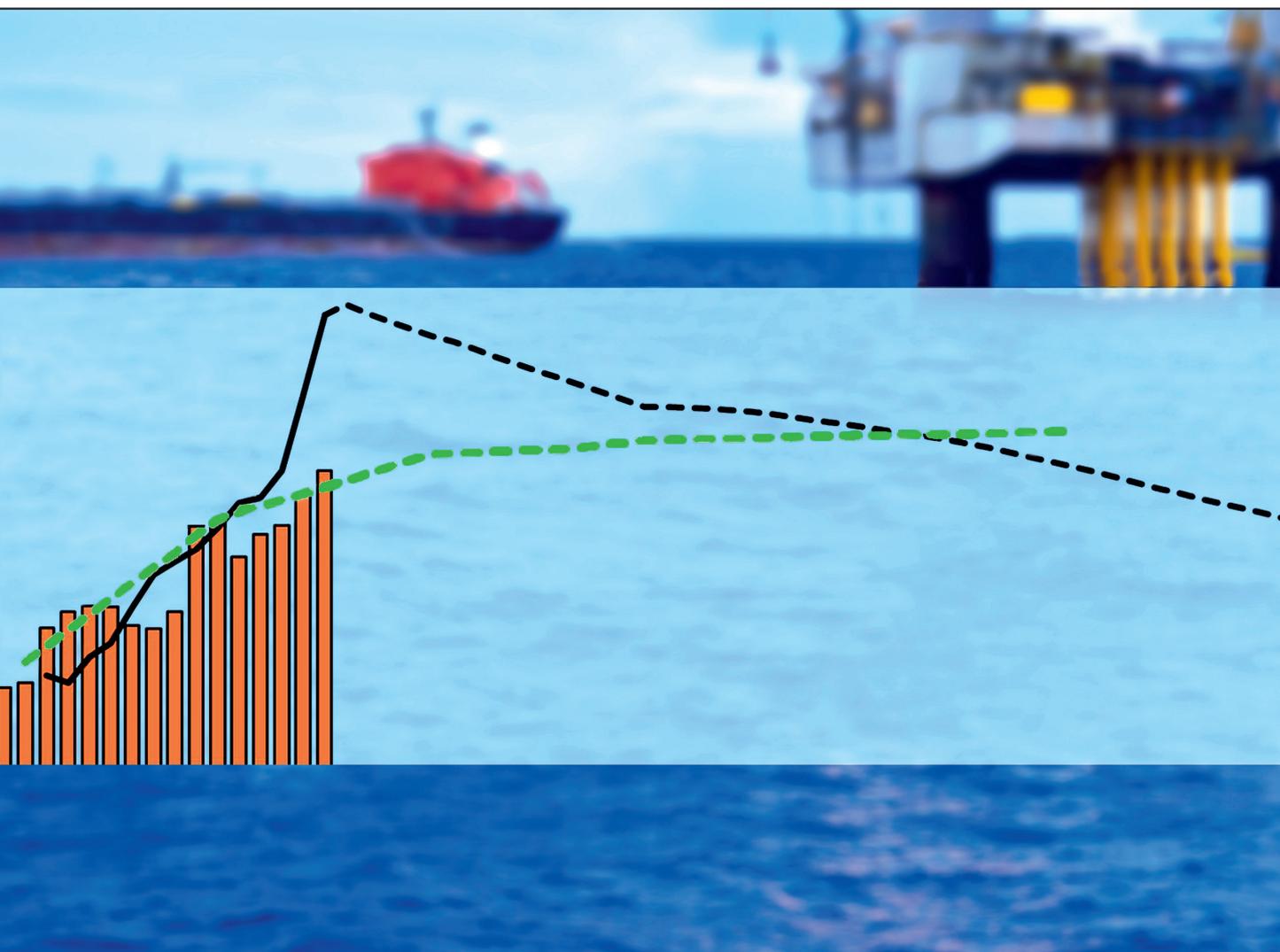


Official Norwegian Reports NOU 2015:9 Chapter 1

Fiscal policy in an oil economy

The application of the fiscal rule

Chapter 1 The assessments and main conclusions of the Commission



Contents

The assessments and main conclusions of the Commission	1
1.1 Main conclusions.....	1
1.2 The Commission’s mandate and work	4
1.3 The adoption of the fiscal rule in 2001.....	5
1.4 Application of the fiscal rule in the period 2002-2015	7
1.5 Lessons learned from economic research and the experiences of other countries.....	9
1.6 Experience with the fiscal rule thus far	11
1.7 Long-term public finance challenges.....	14
1.8 Challenges facing the Norwegian economy in the short and medium term	17
1.9 The Government Pension Fund Global’s expected return and risk profile	19
1.10 Key fiscal policy considerations and evaluation of potential supplementary rules to the fiscal rule.....	21
1.11 Petroleum revenue spending and economic growth capacity.....	30

1 The assessments and main conclusions of the Commission

1.1 Main conclusions

The Commission was mandated to consider how to apply the guidelines for petroleum revenue spending (including the fiscal rule). The mandate was designed to reflect a number of factors: the strong growth of the Government Pension Fund Global, the challenges facing the Norwegian economy in the short and longer term, and the interests of future generations. The Commission was asked to examine whether the current guidelines need to be supplemented, either by issuing additional rules or by identifying factors that should be given particular weight when formulating fiscal policy when there is substantial deviation from the 4 percent path and a possibility of significant year-on-year changes in path estimates. The Commission was also instructed to consider how, within the framework of the guidelines, greater emphasis can be given to the need to boost growth capacity in the mainland economy.¹

The Commission has agreed on the following main conclusions:

1. *The fiscal rule adds a long-term perspective to the management of Norway's petroleum wealth.* The State's net petroleum revenues are transferred to the Government Pension Fund Global, while the spending of these revenues over time mirrors the expected real return on the Fund's capital. The fiscal budget is thus largely insulated against short-term fluctuations in petroleum revenues. The guidelines envisage that petroleum revenue spending will be adapted to the macroeconomic situation at any given time. The fiscal rule is considered simple and easy to communicate.
2. *Norway has become more dependent on petroleum than anticipated in 2001.* High oil prices and a marked rise in demand from the petroleum industry have stimulated strong growth in mainland employment and real wages. Unexpectedly high labour immigration has enabled the mainland economy to meet this demand. The fiscal rule has allowed a gradual increase in the use of substantial petroleum revenues, and has boosted demand during a period of rising activity in petroleum-related mainland industries. Wage levels in Norway are now substantially higher than in neighbouring countries. Tax revenues from the mainland economy have also increased considerably.
3. *Due to the size of the pension fund, year-on-year fluctuations in the expected real return path may be large relative to Norway's economy and public finances.* Flexible application of the fiscal rule has helped fiscal policy to support the objectives identified at the adoption of the fiscal rule in 2001. In the event of large changes in the Fund's capital or in the structural, non-oil deficit in the fiscal budget, the effect on petroleum revenue spending has been spread out over time as provided for in the guidelines. This flexibility is a particular strength of the fiscal rule. However, the rule may prove more difficult to apply in the event of large and prolonged deviations from the 4 percent path.
4. *Petroleum revenue spending may peak in just a few years' time, depending on the pace of spending increases in the years ahead.* Measured as a proportion of output in the mainland economy, the peak will be passed as revenues from oil production decline and

¹ Mainland Norway consists of all domestic production activity except exploration of crude oil and natural gas, transport via pipelines and ocean transport.

the economy continues to grow. Fiscal policy will then, over time, be a drag on domestic demand. The possibility of a fairly imminent peak represents a marked change from 2001, when it was forecast that the 4 percent path would entail rising petroleum revenue spending until at least 2050.

5. *If petroleum revenue spending is rapidly escalated up to the 4 percent path, spending will peak before the sharp rise in aging-related expenditures.* The aging of Norway's population is expected to increase public spending on pensions and health and care services substantially, with a sharp rise anticipated to begin in 10 to 15 years. If current welfare and tax levels are maintained, a large, increasing gap between public revenues and expenditures will develop over time. The welfare state must be sustainable when life expectancy rises and the population ages. Although the fiscal rule is no substitute for necessary adjustments to both public spending and revenues, it can ease adjustments during a transitional phase. In the longer term, the need for adjustments will be even greater if public welfare services are expanded in the years ahead. The fact that the petroleum revenue spending peak may be passed in just a few years' time increases the risk of an uneven development in public services and tax levels. This suggests that Norway should save a greater proportion of its petroleum revenues during the next 10 to 15 years.
6. *It appears likely that the real return on the Government Pension Fund Global will be low for the next 10 to 15 years.* In particular, low long-term interest rates indicate unusually low bond returns during this period. If equity returns also weaken, the real return on the Fund over the next 10-15 years may be pulled down towards 2 percent. The scope for raising petroleum revenue spending from current levels will be far smaller if these developments materialise. History shows that there may be long periods during which the real return on the Fund is lower or higher than the long-term estimate of 4 percent. However, the possibility of lower returns for the next 10 to 15 years does not alter the long-term estimate. Norway's fiscal policy should be robust in the face of uncertain returns.
7. *More expansive fiscal policy is not the solution to a persistent decline in Norway's petroleum industry.* Lower investment and maintenance activity on the continental shelf will require adjustments in the mainland economy. Economic policy must support, not hinder, necessary adjustments. Monetary policy is the first line of defence against an economic downturn. In isolation, interest rate cuts will depreciate the Norwegian krone, which in turn will facilitate necessary adjustments. Fiscal policy must be adapted to the economic cycle, but is not the answer when the main challenge is to strengthen exposed industries, particularly as long as monetary policy still offers room for manoeuvre. Moreover, adopting an expansive fiscal policy now will render adjustment more difficult in a few years' time, when tighter fiscal policy becomes necessary. Spreading the increase in petroleum revenue spending out over time will smooth the spending path and ensure that it better reflects developments in the Norwegian economy. This will facilitate a gradual transition to exposed industries.
8. *Norway may be spending more petroleum money than generally thought.* If the Norwegian economy enters a prolonged period of weak growth due to e.g. lower petroleum activity, the estimate of underlying tax revenues from the mainland economy will have to be lowered. Petroleum revenue spending – estimated using the structural, non-oil deficit – will then appear to be higher. The scope for increasing petroleum revenue spending in the years ahead will be reduced correspondingly.

9. *Norway's fiscal policy must continue to meet the key objectives identified at the 2001 adoption of the fiscal rule.* The objective of ensuring that future generations also benefit from Norway's petroleum wealth is met by spending the expected real return on the Fund while leaving the principal untouched. The objective of stable economic development implies a gradual and sustainable increase in petroleum revenue spending, with consideration for exposed industries and for avoiding unnecessarily abrupt adjustments. In isolation, the objective of a smooth development in public services suggests moderation in petroleum revenue spending before the increased costs associated with an aging population begin to put public finances under serious pressure. Norway's economic policy should not be based on rising direct and indirect tax levels over time. To support a sound and transparent budget process, any guideline on petroleum revenue spending should be simple and easy to communicate, like all other fiscal policy rules. The objectives outlined above must be met even when uncertainty prevails.
10. *Several factors indicate that the spending of Norway's petroleum revenues should be increased more gradually in the years ahead than in the period from 2001 until now.* The scope for further increases in petroleum revenue spending is smaller and less certain now than in 2001. Oil and gas production are believed to have peaked, and a smaller proportion of resources remains on the Norwegian continental shelf. Petroleum revenue spending in the fiscal budget is already at a high level. There is uncertainty not only about the future development of Norway's petroleum revenues, but also about the return on the Fund and the underlying tax revenues generated by the mainland economy. A rapid increase in petroleum revenue spending now will necessitate stricter fiscal policy in just a few years' time. Both economically and politically, a period of more moderate increases in petroleum revenue spending will be easier to handle than a rapid transition to the period of decreasing petroleum revenue spending, measured as a proportion of output in the mainland economy. The need to take account of uncertainty, an aging population and decreasing activity levels on the Norwegian continental shelf implies that Norway should increase the spending of petroleum revenues more gradually in the years ahead than in the period for which the fiscal rule has been in effect so far.
11. *The Government should plot a course for gradually returning to the 4 percent path in the event of substantial deviations from it, and communicate this in the budget documents.* This will give fiscal policy an operational target in the short and medium term that can fully take into account the underlying objectives that motivated the fiscal rule. Thus far, such a course has been plotted in situations where petroleum revenue spending has exceeded 4 per cent of the Fund's capital, but currently little guidance is provided. Drawing up a concrete, multi-year strategy for fiscal policy is well in line with recommendations from the IMF and the OECD.
12. *Supplementary rules can provide guidance when plotting a course to return to the 4 per cent path.* Two of the rules considered by the Commission – reduced withdrawals from the Fund and gradual increases – will entail a more gradual increase in petroleum revenue spending than in the post-2001 period. The period of increasing petroleum revenue spending will then last longer. The supplementary rule *limiting withdrawals from the Fund* for a period of time will help avert a development whereby petroleum revenue spending initially increases strongly as a proportion of output before having to be cut again just a few years later, just when age-related expenditures increase sharply. The supplementary rule on *gradual increases* limits the fiscal impulse when spending is below the 4 per cent path and capacity utilisation in the economy is normal. Even with a fiscal impulse limited to 0.1–0.2 percentage points of mainland GDP, there could be room for

an annual increase in petroleum revenue spending of NOK 5–8 billion, measured in constant prices. The two supplementary rules are complementary. Account must also be taken of the economic situation in each individual year.

13. *Norway's fiscal policy should continue to be founded on the flexible application of the fiscal rule, based on the objectives identified in 2001.* The two supplementary rules may be a helpful reference when plotting a course to return to the 4 percent path, but cannot be applied mechanically or replace discretion in the application of the fiscal rule.
14. *Fiscal policy rules have little purpose if they are circumvented.* Many countries have noted attempts to stretch binding rules by creative budgeting. If budget estimates of revenues and expenditures are too optimistic, the bottom line may be systematically overestimated. If circumvention becomes common, the budget balance and the public balance sheet will give a misleading picture. A particular risk in Norway's case is measures whose costs are charged directly to the State's net cash flow from petroleum activities.
15. *The best way to determine the spending of petroleum revenue is through an integrated budget process.* The authorities should promote high production, employment and economic growth. Norway's petroleum revenues should be spent in the same way as other revenues. Earmarking petroleum revenues for defined purposes will fragment the budget and may undermine the ability to set general priorities that support a stable development of the Norwegian economy. In 2001, the Norwegian parliament's Standing Committee on Finance and Economic Affairs identified direct and indirect taxes, infrastructure and knowledge as three areas of particular importance to the growth capacity of the Norwegian economy. These areas remain important. Nevertheless, the Productivity Commission and the Tax Commission that spending in these areas can be made more effective. To support growth, resources must be used effectively in all budget areas. Effectiveness is not improved by earmarking, or by exempting certain areas from the general budgeting process. Nor should Norway's petroleum revenues become an excuse for failing to implement necessary structural reforms.

Commission member Knut Anton Mork has commented separately on the utility of supplementary rules; see section 1.10.

1.2 The Commission's mandate and work

By Royal Decree of 17 October 2014, the Solberg Government appointed an expert commission to consider how to apply the guidelines for petroleum revenue spending (including the fiscal rule) in light of the strong growth of the Government Pension Fund Global and the challenges facing the Norwegian economy in the short and long term. The mandate made particular mention of challenges such as the future of the petroleum industry, Norway's high cost level, high house prices and household debt, high labour immigration, low productivity growth in recent years, prospects of low returns on the Fund for some time going forward, high public spending and increasing expenditures on pensions and health and care services as the Norwegian population ages.

The Commission was asked to examine whether the current fiscal guidelines need to be supplemented, either by issuing additional rules or by emphasising factors to which particular weight should be given when formulating fiscal policy when there is substantial deviation from the 4 percent path and a possibility of significant year-on-year changes in path estimates.

The mandate also instructed the Commission to consider how, within the framework of the guidelines, greater emphasis can be given to the need to boost growth capacity in the mainland economy. In this area, the Commission's mandate touches on the work of other government-appointed commissions. The Børmer Commission, a separate expert commission also appointed in connection with the presentation of the fiscal budget last autumn, is mandated to evaluate the need for multi-year budgets in selected areas and a clearer distinction between investments and operational spending in the budget. The Productivity Commission appointed in February 2014 is tasked with proposing measures to strengthen productivity and growth capacity in the Norwegian economy.

The Commission has therefore decided to omit specific proposals to boost productivity and growth capacity in the Norwegian economy from its report. The discussion of the link between petroleum revenue spending and the growth capacity of the economy is largely limited to consideration of whether petroleum revenues should be used other than as income in the budget, and to a brief review of resource utilisation in the three areas given particular emphasis by the Standing Committee on Finance and Economic Affairs at the time of the fiscal rule's adoption in 2001; see section 1.11.

1.3 The adoption of the fiscal rule in 2001

The fiscal rule on petroleum revenue spending was presented in March 2001 against the backdrop of two years of rising oil prices and far higher than anticipated petroleum revenues. These higher revenues resulted in large allocations to the Government Petroleum Fund, the predecessor to today's Government Pension Fund Global. The Fund was forecast to grow substantially over the next few years, offering increased budgetary room for manoeuvre. Accordingly, the first Stoltenberg government concluded that there was a need for a clear, long-term strategy for petroleum revenue spending. New fiscal and monetary policy guidelines – in the form of the fiscal rule on petroleum revenue spending and an inflation target – were presented on 29 March 2001, in a white paper entitled *Guidelines for economic policy*² and the Government's Long-Term Programme for 2002–2005.³ The new guidelines received broad parliamentary support.

The white paper gave particular emphasis to the following considerations in its explanation of the fiscal rule:

- a. In isolation, the objective of a smooth development in public services suggests great moderation in petroleum revenue spending over the next 20 years. The saved petroleum revenues can then be used to cover increased future costs linked to the aging of the population.
- b. The objective of stable economic development over time implies a fairly even increase in petroleum revenue spending. The more petroleum revenue spending rises over the short to medium term, the greater the need for later measures to reinforce public budgets to achieve steady improvements in public services.
- c. The interests of exposed industries and the objective of avoiding major economic readjustments must weigh heavily. When spending petroleum revenues, great

² Report no. 29 to the Storting (2000–2001).

³ Report no. 30 to the Storting (2000–2001).

emphasis must be given to preserving the competitiveness of exposed industries, to ensure the balanced long-term development of the Norwegian economy. Both domestic and international experiences show that excessive petroleum revenue spending can trigger large-scale restructuring costs and unemployment (Dutch disease).

- d. Uncertainty regarding future petroleum revenues is a strong argument for caution in the context of petroleum revenue spending.
- e. Economic policy should not be based on expectations of rising direct and indirect tax levels.

The white paper also stated:

“The Government emphasises that a guideline for the use of petroleum revenues that safeguards the considerations highlighted above must also be fairly simple and should be able to provide a reference for the budget process. A feasible approach would be to use a share that is approximately equivalent to the expected real return on the Government Petroleum Fund. A policy based on using the expected real return on the Government Petroleum Fund ensures that the real value of the Fund is not reduced. When all the revenues deriving from petroleum activities are transferred to the Government Petroleum Fund, and the use of revenues is limited to the return, the Fund will continue to grow in the years ahead. Moreover, the use of revenues is based on realised revenue flows from petroleum activities, and not on uncertain future revenues.

On the basis of an overall assessment, the Government will apply the following guidelines for fiscal policy:

- Considerable emphasis must be placed on stabilising fluctuations in the economy with a view to ensuring appropriate capacity utilisation and low unemployment.
- Petroleum revenues are gradually phased into the economy, approximately in pace with the expected real return on the Government Petroleum Fund.”

The expected real return on the Fund was estimated at 4 percent. It was emphasised that the fiscal rule should be applied flexibly. In the event of particularly large changes in the Fund’s capital or in factors influencing the structural, non-oil deficit from one year to the next, the resulting change in the pace of petroleum revenue spending should be spread across several years based on the estimated real return on the Fund a number of years into the future.

The rule focuses on the establishment of a predictable, relatively even path for the increase in petroleum revenue spending in the fiscal budget. Strictly speaking, it is not the petroleum revenues that are spent, but rather the expected real return on a fund comprising accumulated, unused petroleum revenues. This makes the fiscal policy robust in the face of fluctuating oil prices. More permanent oil price adjustments will over time impact the size of the Fund, and thus shift the petroleum revenue spending path.

The fiscal rule enables the so-called automatic stabilisers to function, since petroleum revenue spending is measured by means of the structural, rather than actual, non-oil deficit. The rule also allows the fiscal budget to be used actively to stabilise economic development, while at

the same time highlighting that fiscal policy must be coordinated with monetary policy in this area.

When budget policy was given a more explicit long-term perspective, the need to assign monetary policy a clearer role in the context of stabilisation policy also increased. The inflation target set for Norges Bank –annual consumer price inflation of around 2.5 percent – gave monetary policy such a role. Given the prospect of a gradual increase in petroleum revenue spending, an inflation target provided a better foundation for low, stable inflation and stable economic development than the old guideline to pursue a stable NOK exchange rate. In practice, monetary policy quickly assumed a key role in the management of economic cycles.

1.4 Application of the fiscal rule in the period 2002–2015

The objective of following the 4 percent path has had a substantial impact on annual budgets following the adoption of the fiscal rule. Emphasis has also been given to the economic situation, the interests of exposed industries, long-term challenges linked to the aging of the population and the need to spread the consequences of major changes in the Fund's capital out over several years. Further, weight has been given to the risk of financial instability as a result of high indebtedness and high house prices. The fundamental considerations have largely remained fixed, although the priority given to different factors has naturally varied in line with economic cycles and the distance between the 4 percent path and petroleum revenue spending as measured by the structural, non-oil deficit.

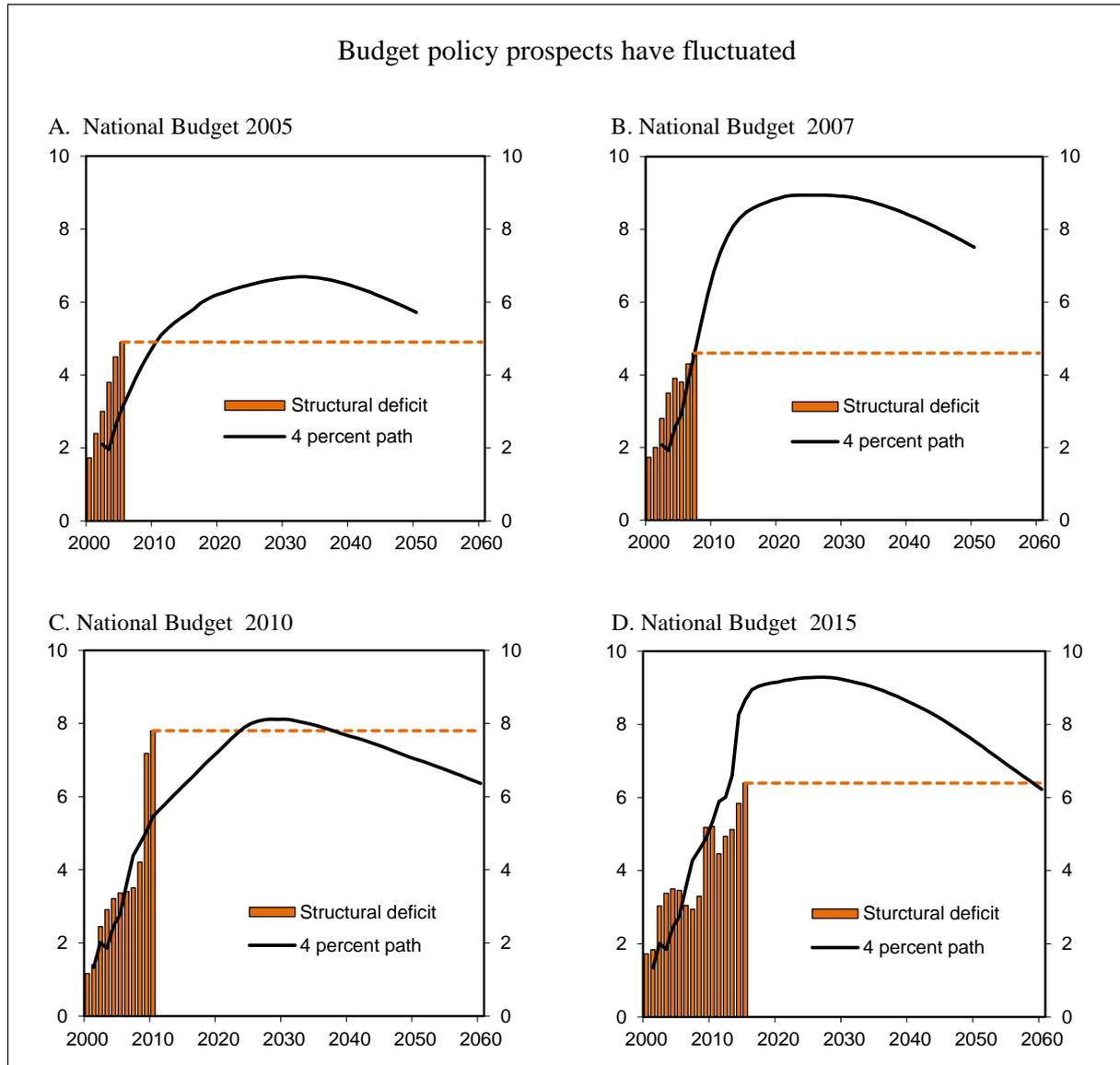
Budget policy prospects have fluctuated significantly during the period for which the fiscal rule has been in force; see Figure 1.1. This is due partly to amended estimates of the Fund's capital, and thus changes in the 4 percent path, and partly to revised estimates of the structural, non-oil deficit.

The so-called dot.com crisis in 2002 weakened economic growth both internationally and in Norway. Moreover, the Fund recorded no growth in 2002 (measured in NOK), despite substantial net inflows. Petroleum revenue spending gradually stabilised at a level significantly above the 4 percent path. Given that the Fund was expected to grow, budget documents pointed to unchanged petroleum revenue spending, measured in constant prices, as a potential route back to the 4 percent path. The same option was pointed out after the financial crisis of 2008/2009, when the distance between petroleum revenue spending and the 4 percent path had again become considerable. This approach entailed pursuing a somewhat contractive fiscal policy until the 4 percent path was reached and petroleum revenue spending could again increase in line with the Fund's capital.

In the opposite scenario – when petroleum revenue spending has fallen significantly below the 4 percent path – no equally clear strategy has crystallised for bringing the deficit back to path. In 2007 and 2008, when the Fund had grown strongly and it seemed likely that petroleum revenue spending would remain well below the 4 percent path, the impact of the financial crisis was felt quickly, and powerful fiscal policy measures were implemented that increased petroleum revenue spending far over the 4 percent path. The expected return path is currently substantially higher than the structural deficit, and the last two budgets have been adopted with an annual increase in petroleum spending of 0.5 percentage points of Mainland GDP, somewhat more than the average increase since 2001.

Overall, it seems clear that the fiscal rule has been applied with the aim of bringing petroleum revenue spending back to the 4 percent path whenever deviations have arisen, for whatever

reason. Temporary events (shocks) have thus been smoothed out by applying the rule flexibly. However, in this context it is important to note that an important factor in the return to the 4 percent path has been that the negative shocks subsequently proved to be temporary. Periods of weak growth in the Fund and/or weak economic development have been followed by correspondingly strong periods relatively quickly. Similar good fortune cannot be expected in every instance. Shocks can be longer-lasting.



Figur 1.1 Structural, non-oil budget deficit (petroleum revenue spending) and expected real return on the GPF. Estimates from the National Budgets for 2005, 2007, 2010 and 2015. Percentage of trend Mainland GDP.

Source: Ministry of Finance.

1.5 Lessons learned from economic research and the experiences of other countries

The main considerations highlighted at the time the fiscal rule was adopted, see the discussion above, are well in line with findings in international literature. For example, the fiscal policy

framework should aim at a smooth development in public services, stable tax revenue growth, long-term sustainability of public finances, steadily increasing petroleum revenue spending and stable economic development.

In practical policy-making, such factors must be weighed against each other. To ensure the achievement of long-term objectives and that state finances are sustainable, fiscal policy rules should ideally provide clear guidance on annual budget decisions. Although this applies to all countries, fiscal policy rules are probably particularly useful for countries receiving large, temporary cash inflows from the production of non-renewable natural resources. Such countries need to adopt a wealth-preservation perspective in the management of their resources, and take into account that cash inflows may fluctuate considerably and at times greatly exceed the permanent return generated by the resources. In such cases, some of the cash inflows must be reinvested in other assets if future generations are also to benefit from the exploitation of the natural resources. Such a reallocation of assets, from oil and gas to financial assets, makes the country neither richer nor poorer.

Since resource revenues in some periods may be very large, the pressure to spend more of them may also be high. This underlines the need for simple, clearly formulated rules. The rules should also be sufficiently flexible to deal with challenges that may arise due to cyclical developments or other unforeseen changes. A fiscal policy rule is no autopilot, and on its own no guarantee of sound and prudent fiscal policy.

A lesson to which greater emphasis has been given in literature after the financial crisis in 2008–2009 is that the fiscal policy framework must be robust against alternative economic developments, particularly ones with negative outcomes. Otherwise, a country may be forced to tighten fiscal policy in the midst of an economic downturn. Moreover, many countries have found that monetary policy can be less effective when an economic downturn is severe and prolonged. When key policy rates are close to zero, traditional monetary policy has only been able to play a limited role in stabilisation policy. In such situations, fiscal policy can be particularly effective, provided that there is room for manoeuvre when the economic downturn hits. This requires sufficient funds to be set aside when times are good.

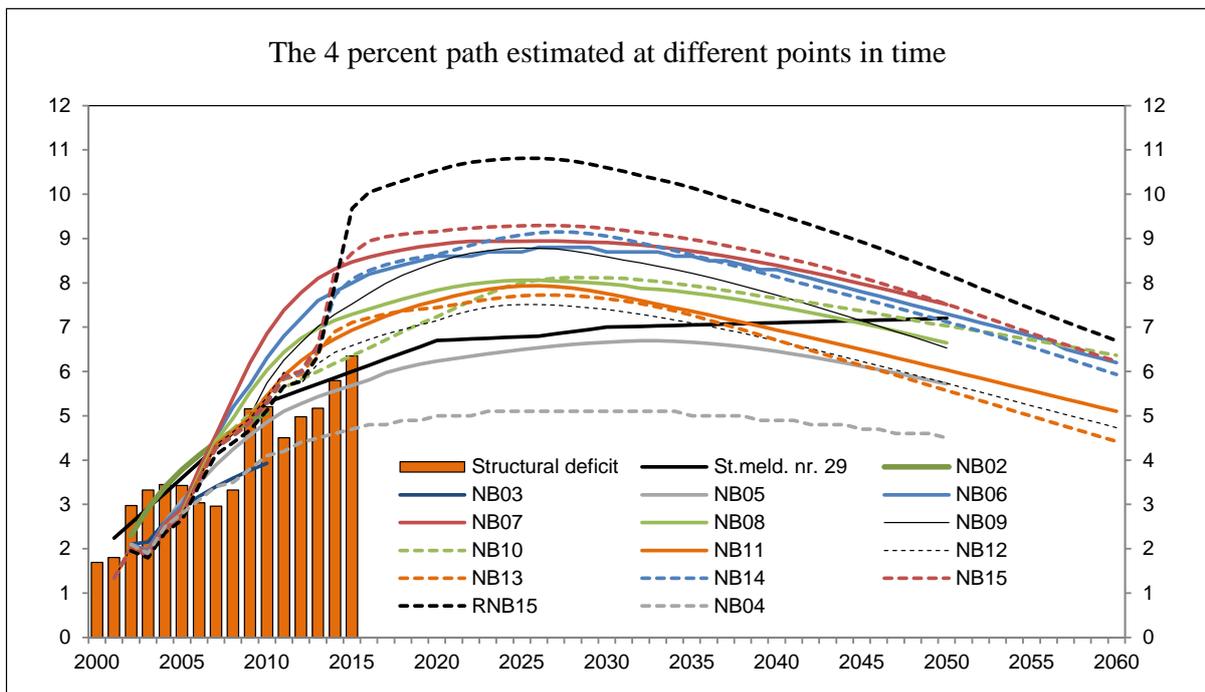
Another key conclusion, which is also incorporated into the Norwegian framework, is that political priorities between different objectives are best determined in the context of a coherent and integrated budget process. Once the level of petroleum revenues to be used in individual annual budgets is decided, these funds should not be treated differently from other revenues. Both countries with and without resource revenues should utilise all public funds as efficiently as possible; see further discussion in section 1.11.

Fiscal policy rules can only be a helpful, relevant tool in the budgeting context if they are simple and easy to understand. This has been underlined not only by international organisations, but also by the experiences of other countries and Norwegian politicians who have worked with the fiscal rule. A rule should not only act as a guide for political decisions; it should also make budget policy easier to communicate. In order to be sustainable in the longer term, any framework for the management of Norway's petroleum revenues must be broadly understood and supported by politicians, civil servants and voters.

Many countries have experienced attempts to stretch binding fiscal policy rules by creative budgeting. For example, exaggerated confidence in the efficacy of one's own policies may result in excessively optimistic budget estimates of revenues and expenditure, and thus in systematic overestimation of the fiscal space. Extraordinary dividends from state-owned companies generate revenues in a particular fiscal year, but may also entail reduced revenues in subsequent years. A clear example of circumvention is injecting capital into state-owned

companies “below the line” – i.e. in the form of a loan which is not recorded as expenditure in the fiscal budget – and later recovering all or part of the funds in the form of “above the line” dividends. A further example is organising activities which naturally belong in public budgets in such a way that related expenses are not captured by budget indicators. A particular concern in Norway’s case is measures whose costs are charged to the State’s net cash flow from petroleum activities or the return on the Fund, rather than the non-oil budget deficit. If budget circumvention becomes commonplace, the budget balance and the public balance sheet will give a misleading picture of the financial situation. The European Commission has documented extensive circumvention attempts in several EU member states. Thus far, the scale of such circumvention in Norway has been relatively modest. This should remain the case. Otherwise, a fiscal rule will serve little purpose.

In recent years, countries have increasingly established fiscal policy councils to help ensure that fiscal policy is credible and sustainable. The tasks and responsibilities of these councils vary from country to country. The OECD has issued guidelines on the work of fiscal policy councils. Their mandate should not be to advise on economic policy, but rather to review budget forecasts and assumptions, to examine whether policies are being applied in accordance with adopted guidelines, and to evaluate whether policies underpin long-term sustainability of public finances. Several countries have had positive experiences with fiscal policy councils. The Commission has not assessed whether it would be appropriate to establish a fiscal policy council in Norway, since this falls outside its mandate.



Figur 1.2 Expected real return on the Fund. Estimates at different points in time. Percentage of trend for Mainland GDP.

Source: Ministry of Finance.

1.6 Experience with the fiscal rule thus far

The fiscal rule and the Fund have had a decisive impact on the management of Norway’s petroleum revenues. When the fiscal rule was introduced in 2001, it gave a relatively simple and intuitive answer to the question of how to deal with the strong growth of the Government

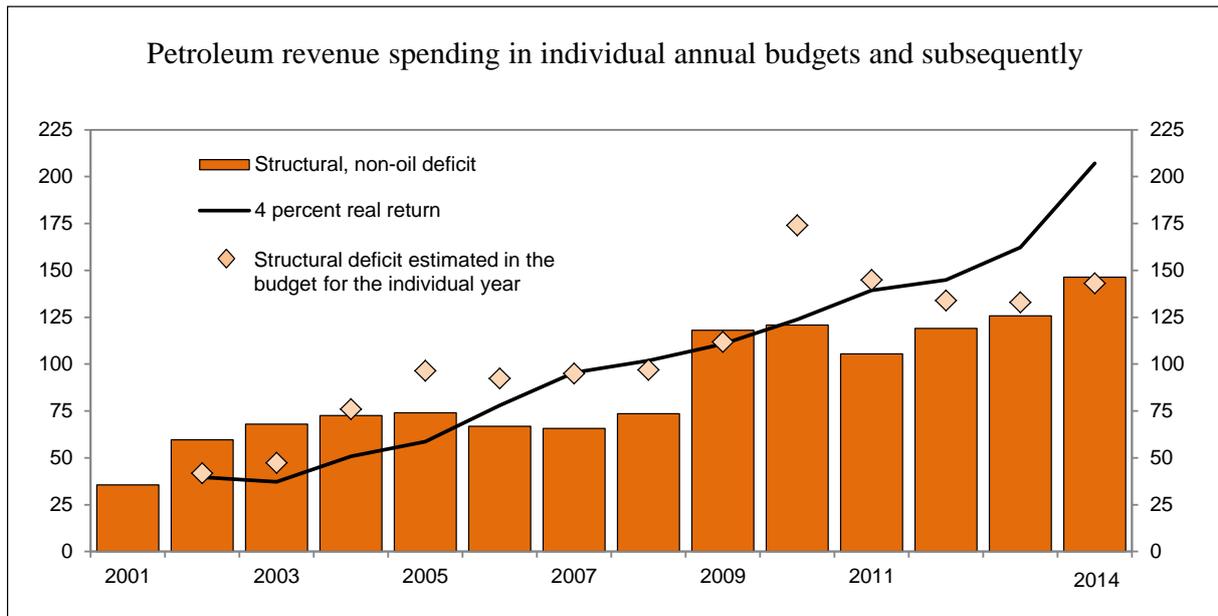
Pension Fund Global (then called the Government Petroleum Fund). The objective of the fiscal rule is a stable development of the Norwegian economy in both the short and long term, not simply short-term stability as under the previous fiscal guidelines. Its emphasis on the interests of future generations gives fiscal policy a kind of moral anchor which has probably made it easier for politicians to advocate sustainable petroleum revenue spending.

To fulfil its function as a guideline for fiscal policy, the rule has to be easy to communicate. In order to be useful to political decision-makers, fiscal policy rules must be simple and readily understandable; otherwise, they are unlikely to be helpful in justifying a fiscal policy programme. It is difficult to formulate a rule to take account of all eventualities. Fourteen years' experience shows that the fiscal rule allows flexibility. Petroleum revenue spending has not mechanically followed 4 percent of the Fund's capital. This room for discretion is a strength of the rule.

Seen in retrospect, production in the mainland economy has significantly exceeded the level forecast in the 2001 white paper *Guidelines for economic policy*.⁴ High oil prices and far stronger than expected growth in petroleum industry demand have lifted the mainland economy, stimulating strong growth in employment and real wages. Rising employment would not have been possible without labour immigration on an unanticipated scale since 2004. Simultaneously, high oil prices have boosted the Government Pension Fund Global's revenue inflows and lifted the 4 percent expected real return path. In terms of percentages, the growth rates of the mainland economy and the 4 percent path have risen by approximately the same amount. Petroleum revenue spending as a proportion of Mainland GDP has therefore developed approximately as forecast in the 2001 white paper.

Throughout the period, growth forecasts for the Fund's future value have been raised and lowered several times, reflecting changes in oil prices and petroleum production levels, exchange rates and the realised return on the Fund's investments. As a result, assessments of the future scope for increasing petroleum revenue spending have varied, at times substantially; see Figure 1.2. Whereas the National Budget 2004 estimated that the funding contribution would peak at below 5 percent of trend Mainland GDP, the peak was estimated at almost 11 percent in the Revised National Budget 2015. Forecasts of the 4 percent path have thus proven to be volatile.

⁴ Report no. 29 to the Storting (2000–2001).



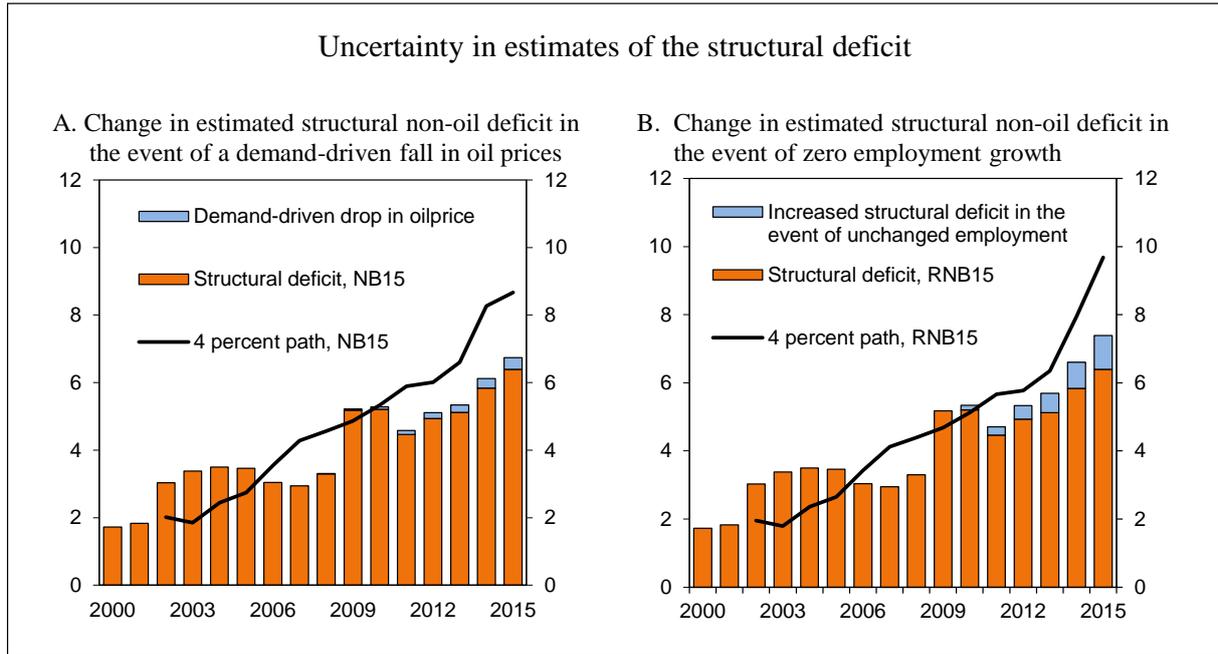
Figur 1.3 Structural, non-oil budget deficit (petroleum revenue spending) as estimated in individual annual budgets and subsequently (Revised National Budget 2015). NOK billion at 2015 prices.

Source: Ministry of Finance.

Petroleum revenue spending is measured by the structural, non-oil deficit. Both domestic and international experiences show that the estimated structural budget balance may be substantially revised when additional information on tax revenues and cyclical developments subsequently becomes available. Estimates may also be revised if a different view is taken of future economic developments. In Figure 1.3, the diamonds indicate the level of petroleum revenue spending forecast for each fiscal year in the period 2002–2015 at the time the individual budgets were presented. The bars show current estimates. Contemporaneous and subsequent estimates can differ substantially.

Two factors particularly complicate the precise calculation of Norway’s structural budget balance. First, strong increases in petroleum industry activity levels over the past 45 years have functioned as a long-lasting economic growth stimulus, the like of which few other countries have experienced. A turning point now appears to have been reached in this regard, although both the strength and speed of the reversal are uncertain. Second, labour immigration to Norway has been very high since the expansion of the EU in 2004, driven by strong growth in labour demand and good earnings prospects for immigrants in Norway. Future labour immigration remains uncertain. In both of these areas, Norway may be facing prolonged fluctuations which are difficult to take into account in the structural budget balance estimates.

The Holden III Commission illustrated the potential consequences of a large, demand-driven drop in oil prices. The commission’s calculations assumed a decline in real oil prices to USD 60 per barrel as of 2016. This price fall would result in lower petroleum industry activity. Further, Norway’s mainland economy would be hit by reduced international demand. Figure 1.4A illustrates the consequences for the structural, non-oil deficit when the calculations of the Holden III Commission are applied; see the blue bars. In 2015, the changes to economic trends increase the structural, non-oil deficit by around 0.3 percent of trend Mainland GDP. Further into the future, the change becomes greater, with an estimated decline in structural tax revenues equivalent to 0.7 percent of trend Mainland GDP in 2020.



Figur 1.4 Structural, non-oil budget deficit (petroleum revenue spending) in an alternative scenario featuring lower oil prices (National Budget 2015) and an alternative scenario featuring zero employment growth in the years ahead (Revised National Budget 2015). Percentage of trend Mainland GDP.

Sources: Ministry of Finance and own calculations

Figure 1.4B illustrates the uncertainty using a different scenario, assuming zero employment growth from 2015 to 2025. This situation arose in the Norwegian economy in the late 1980s and early 1990s, when Norway experienced its strongest post-war economic downturn. This type of downward adjustment has a material impact on the assessment of what proportion of tax revenues are structural, not only for the years ahead but also for the recent past; see the blue bars in the figure.

The two examples show that if the Norwegian economy enters a phase of prolonged weak growth, the estimates of the structural, non-oil budget deficit and petroleum revenue spending may be raised, including for previous years. The scope for further increases in petroleum revenue spending in the future will be reduced correspondingly.

This raises the question of whether fiscal policy has reinforced the petroleum boom. The fiscal rule as presented in the 2001 white paper envisaged a moderately expansive fiscal policy that mirrored the expected growth of the Fund. The period of escalating petroleum revenue spending coincided with a marked rise in petroleum industry demand, and expansive fiscal policy thus became an important driver of the prolonged economic upturn during these years.

If petroleum revenue spending had been allowed to increase at a somewhat slower pace, the result would have been slightly lower economic growth. In hindsight, given current knowledge about the Norwegian economy, it would perhaps have been desirable to hold back other demand components in the years in which growth in petroleum industry demand was strongest. One way of doing so would have been to pursue a tighter fiscal policy. This would have left more room for increasing the spending of petroleum revenues, and thus provided a foundation for slightly more expansionary fiscal policy in the future. The Norwegian

economy would have benefited more from a supportive fiscal stance when petroleum activity declines in future than in the years when petroleum activity had strong ripple effects on the mainland economy.

It is not only the income side of public budgets that has been boosted by Norway's relatively strong economic growth. Large-scale labour immigration has contributed to strong population growth. Combined with high wage inflation, this has increased spending needs in areas such as health, schools, transport and public administration. If no compensation (to municipalities and other public service providers) had been made for higher population growth and wage inflation, the public services available to individual users would have deteriorated in real terms.

1.7 Long-term public finance challenges

Due to the aging of the population, public spending growth is set to be higher than tax bases growth in the decades to come. Moreover, costs tend to increase more rapidly in the public service sector than in other sectors, due to poorer prospects of productivity improvements in the provision of public services (the Baumol Effect). Also, demand for public services – in terms of both scope and quality – generally tends to increase as wage levels rise in a society (Wagner's law).

The projections discussed in the report indicate a gradually increasing gap between public revenues and expenditures, with a point estimate putting the financing gap at some 5 percent of Mainland GDP by 2060.

The conclusion regarding a substantial long-term funding shortfall is reasonably robust to altering input conditions. However, the precise scale of the financing gap will depend on developments in factors such as oil prices, the return on the Fund, labour supply and productivity in the public service sector.

The most important driver of the financing gap is the aging population, which entails higher spending on pensions and health and care services. The primary response must be to make relevant welfare systems more robust to increasing life expectancy – precisely the aim of Norway's pension reform. Given the current economic situation in Norway, both the strong rise in age-related expenditures and uncertainty about the return on the Fund and oil prices suggest caution about increasing petroleum revenue spending at the present time. Particular care should be taken when considering increasing petroleum revenue spending to expand other welfare service in the period before age-related expenditures increase sharply. Such a spending increase would also increase the long-term financing gap. Corresponding cuts in other schemes may then become necessary, or the subsequent reversal of the new welfare reforms.

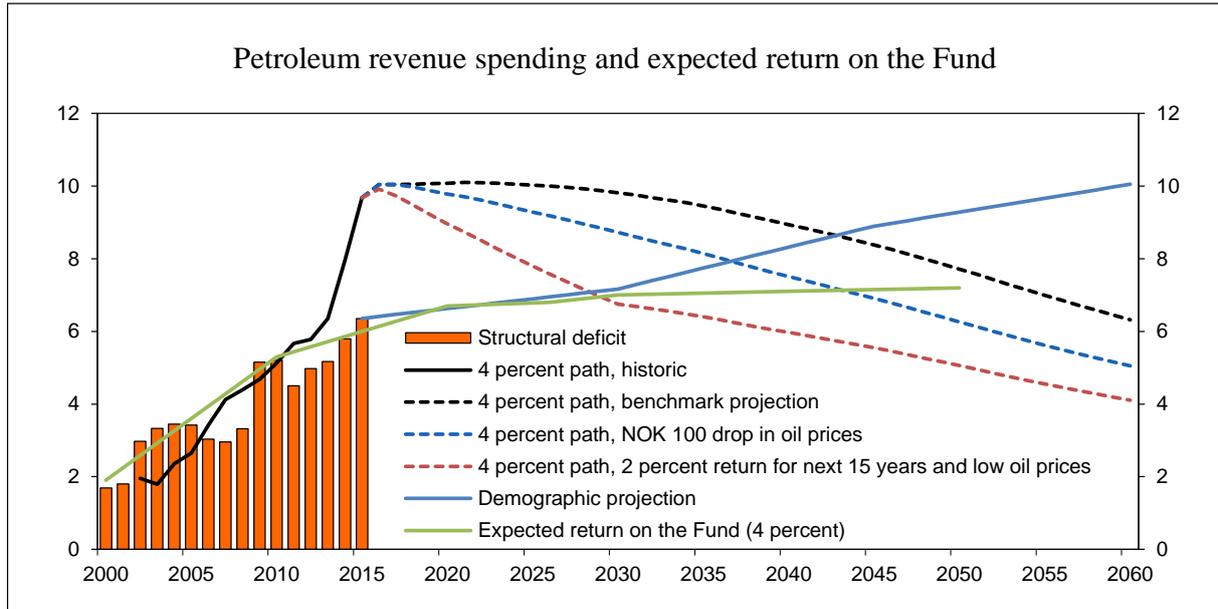
When assessing to what extent prior saving is required to meet rising age-related spending, the guidelines chosen must also be politically robust. This implies that such guidelines must be relatively simple to explain and apply, and that they must appear sensible in both the short and long term. The fiscal rule provides that only the real return over time may be spent. No other countries have set aside their natural resource revenues and restricted themselves to spending only the return on the accumulated financial assets. Accordingly, the Norwegian guidelines appear to mandate relatively cautious, but also ambitious, natural resource management. They can be interpreted as the result of a pragmatic balancing of the objective of avoiding short-term instability with the objective of long-term sustainability in public

finances. At the same time, the fiscal rule is founded on an intuitive and relatively simple principle.

On the other hand, it makes little sense first to increase petroleum revenue spending systematically relative to economic output only to have to reduce it again – equally systematically – just a few years later. The current figures suggest that this will be the outcome if the 4 percent path is followed mechanically over the next few years; see Figure 1.5. Updated estimates show that the benchmark 4 percent path may already have peaked, and that it will begin to decline from about 2030 onwards; see the broken black line. Letting petroleum revenue spending rise rapidly to the 4 percent path will result in an unstable development for the economy, public services and taxes. Current estimates indicate that a period of increased petroleum revenue spending will rapidly be succeeded by many years of gradual, but permanent, reductions in petroleum revenue spending relative to the size of the mainland economy. The remaining scope for increasing petroleum revenue spending will then be utilised long before spending on pensions and health and care services begins to increase sharply; see the demographic projection in Figure 1.5, which shows the consequences for the structural, non-oil deficit of maintaining current welfare schemes. Cutting through the temporary peak in the 4 percent path appears to be a more stability-oriented fiscal policy approach. Although this may result in a fairly lengthy deviation from the 4 percent path, it will provide a smoother development in welfare services and taxes. More cautious spending now will mean less fiscal tightening when age, health and care-related spending begins to rise sharply.

Circumstances were very different when the fiscal rule was adopted in 2001. At that time, it was envisaged that the Fund would facilitate gradually increasing petroleum revenue spending throughout the period to 2050; see the green line in Figure 1.5. The main reason for the marked change is stronger growth in output and the Fund than anticipated in 2001. These developments are due partly to higher productivity growth and partly to greater employment growth than forecast in 2001. The rise in employment has been supported by extensive labour immigration, which has also boosted population growth significantly. In addition, in 2001 inflation as measured by the Mainland GDP deflator was expected to be relatively low in the period to 2020. Immigration is expected to provide a foundation for increased employment and output growth for many years to come, particularly over the next 15 years.

It is not obvious that higher trend economic growth should trigger higher saving today in order to maintain the Fund's share of public welfare funding, particularly if such economic growth is based on higher productivity growth in mainland industry. Although increased productivity will, in isolation, reduce the size of the Fund and the real return as a proportion of Mainland GDP, public spending as a share of output will also be reduced, leaving the financing gap largely unchanged. Moreover, productivity growth will make future generations richer. The redistribution considerations that underpin the progressive nature of the tax system may also indicate progressive taxation of generations. On the other hand, the objective of ensuring that tax rates and public services fluctuate as little as possible over time suggests that a marked peak in petroleum revenue spending should be avoided.



Figur 1.5 Structural, non-oil deficit, demographic projection and anticipated return on the Fund. Percentage of trend Mainland GDP.

Sources: Ministry of Finance and own calculations

The upward adjustment of the 4 percent path in recent years is also linked to the high return generated by the Fund, particularly compared to events during the financial crisis in 2008. Moreover, high oil prices have boosted the Fund's capital considerably. The benchmark projection is not based on equally high returns and oil prices going forward. Growth may also be weaker than in the benchmark projection, and Figure 1.5 provides several examples of this. The blue line illustrates an alternative under which oil prices drop by NOK 100 per barrel, corresponding to a long-term price of around USD 57 per barrel. In this scenario, the decline in the 4 percent path occurs more quickly and is sharper than in the benchmark projection.

A strategy of cutting through temporary peaks will also leave Norway less vulnerable to downturns in international financial markets. Experience shows that such drops have to be expected from time to time. In section 1.9, the argument is made that the return on the Fund should be expected to be below 4 percent for the next 15 years. Like lower oil prices, this will entail a quicker, sharper drop in the 4 percent path; see the broken orange line in Figure 1.5.

The fiscal rule was formulated to promote the smooth, sustainable spending of petroleum revenues, to avoid abrupt, unnecessary industrial readjustment and to ensure a smooth development in public services. All three of these objectives provide arguments for cutting through the temporary peak in the 4 percent path and limiting increases in petroleum revenue spending in the years ahead:

- Following the 4 percent path mechanically, given the current estimates, will not result in even petroleum revenue spending. This becomes even clearer when a drop in oil prices or a period of low returns on the Fund is assumed. Moreover, in this scenario the room for higher petroleum revenue spending will be utilised long before rising age-related spending on pensions, health and care services begins to have a serious impact on public finances.
- A rapid increase in petroleum revenue spending now may also trigger unnecessary industrial readjustments. The aging of Norway's population implies higher activity in

the health and care sector over time, whereas increases in petroleum revenue spending in the next few years are likely to be used for many other purposes than this. The objective of avoiding unnecessary industrial readjustments suggests that petroleum revenue spending should not be increased for other purposes in the period before pension, health and care-related spending starts to rise. Moving labour and capital between sectors requires both time and resources.

- The smooth development of public services entails the expansion of health and care services as the number of old people increases. Even if efficiency gains are made in other areas, such an expansion is likely to necessitate reductions in other public tasks or require (partial) funding through higher direct and indirect taxes. The higher petroleum revenue spending is at that time, the sharper the necessary cuts will be.

1.8 Challenges facing the Norwegian economy in the short and medium term

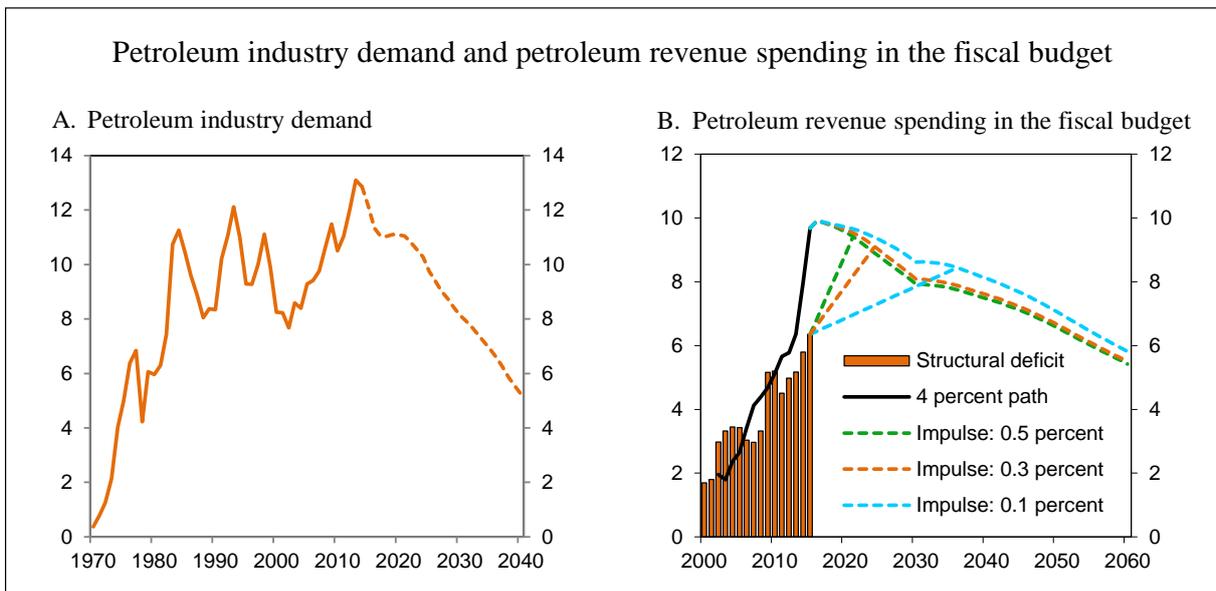
Over the past 10 years, several factors have helped to boost growth in the mainland economy. High prices for oil and other exports have generated substantial revenues, while import prices have been low. Increased activity on the Norwegian continental shelf has provided strong stimuli for the mainland economy. Households have engaged in a wave of borrowing supported by low interest rates, and house prices have risen rapidly. Demand has also been inflated by higher petroleum revenue spending in the fiscal budget, as well as increased municipal borrowing. High labour immigration has improved Norway's productive capacity and helped to meet increased demand for goods and services from the public and other sheltered sectors. The Norwegian economy cannot be expected to receive similar boosts in the years ahead.

At present, little is known about what economic disruptions the Norwegian economy may encounter in future. Many factors influence the ability of the economy to make necessary adjustments and deal with unanticipated shocks. When the labour, product, credit and capital markets function properly, they facilitate readjustment and act as important shock absorbers in the event of temporary changes in demand. A stabilisation-oriented monetary policy and floating exchange rate can ease economic adjustments. Other important factors include robust banks, as well as sound regulation and supervision of financial markets. Recent experiences both in Norway and abroad indicate that fiscal policy can play a key role both prior to and after major economic turnarounds. This applies particularly in situations where monetary policy offers limited room for manoeuvre. From this perspective, the application of the fiscal rule is important.

The Norwegian economy currently appears to be moving into an interim period with falling demand from the Norwegian continental shelf as a proportion of Mainland GDP, see Figure 1.6A, whereas the fiscal rule provides for increasing petroleum revenue spending for several more years. In the period to 2020, the decline in petroleum-related activity will be moderated by the planned development of the Johan Sverdrup field. Lower activity levels on the Norwegian continental shelf will require adjustments in the mainland economy as Norwegian industry is forced to turn to new markets. This may result in temporary increases in unemployment as workers seek jobs in new industries and businesses. Economic policy must support necessary adjustments. Monetary policy is the first line of defence against an economic downturn. In isolation, interest rate cuts will weaken the Norwegian krone, which in turn will facilitate necessary adjustments. Fiscal policy must be adapted to the economic

cycle, but is not the answer when the main challenge is to strengthen exposed industries, particularly as long as monetary policy still offers room for manoeuvre.

Restructuring in response to lower demand from the Norwegian continental shelf will be more difficult in a period of tighter fiscal policy, since petroleum revenue spending will also decline as a proportion of mainland economic output. Such a concurrence of negative fiscal policy impulses and reduced continental shelf activity may arise in the 2020s if petroleum revenue spending is increased rapidly in the short term, for example in an attempt to keep unemployment very low during an adjustment period. Spreading this increase out over time will smooth the petroleum revenue spending path and ensure that it better reflects developments in the Norwegian economy; see Figure 1.6B. This may ease the gradual transition to other export-focused industry. This approach will help prevent unnecessarily large adjustments in the Norwegian economy at a later date.



Figur 1.6 Petroleum industry demand and petroleum revenue spending in the fiscal budget. Percentage of Mainland GDP.

Sources: Ministry of Finance (Revised National Budget 2015) and own calculations.

The developments referred to above have helped to boost the public tax revenues in recent years. There is a risk that estimates of underlying growth in tax revenues will have to be reduced when the long-term waves that have lifted the Norwegian economy diminish; see the discussion in section 1.6. If this change arises suddenly, the estimate of underlying petroleum revenue spending – measured by the structural, non-oil budget deficit – will probably have to be increased, as seen in several OECD countries in recent years. Fiscal policy planning should take this possibility into account.

Keeping petroleum revenue spending at a level clearly below the forecast 4 percent path will lower the risk of fiscal policy reinforcing fluctuations in the Norwegian economy. The risk of eating into the Fund's principal in the years ahead will also be reduced. The room for manoeuvre offered by fiscal policy may also be useful in a situation where monetary policy is restricted by zero as the nominal floor for the key policy rate. This is illustrated by the challenges encountered by the USA and Eurozone countries in recent years, where key policy rates have been at zero for a long time and central banks have resorted to unconventional monetary policy measures.

1.9 The Government Pension Fund Global's expected return and risk profile

The Commission has been asked to evaluate the application of the guidelines for petroleum revenue spending, *inter alia* in light of the challenge of lower capital returns in the next few years. This evaluation is an important element in the basis for discussing how the fiscal rule should be applied going forward.

From January 1997 to the end of March 2015, the average annual real rate of return on the Fund was 4.2 percent. This somewhat exceeds the long-term expectation. However, there have been substantial variations, and the realised real rate of return has been both considerably higher and considerably lower than 4 percent for prolonged periods of time. In addition, more than 100 years' experience of global equities and bond markets shows that returns can fluctuate significantly. Analyses of expected return and risk based on model simulations show an estimated standard deviation of 2.5 percentage points around the expected 4 percent.

The size of the Fund and its importance as a source of public funding mean that altered expectations regarding the return on or fluctuations in the value of the Fund may have a substantial impact, both compared to the size of other state revenues and the Norwegian economy and, particularly, compared to the underlying year-on-year growth in the mainland economy. If the largest recorded annual percentage changes in the return (measured using the Fund's currency basket) are applied to the Fund's current value, the result is either a drop in value of almost NOK 1,500 billion (2008) or an increase in value of some NOK 1,600 billion (2009). Given withdrawals from the Fund totalling 4 percent, these figures respectively correspond to a fall of NOK 60 billion and an increase of NOK 66 billion, i.e. plus/minus 2 percent of trend Mainland GDP. Such large changes in petroleum revenue spending from one year to the next are incompatible with the objective of a stable economic development and smooth, gradual spending of petroleum revenues. Accordingly, petroleum revenue spending must be smoothed out over several years, as envisaged in the 2001 white paper that set out the fiscal rule. The consequences of such major changes in the Fund's capital are discussed further in section 1.6 on experience with the fiscal rule thus far and section 1.10 on advantages and disadvantages of various supplementary rules to the fiscal rule.

Since the transfers to the Fund are expected to decline as a proportion of the Fund's capital, future changes to the Fund's value may be dominated by changes in the return and the NOK exchange rate. Unlike changes in the return on investment measured using the Fund's currency basket, changes in the NOK exchange rate will not affect the international purchasing power of the Fund. Factors with potential significance for the expected long-term return and risk are thus particularly important, and include global productivity, international economic framework conditions, global demographics, environmental and climate change, access to resources and geopolitical developments.

An important question is whether the financial crisis of 2008 will affect the expected future return. The Commission is not aware of any unambiguous, generally accepted research results indicating that the expected long-term real rate of return and risk need to be significantly re-assessed due solely to the financial crisis. The situation may be different as regards prospects for the medium term, i.e. the next 10 to 15 years. Real interest rates are currently very low, also historically speaking. This is due partly to the economic after-effects of the financial crisis and partly to the attempts of central banks to stimulate economic growth by taking steps to reduce interest rates. In isolation, low real interest rates suggest that the expected real rate

of return on government bonds over the next 10 to 15 years may be lower than the 2.5 percent estimate adopted in the long-term analyses of expected return and risk. The Commission is of the view that current market rates may indicate that the bond interest-rate level is at least 2 percentage points lower than a normal long-term level.

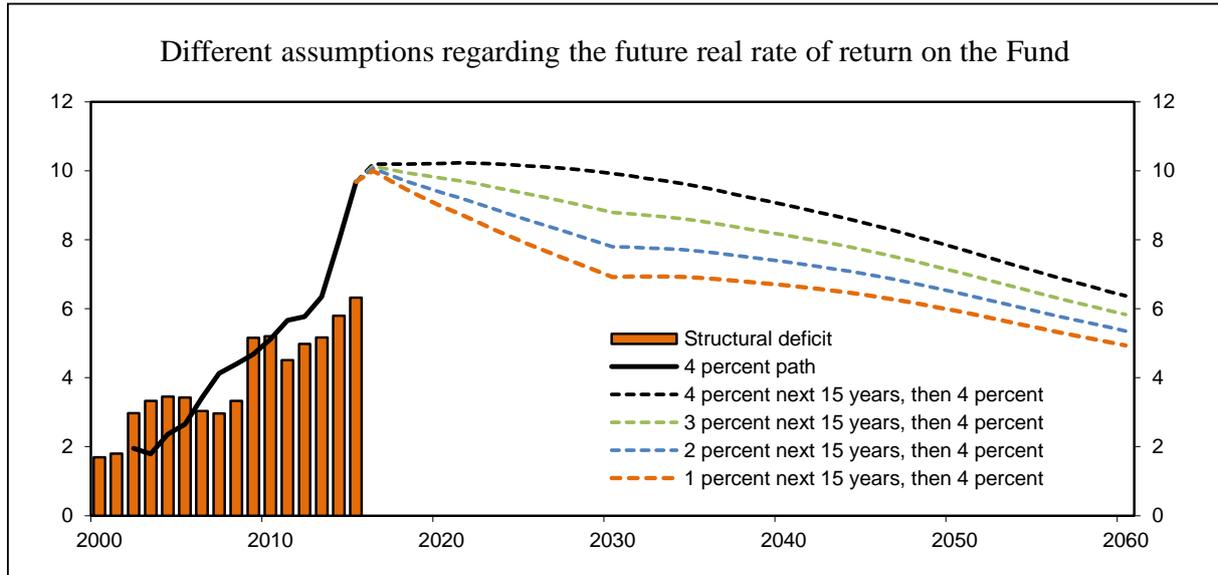
However, it is less clear whether low interest rates also mean low real returns on equities in the years ahead. A review of the links between different valuation indicators suggests that, overall, company profits are priced moderately, despite very low interest rates. If today's direct return (dividends) and trend growth in company profits continue, a future real rate of return on equities of 5 to 6 percent appears likely. However, there are factors that pull in the opposite direction: that strong growth in company profits reflects a drop in workers' share of GDP and that investment levels have been low. This has contributed to a high real rate of return on equities over the past 30 years, but it is uncertain whether corresponding contributions to the real return can be expected going forward.

In chapter 9, the Commission has described two possible scenarios for the expected rate of return on the Fund. In both of these, the real rate of return on the bond portfolio is 2 percentage points lower than the long-term expectation 15 years ahead. One scenario assumes that the equity and real estate premiums are kept unchanged, i.e. that they provide an additional return compared to bonds of 2.5 and 1 percentage points, respectively. In this situation, the real rate of return on the Fund will be reduced by 2 percentage points to 2 percent for the next 15 years. In the other scenario, the real returns on equities and real estate remain unchanged from the long-term expectations. In this case, the real rate of return on the Fund will be reduced to 3 percent for the next 15 years. Both scenarios assume that the real rate of return on the Fund will total 4 percent per year after the end of the 15-year period. Adopting 2014 as the starting point, it has therefore been estimated that the long-term real rate of return will be somewhat below 4 percent. The period of lower returns on the Fund reduces the long-term estimate somewhat, despite the assumption of a real rate of return of 4 percent after the first 15 years.

Figure 1.7 shows the development of the return on the Fund as a proportion of mainland economic output under these two scenarios, compared to a scenario in which the real return totals 4 percent every year going forward. The figure also illustrates a scenario with a considerably weaker return than in the two scenarios above, stipulated as 1 percent for the next 15 years.

All three of the alternative scenarios assume that withdrawals from the Fund, i.e. transfers to the fiscal budget, will total 4 percent of the Fund's capital at the beginning of each fiscal year. The figure shows a far more rapid drop in the Fund's return path for the next 10 to 15 years when the real rate of return is weaker than 4 percent. Since it has been assumed, for technical reasons, that the real rate of return will never exceed 4 percent, these paths will never return to the benchmark path, which assumes that the real return will always be 4 percent.

The Commission would point out that Norway should be prepared for a period of relatively low returns, particularly on the bond portfolio.



Figur 1.7 Structural, non-oil budget deficit (petroleum revenue spending) and different assumptions regarding the future real rate of return on the Fund.¹ Percentage of trend Mainland GDP.

1 The Fund's capital has been extrapolated using real return rates of 4 percent, 3 percent, 2 percent and 1 percent, respectively, for the first 15 years. All of the scenarios assume a return on the Fund of 4 percent per year after 15 years. As a technical assumption, withdrawals from the Fund are set to 4 percent of the Fund's capital at the beginning of each fiscal year as of 2016.

Sources: Ministry of Finance and own calculations.

1.10 Key fiscal policy considerations and evaluation of potential supplementary rules to the fiscal rule

In the above review, the Commission has discussed objectives to which particular emphasis has been given when applying the fiscal rule and to which considerable weight should continue to be given. The Commission was asked to examine whether the fiscal policy guidelines need to be supplemented with additional rules designed to meet these objectives when there is substantial deviation from the 4 percent path and a possibility of significant year-on-year changes in the path. The report discusses key fiscal policy considerations and evaluates potential supplementary rules to the fiscal rule.

Key fiscal policy considerations

In the Commission's view, the objectives emphasised at the time the fiscal rule was adopted in 2001 should continue to influence the formulation of fiscal policy. The objective of stable economic development implies a gradual and sustainable increase in the spending of petroleum revenues, with consideration for exposed industries and for avoiding unnecessarily abrupt adjustments in the Norwegian economy. The objective of a smooth development in public services and tax levels suggests, in isolation, great moderation in petroleum revenue spending before the increased costs associated with an aging population begin to put public finances under serious pressure. The objective of ensuring that future generations also benefit from Norway's petroleum wealth is met by spending the expected real return on the petroleum revenues already transferred to the Fund, while leaving the principal untouched. To support a sound and transparent budget process, and to ensure that any fiscal policy rule

enjoys legitimacy and is easy to communicate, the fiscal policy rule should be relatively simple in form. Any fiscal policy rule must also take into account the uncertainty that will always exist regarding the scale of future petroleum revenues, the budget balance and the return on the Fund.

Thus far, the fiscal rule has been applied in a way that has largely enabled the objectives identified in 2001 to be met. The 4 percent path has not been followed mechanically, with the fiscal rule being applied flexibly to smooth out spending in connection with major changes in the Fund's capital or in factors affecting the structural deficit. This flexibility is a strength of the rule. The unexpectedly rapid growth of the Fund has also helped.

The fiscal rule has helped to give fiscal policy a short and medium-term perspective, in particular in periods when petroleum revenue spending was close to the 4 percent path or above the expected return on the Fund. Currently, petroleum revenue spending is substantially below the 4 percent path, following very strong growth in the Fund's NOK value over the last couple of years. In this situation, the estimated 4 percent path provides less guidance for fiscal policy over the short and medium term. The Fund is large, and the 4 percent path must be expected to fluctuate considerably relative to public spending and mainland economic output. Although such fluctuations may, at times, reduce the distance to the 4 percent path, they may also increase it, as in recent years.

A particular challenge is that almost half of the substantial growth in the Fund's capital over the past two years is due to the depreciation of the Norwegian krone. Changes in the value of the krone do not affect the Fund's international purchasing power. Although Norway thus becomes neither richer nor poorer when the krone fluctuates, such changes in value may impact differently on different groups and sectors. The future krone exchange rate is uncertain, and an appreciation cannot be excluded. Moreover, it seems likely that at least some of the krone's depreciation will be passed on to prices and wages, reducing the value of the Fund measured as a proportion of economic output.

In the Commission's opinion, the current situation suggests that petroleum revenue spending should be below the 4 percent path for many years to come. A rapid return to the path, as the path is currently estimated, would not support the stable, balanced development of the Norwegian economy. Other considerations also indicate a more gradual increase in petroleum revenue spending than in the period since 2001. The costs associated with an aging population are only expected to begin affecting public finances more severely in around 15 years' time, long after the 4 percent path is forecast to peak. The 4 percent path has changed significantly since 2001, and is now expected to decline gradually as a proportion of economic output in a few years' time. The objective of a smooth development in public services and tax levels therefore indicates great moderation in the increase in petroleum revenue spending over the coming decade. If petroleum revenue spending is rapidly increased up to the 4 percent path, spending will peak long before the sharp rise in aging-related expenditures. This represents a considerable challenge. In addition, the prospect of falling demand stimuli from the Norwegian continental shelf suggests that Norway will benefit more from spreading out increases in petroleum revenue spending over time. Cautiously increasing spending will also provide a safety margin with respect to uncertainty about the return on the Fund, future petroleum revenues and future developments of the Norwegian economy. The fact that it is easier to increase petroleum revenue spending than to reduce it further supports this approach. Cautiously increasing spending will also reduce the risk of errors in economic policy.

In the event of substantial deviations from the 4 percent path, fiscal policy should be given an operational target in the short and medium term that takes into account the underlying

objectives discussed above, as well as the long-term target inherent in the 4 percent path. Such targets can be formulated in various ways. In accordance with its mandate, the Commission has considered whether a supplementary rule could be helpful when there is substantial deviation from the 4 percent path. A key question is thus whether a supplementary rule could help to improve the achievement of the fundamental objectives to be met by fiscal policy.

Evaluation of alternative supplementary rules

The Commission has evaluated six potential supplementary rules:

- i. smoothing out the increase in petroleum spending in combination with guidelines on the maximum budget impulse in a normal macroeconomic situation;
- ii. keeping petroleum revenue spending unchanged at the current level, measured as a proportion of mainland economic output;
- iii. allowing petroleum revenue spending to track the rise in demographic costs;
- iv. limiting withdrawals from the Fund over the next 15 to 20 years, for example to 3 percent of the Fund's capital;
- v. smoothing out the calculation basis for the 4 percent path; and
- vi. linking petroleum revenue spending with the Fund's book revenues.

The advantages and disadvantages of these potential supplementary rules are discussed by reference to alternative future economic development scenarios.

The Commission defined five criteria against which to evaluate the different alternatives. The criteria are based on the considerations emphasised by the Commission in sections 1.3–1.9. The purpose of any supplementary rule must be to safeguard the objective of a gradual, sustainable increase in petroleum revenue spending in the years ahead to reduce the risk that a marked increase in spending has to be followed by large cuts a few years later. In view of current estimates, such smoothing out can be described as “cutting through the peak in the 4 percent path”. Any supplementary rule must also help ensure that large fluctuations in the Fund's capital do not impact excessively on petroleum revenue spending in the short term, i.e. “reduce short-term volatility”. A supplementary rule should also be robust in response to particularly negative outcomes relating to key variables such as the return on the Fund and oil prices. A further consideration is that a supplementary rule will not replace the fiscal rule, merely supplement it. Accordingly, weight must be given to how well different supplementary rules accord with the current fiscal policy guidelines. Finally, any supplementary rule must be simple, easy to communicate, and verifiable.

Smoothing out the increase in petroleum spending will in many respects formalise the way flexibility in the fiscal rule is currently practised when there are deviations from the 4 percent path. Such a supplementary rule could anchor and reinforce a policy that softens the impact of short-term volatility in the Fund's capital. The current outlook suggests that petroleum revenue spending may also cut through the peak of the 4 percent path if the smoothing is sufficiently strong. Petroleum revenue spending is presently far below the 4 percent path. Accordingly, a supplementary rule specifying a smoothing out of the increase in petroleum spending implies issuing guidelines on the maximum budget impulse in a normal macroeconomic situation, for example stipulating that the budget's expansive impulse should not normally exceed 0.1–0.2 percentage points of Mainland GDP. Such a supplementary rule would be relatively robust to particularly negative outcomes, but may necessitate an even smaller maximum impulse. Smoothing out escalation is clearly in accordance with the current fiscal rule.

A supplementary rule specifying that the increase in spending must be smoothed out will require the exercise of considerable discretion when determining the amount of smoothing. The development of detailed guidelines on the exercise of discretion will depend on factors such as whether petroleum revenue spending is above or below the 4 percent path and the Fund's anticipated future financing contribution. A strategy of strong smoothing is particularly relevant when petroleum revenue spending is below the 4 percent path and it appears likely that withdrawals from the Fund will have to be reduced in the longer term as a proportion of mainland economic output. However, the Fund's capital may also exceed the figure assumed in the scenarios evaluated by the Commission. Therefore, if petroleum revenue spending is increased cautiously, the distance to the 4 percent path may increase further in the years ahead. This illustrates that mechanical application of a smoothing out rule will be insufficient on its own.

One disadvantage of a supplementary rule requiring increased spending to be smoothed out is that calculations of structural budget deficits, and thus of the fiscal policy impulse, are subject to substantial revision. Revisions of the fiscal policy impulse totalling several tenths of a percent are more the rule than the exception, and experience shows that when there are marked changes in economic conditions the level of the structural deficit may be revised by as much as 1–2 percent of Mainland GDP. This can make it difficult to apply a rule that specifies that the increase in spending should not exceed 0.1–0.2 percent of Mainland GDP.

Keeping petroleum revenue spending unchanged at the current level – measured as a proportion of mainland economic output – until spending returns to the 4 percent path may be regarded as a variant of smoothing out the increased spending. The ceiling on the maximum budget impulse in a normal macroeconomic situation is then set as zero. Arguments in support of such a supplementary rule are that petroleum revenue spending has already reached a high level, that there is uncertainty about the potential for future increases and that petroleum revenue spending must gradually be reduced to below the current level.

On the other hand, such a supplementary rule may mean an increase in the distance from the 4 percent path over a prolonged period of time. The rule may thus appear largely irrelevant if the Fund grows significantly more in the years ahead than currently envisaged. A further factor, which reduces the utility of the rule in the political debate, is that the rule does not provide an answer to when a higher return on the Fund should be spent in public budgets, except that this should be in the distant future. However, such a strategy will be highly robust in the event of weaker oil prices and a weaker return on the Fund. If this supplementary rule is adopted, fluctuations in the Fund's capital will not impact petroleum revenue spending until it has returned to the 4 percent path.

Governing fiscal policy in accordance with a supplementary rule specifying that petroleum revenue spending must be kept constant as a proportion of mainland economic output will in a sense entail a return to the regime that prevailed before the fiscal rule was adopted in 2001. At that time, fiscal policy was steered by reference to the non-oil, cyclically adjusted primary deficit. It can be questioned whether this strategy will be politically robust in the event of a marked increase in oil prices or the Fund's capital. One reason for the adoption of the fiscal rule was, precisely, the lack of a good answer to the question of how higher petroleum revenues and increased transfers into the Fund should impact budget policy. Political parties, economists and public opinion gradually agreed that it should be possible to spend at least some of the higher revenues.

Allowing petroleum revenue spending to increase in line with demographic costs implies increasing petroleum revenue spending to cover higher expenditures on pensions and health

and care services linked to the aging of the population. Norway's demographic trends suggest that petroleum revenue spending should be increased more cautiously in the years ahead than in the period since 2001. This strategy will therefore entail larger transfers into the Fund, and thereby a larger Fund for many years to come. Nevertheless, the strategy is only viable for as long as petroleum revenue spending is under the 4 percent path. Petroleum revenues will thus only assist in addressing the consequences of aging-related challenges for public budgets for a limited time, since life expectancy is forecast to continue rising beyond the time horizon of the projections in this report. The lower the return on the Fund and oil prices are in the years ahead, the shorter this period will be. The majority of the challenges an aging population presents in the public finance context will therefore have to be dealt with in other ways than by setting aside petroleum revenues.

A supplementary rule specifying that petroleum revenue spending should track demographic costs is an explicit regulatory means of resolving more of the challenges associated with an aging population through higher saving now. As in 2001, the argument can still be made that these challenges should primarily be overcome by making welfare services more sustainable in response to increasing life expectancy and a higher proportion of elderly people in the population. This argument facilitated implementation of Norway's pension reform, which introduced a system whereby the time spent in work must increase as life expectancy increases; otherwise, the annual pension must be cut. However, it may well be more difficult to implement similar reforms to address the rise in health and care-related expenditures.

Steering fiscal policy according to the development in demographic costs would be difficult to operationalise. Considerable uncertainty attaches to estimates. For example, expenditures are influenced by how many people choose to draw a retirement pension, a number that has become substantially more uncertain since it became possible to draw a pension and simultaneously continue to work. Demographic costs may also change if new decisions are made that alter contribution rates and standards. Clearly, automatically covering all future expansions of welfare services for older age groups through higher petroleum revenue spending is not a robust approach. Accordingly, the demographic projection must be adjusted to take into account the effect of reforms and changes in behaviour.

Despite these objections to making the demographic projection a rule, the projection does illustrate an important factor that should be given substantial weight in the fiscal policy context. It makes little sense to increase petroleum revenue spending markedly over the next few years only to have to cut it back again as a proportion of output at the same time as demographic costs rise.

Limiting withdrawals from the Fund would result in a more gradual increase in the spending of petroleum revenues in the immediate future and cut through the peak in the 4 percent path. Limiting withdrawals to, for example, 3 percent for a period would strengthen the ability of fiscal policy to address future growth in spending on pension and health and care services as the Norwegian population ages. Cutting withdrawals from the Fund can also be viewed as an adaptation to uncertainty, for example as to oil prices and as to whether the Fund can achieve the projected long-term real return of 4 percent.

A supplementary rule specifying that withdrawals from the Fund must be reduced will not have a notable impact in terms of reducing fluctuations in the path by which fiscal policy is steered. On the other hand, this rule would be transparent and easy to apply, at least as long as the Fund does not grow or shrink substantially from year to year. Current estimates indicate that the rule is also well in line with the objectives the fiscal rule is designed to safeguard, as it prescribes a smoother, more gradual petroleum revenue spending path than is implied by

keeping Fund withdrawals at 4 percent. Nevertheless, the intention must be to return to total withdrawals of 4 percent at some point in the future.

Tabell 1.1 Summary of the properties of potential supplementary rules. The overview is based on the current situation and the prospects for the next few years.

Smooth increase in spending	<ul style="list-style-type: none"> • Formalises current practice and is highly consistent with the current fiscal rule provided that the transitional phase is not too long. • Reduces short-term volatility. • Cuts through the peak of the 4 percent path and is robust in response to particularly negative outcomes, provided that the normal impulse is low enough. • Revisions in structural balance estimates will be a challenge.
Keep spending unchanged as a proportion of output until the 4 percent path is reached	<ul style="list-style-type: none"> • The link with the State's petroleum revenues and the development of the Fund is broken. Can render it less useful in the political debate. • Reduces short-term volatility. • Cuts through the peak of the 4 percent path and is robust in response to particularly negative outcomes. • Unclear how revisions of structural budget balance estimates should be handled.
Follow demographic projection until the 4 percent path is reached	<ul style="list-style-type: none"> • Meets an important objective even though temporary revenues offer only limited scope for addressing the challenges associated with an aging population. • Reduces short-term volatility. • Cuts through the peak of the 4 percent path and is robust in response to particularly negative outcomes.
Limit withdrawals to, for example, 3 percent for a period of time	<ul style="list-style-type: none"> • Cuts through the peak of the 4 percent path and is robust in response to particularly negative outcomes. • Does little to counter short-term volatility. Provides no answer to the question of what to do in the event of major changes in the Fund's capital. • Consistent with the current rule as long as the intention is to return to total withdrawals of 4 percent.
Smooth the calculation basis for the 4 percent path	<ul style="list-style-type: none"> • Reduces short-term volatility but does little to cut through the peak of the 4 percent path. Not very robust in response to particularly negative outcomes. • Necessitates extensive supplementary assessments in practice.
Use booked revenues	<ul style="list-style-type: none"> • Ignoring returns linked to changes in the Fund's value represents a material change to the fiscal rule. • Reduces short-term volatility linked to returns in foreign currencies, but does little to reduce volatility due to the NOK exchange rate. • Cuts through the peak of the 4 percent path and is robust in response to particularly negative outcomes.

Although *linking petroleum revenue spending to the Fund's booked revenues* will help to address uncertainty, the effects of such a rule differ slightly from those of a rule limiting withdrawals to 3 percent of the Fund's capital. The booked revenues fluctuate less than a 3 or 4 percent path when there are changes in the Fund's capital in response to altered share prices, altered bond prices or exchange rate movements between foreign currencies. However, short-term fluctuations occasioned by changes in the NOK exchange rate are not reduced. As regards cutting through the peak of the 4 percent path, this supplementary rule has about the same effect as limiting withdrawals to 3 percent of the Fund's capital. The same applies to particularly negative outcomes.

In the Commission's view, permanently decoupling spending from the long-term expected real return is unsatisfactory from a theoretical perspective. Spending booked revenues ignores revaluations, an important element in the overall real return on the Fund's capital. Failing to take this part of the return into account can be regarded as a material change to the fiscal rule. Such a supplementary rule may also affect the Fund's investment strategy, for example if more of the Fund's capital is invested in assets that generate high book revenues, i.e. more bonds and fewer equities. This in turn will lower the expected return on the Fund. Moreover, the investment decisions made by fund managers may have a direct effect on the size of the booked revenues, for example when a choice is made between bonds with and without a coupon rate.

Smoothing the calculation basis for the 4 percent path, for instance by calculating the average Fund capital over the previous five years, helps to reduce the short-term volatility of the 4 percent path as long as changes in the Fund's capital are temporary and do not last longer than 2–3 years. However, this supplementary rule will do little to cut through the peak of the 4 percent path. Nor is it robust in response to particularly negative outcomes, since the smoothed path will generally track the 4 percent path, albeit with a slight time lag. Smoothing the 4 percent path to reduce short-term volatility, on the other hand, is simple, easy to understand and transparent, as well as highly consistent with the current fiscal rule, which gives great emphasis to smoothing out in connection with major changes in the Fund's capital.

The application of the fiscal rule thus far shows that the focus of individual budgets has not reflected short-term fluctuations in the Fund's capital to any notable extent. Accordingly, the potential benefits of formalising a particular rule to smooth out the expected real return path are highly uncertain. Even if smoothing is implemented, the Government and the Storting (the Norwegian parliament) will have to balance various considerations when considering withdrawals from the Fund. If a supplementary rule prescribes smoothing of the 4 percent path, it may appear more legitimate to allow withdrawals to follow the smoothed withdrawal path mechanically, even if policy becomes less purposive as a result.

None of the six evaluated supplementary rules can be applied mechanically – uncertainty about the development of the Fund, oil prices and other economic variables is simply too great. Moreover, petroleum revenue spending must be adapted to the macroeconomic situation. It appears impossible to formulate a quantified supplementary rule that describes relevant, effective responses to all possible economic scenarios. This suggests that there should still be room for flexibility in the application of the fiscal rule.

Table 1.1 summarises important characteristics of the six supplementary rules.

Conclusions regarding the benefit of supplementary rules

The Commission is of the opinion that a clear course for returning to the 4 percent path should be plotted in the event of deviations from it, and that this course should be communicated in

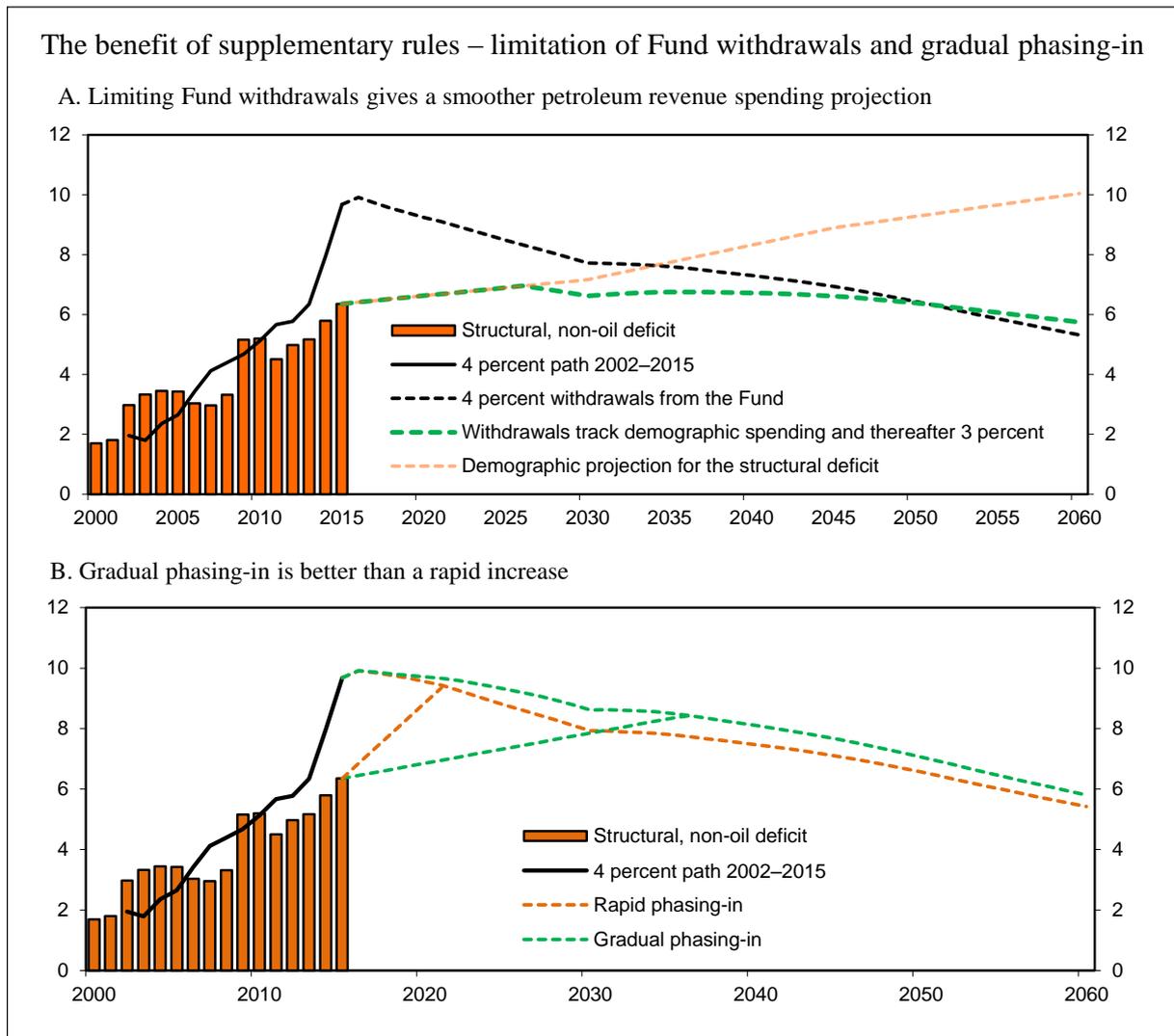
budget documents. This has been done in situations where petroleum revenue spending has been above the 4 percent path, but is less common today. Such a course must be based on the key objectives which Norway's fiscal policy and the fiscal rule are supposed to safeguard. This will anchor what fiscal policy is expected to achieve in the event of deviations from the 4 percent path, and reduce the risk of fiscal policy being unduly influenced by short-term considerations in this situation. Drawing up a concrete, multi-year strategy for fiscal policy is well in line with recommendations from the IMF and the OECD.

The Commission's majority takes the view that supplementary rules can be useful in the overall assessment of different objectives which has to be undertaken when plotting a course for returning to the 4 percent path. Given current conditions and future prospects, all important considerations indicate that a more cautious approach should be taken to increasing petroleum revenue spending than in the period since 2001. This will help to spread the increase in petroleum revenue spending out over a longer period. Figure 1.8 illustrates the benefit of two particular supplementary rules when plotting such a course:

- *Limiting withdrawals from the Fund for a period of time.* This will avoid a situation where a strong increase in petroleum revenue spending as a proportion of mainland economic output has to be followed by significant spending cuts. Limiting withdrawals will ensure that the petroleum revenue spending path is better adapted to increased expenditures on pensions, health and care services linked to the aging of the population. These expenditures will begin rising significantly in around 15 years' time; see Figure 1.8A. To avoid an immediate jump in petroleum revenue spending, the figure assumes a gradual increase to the 3 percent path, about in line with rising demographic costs.
- *Gradual phasing-in.* In the rapid phasing-in scenario in Figure 1.8B, petroleum revenue spending as a proportion of mainland GDP is increased by 0.5 percentage points per year, whereas in the gradual phasing-in scenario it is increased by 0.1 percentage points per year. Even if the pace of escalation equals 0.1–0.2 percentage points of Mainland GDP, petroleum revenue spending is likely to rise by around NOK 5–8 billion annually, measured in constant prices converted using the fiscal budget cost deflator. The supplementary rule on gradual phasing-in limits how quickly petroleum revenue spending should be increased when it lies below the 4 percent path and the macroeconomic situation is normal.

Under both rules, the macroeconomic situation in each individual year also has to be taken into account.

If the limit in the gradual phasing-in scenario is set sufficiently low, under current conditions the two supplementary rules generate fairly similar petroleum revenue spending projections for the years ahead. Considerable uncertainty attaches to the estimates of the return on the Fund, oil prices, the structural deficit, demographic costs and other economic variables. This uncertainty implies a cautious approach, and reinforces the arguments in favour of adopting a gradual approach in the phasing-in of petroleum revenue spending.



Figur 1.8 Limitation of Fund withdrawals and gradual phasing-in given a projected annual real return on the Fund of 2 percent for the next 15 years and 4 percent thereafter. Percentage of trend Mainland GDP.

Sources: Ministry of Finance and own calculations.

Substantial changes to the scenarios illustrated in this chapter are possible, even within a relatively short timeframe. In the event of major changes to the 4 percent path, the two supplementary rules may have different effects. The gradual phasing-in rule may assist in the handling of large fluctuations in the 4 percent path, since the phasing-in will be capped. The limited withdrawal rule will primarily serve to restrict petroleum revenue spending, thus avoiding a situation where an initial strong increase in petroleum revenue spending as a proportion of mainland economic output has to be followed by spending cuts. This will ensure that the petroleum revenue spending path is better adapted to the higher expenditures resulting from demographic developments. At the same time, the Commission would emphasise that the public finance challenges presented by the aging of the population primarily have to be overcome through reforms to make welfare services sustainable over time.

Overall, the majority of the Commission is of the view that, in the current situation – where petroleum revenue spending is significantly below the 4 percent path and there is great uncertainty about the return on the Fund and oil prices – a more gradual approach should be taken to the phasing-in of petroleum revenue spending in the years ahead than in the period since 2001.

Commission member Knut Anton Mork is of the view that plans to defer petroleum revenue spending for as long as possible entail an unreasonable transfer from current to future, wealthier generations. He also considers that specific plans for state revenues and expenditures over time are preferable to mechanical rules. Such rules may be easy to formulate, but are not necessarily easy to apply. Consideration should therefore preferably be given to formulating any supplementary rules designed to ensure a return to the fiscal rule following deviations in the context of multi-year budgeting.

1.11 Petroleum revenue spending and economic growth capacity

When the fiscal rule was adopted in 2001, the Norwegian parliament's Standing Committee on Finance and Economic Affairs emphasised that the fiscal space offered by the increase in petroleum revenue spending should be used to boost growth capacity in the Norwegian economy. Tax policy, infrastructure, research and education were highlighted as important for a well-functioning economy. The Committee also underlined the need to use public money efficiently, and stressed that petroleum revenues should not become an excuse for failing to implement necessary system reforms.

The Standing Committee on Finance and Economic Affairs warned against waste in general, both of public funds and of the resources that contribute to production in the mainland economy. Many countries with substantial natural resource revenues have found that such revenues can undermine economic performance, either because exposed sectors in the economy become too small or due to poor utilisation of labour and real capital. The Committee's warning continues thus to be relevant.

Overall, Norway has been relatively successful in preserving mainland economic resources in the period after 2001, which also saw a peak in petroleum revenues. The Fund has allowed Norway to separate the earning of petroleum revenues from their expenditure. The fiscal rule has facilitated the gradual increase and sustainable spending of petroleum revenues in the fiscal budget while also promoting good capacity utilisation and low unemployment. A stable economic environment is a key condition for growth. Moreover, labour force participation is high, unemployment is low, and welfare schemes have been based on the principle that work should be rewarded. A pension reform has been implemented to make public finances more robust to rising life expectancy.

Moving forward, it will continue to be important that petroleum revenues are not used to support pension and welfare schemes that over time are unsustainable. High labour supply is vital for the funding of public spending on benefits such as welfare and health. If the hours worked in Norway were to drop by 10 percent as participation in paid work declined Norway's national wealth would be reduced by a sum equivalent to the combined value of Norway's remaining petroleum resources and the Government Pension Fund Global. The principle of rewarding work should therefore continue to be a cornerstone of economic policy, and necessary system reforms should be implemented independently of petroleum revenues.

The priorities in public budgets can help to support the economy's capacity for growth. The areas emphasised by the Standing Committee on Finance and Economic Affairs in 2001 are

important in this regard. At the same time, the Productivity Commission and the Tax Commission have concluded that resource utilisation in these areas could be more efficient. Growth capacity is dependent on the efficient use of resources in all budget areas.

The Commission is of the view that earmarking petroleum revenues for defined purposes will not promote efficient resource utilisation or higher growth. Similarly, specifications and other special arrangements that in practice suggest earmarking should be avoided. The fiscal rule is a guideline for petroleum revenue spending, and in the Commission's opinion should not be assigned the additional task of helping to ensure that public resources are used for particular purposes, for several reasons:

- It is in practice very difficult to distinguish between allocations that support future growth and other budget objectives. The technical distinction between operational spending and investments in public budgets and accounts is not a suitable guide.
- Such a distinction would fragment the budget and make it difficult to ensure satisfactory, integrated prioritisation of public expenditures and revenues. It could weaken Norway's ability to facilitate stable economic development, and would increase pressure on other parts of the budget, such as health, policing and the judicial system.
- The use of public resources should be considered from an overall perspective, irrespective of whether spending is funded by tax, petroleum or other revenues.

The fiscal rule has given an anchor to fiscal policy. The relative simplicity of the rule is a particular strength. So too is the broad political support the rule enjoys. This support is due in part to the fact that the rule guides the budget balance but not the level of public spending. Views differ on the role of government and the tasks of the welfare state. Accordingly, successive governments have supplemented the rule with different ambitions for the tax level. It would be difficult to secure broad political support for a rule containing explicit provisions on the tax level and public spending objectives. Future parliaments would probably feel less bound by such provisions. Moreover, such provisions make the fiscal rule more complex and difficult to communicate.

Improved resource use requires a stronger emphasis on results than on allocations. Such an emphasis represents the best way to implement the recommendation of the Standing Committee on Finance and Economic Affairs to utilise public resources efficiently and in a manner that supports future growth. Decisions must be based on a solid foundation that takes into account uncertainty and facilitates the measurement of results, in particular when implementing reforms. As regards investments, great emphasis should be given to their net social returns. Norway's public spending level is already higher than or on a par with that of other countries, including in areas such as public transport and knowledge.

Many unsolved tasks remains in structural policy. The report of the Productivity Commission shows that resources can be utilised more efficiently in many areas. Structural policy has become even more important now that productivity growth has slowed somewhat, activity on the Norwegian continental shelf appears to be declining and the population is aging gradually and challenging the sustainability of public finances.