-2005



Source: Huttunen, Møen og Salvanes (2009): "Bedriftsnedlegging, omstillingsevne og regional mobilitet i norsk økonomi".

The monetary policy regulation stipulates a flexible inflation targeting regime for monetary policy. The long-term role of monetary policy is to provide the economy with a nominal anchor. In the short- and medium-term, monetary policy shall balance the need for low and stable inflation against the outlook for output and employment. Norges Bank's (the Norwegian central bank) implementation of monetary policy is oriented towards maintaining low and stable inflation. The operational target is defined as an annual increase in consumer prices of close to 2.5 per cent over time. The interest rate decisions of Norges Bank shall be forward looking, and pay due attention to the uncertainty attached to macroeconomic estimates and assessments. It shall take into consideration that it may take time for the policy changes to take effect, and it should disregard disturbances of a temporary nature that are not deemed to affect underlying price and cost increases.

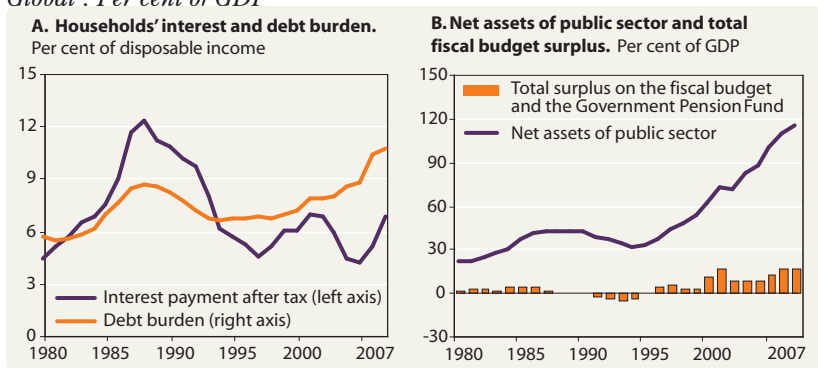
The fiscal policy guidelines stipulate that fiscal policy shall be geared towards a gradual increase in the use of petroleum revenues. Over time, the structural non-oil central government budget deficit shall correspond to the expected real return – estimated at 4 per cent – on the Government

Pension Fund – Global. However, the guidelines also allow fiscal policy to be used actively to counter fluctuations in economic activity. Fiscal policy and monetary policy should work in concert to facilitate a stable development of the Norwegian economy.

OECD studies show a positive correlation between a good stabilisation policy framework and high economic growth. Well-functioning labour markets, product markets, credit and capital markets along with a well-adapted fiscal and monetary policy are important tools in the efforts to align resource utilisation and the economy’s absorption capacity.

The international financial crisis has led to increased uncertainty and weaker prospects for the Norwegian economy in the short term. Substantial room for manoeuvre in fiscal policy and a sound economic policy framework put Norway in a good position to meet these challenges. Compared with the sharp setback in Norway around 1990, monetary policy now has a more clear-cut role in stabilising production and employment, Norwegian households are better placed, and public finances are much more solid, see Chart 2.16.

Chart 2.16 Households’ interest and debt burden, net public sector assets and total surplus on the fiscal budget and the Government Pension Fund – Global¹. Per cent of GDP

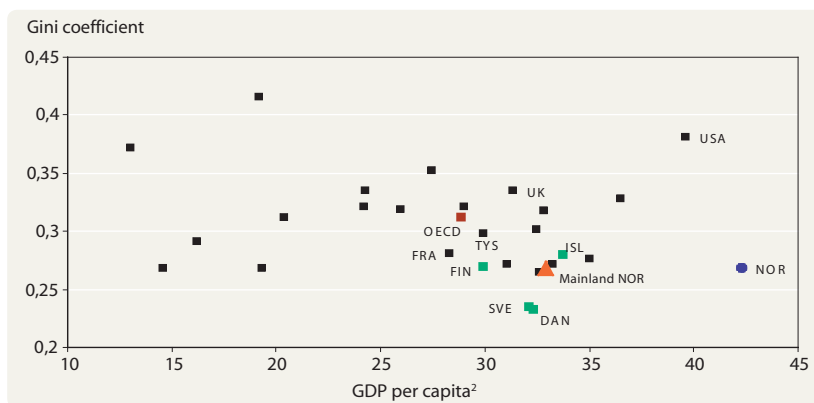


¹ The Government Petroleum Fund before 2006.
Sources: Statistics Norway and Ministry of Finance.

2.8 Policy options for the further development of welfare provision

Like the other Nordic countries, Norway has succeeded in combining development of welfare provision and equitable income distribution with strong economic growth, see Chart 2.17. The Nordic welfare model has proven highly adaptable and flexible in a world undergoing constant change. There are, however, important challenges ahead, in particular linked to the projected ageing of the population and higher demand for welfare services and more leisure time in the future. In the long term, the sustainability of public finances may be put to the test.

Chart 2.17 GDP per capita and income inequality measured by the Gini coefficient¹ in the OECD countries



¹ Average Gini coefficient for the years 2004-2006.

² Purchasing-power adjusted GDP in thousands USD.

Sources: OECD and Statistics Norway.

Calculations in this report suggest that measures designed to stimulate labour supply can contribute significantly to meeting the challenges facing public finances. Particularly, measures that encourage more people to opt for work rather than social security can make large contributions to fiscal sustainability as well as individual welfare improvements. Changes in the tax and pension system, that increase the individual's financial gain

from working, are important to promote work. The pension reform will make it financially lucrative to prolong working life by for example combining employment with pension. Beyond increased remuneration, a good and flexible work environment and more systematic on the job training are needed to attain prolonged work efforts. Measures that increase competence and prevent damage to health also help to promote labour force participation and to reduce expenditure on a number of welfare schemes.

Alongside old-age pensions, disability benefits account for the largest transfers to households. Both demographic development and increased exit from employment to health-related schemes among various age groups have caused strong growth in these transfers over a long period of time. Improved coordination between social security, job placement and social assistance services through a new labour and welfare administration (NAV) can help to get more benefit recipients into work. Employment must be advocated wherever it is a viable option, and employers must be rewarded for employing persons with reduced capacity for work. The design and practical application of requirements imposed on the individual benefit recipient, and rules affecting the real level of compensation under the schemes, must also support the activation approach.


Immigration policy should ensure regulated immigration in accordance with national priorities. It should at the same time accommodate international obligations and humanitarian considerations. Increased labour immigration from new EU countries has, overall, proved to be a clear-cut benefit for the Norwegian economy in recent years. Immigration of groups with high employment rates reduces bottlenecks in the economy in the short term. At the same time, the balance between the occupationally active and occupationally passive is improved, and thereby public finances as well. However, in the long run labour immigration cannot be expected to alleviate central government's financial challenges posed by an ageing Norwegian population, since labour immigrants also grow older, and the petroleum wealth has to be shared among a greater number of people.

It is important to get the best possible value for the resources spent in the public sector. Rethinking the public sector can contribute to more efficient resource use. Analyses of individual segments of the public sector in Norway indicate a clear potential for efficiency improvements if all service providers were equally efficient as the best international benchmark. Systematic collection of information on efficiency, results and user satisfaction could spur a development in this direction. The point is to adapt public services to user demands, and to develop and put to use better and more efficient solutions.

An increased element of user charges could reduce the need for public financing of a given range of services. Moreover, the demand for a service is more likely to reflect the underlying need for that service if it is charged for than if it is free or almost free of charge. However, a substantial increase in user charges would require the introduction of charging schemes in large service areas such as health and higher education. This could have significant and detrimental distributional effects which could not be countered simply by means testing. Any steps taken to shield weaker groups from higher user charges would render the charging schemes less universal and more complicated. They may also weaken the incentives to work.

Norway has a relatively high tax level by international standards, although lower than both Sweden and Denmark. Norway's generally broad tax base and its taxation of economic rent in the petroleum sector suggest, all other things equal, that Norway can tolerate a somewhat larger overall tax burden than many other countries. However, there are limits to the size of tax increases that can be pushed through without risk of weakening labour input and economic growth. Moreover, internationalisation and close economic relations with other countries limit the opportunities to tax capital income and other mobile tax bases at rates significantly higher than at present.

Measures promoting a large labour force and an efficient public sector can help to ensure the continuation of our welfare model without increasing the tax level. A larger element of user charges can also help to reduce the financing requirement and will allow the demand for services to better



reflect underlying needs. At the same time, greater emphasis on user charges may undermine collective solutions and create new inequalities. The Government's policy is based on the assumption that user charges will be kept to a low level.

Ministry of Finance
March 2009

