Economic perspectives

Address by Governor Øystein Olsen to foreign embassy representatives in Oslo, 5 March 2015.

An oil-driven economy

To Norway, the sea has always been of great importance. It has been our lifeblood, and it has been a main artery. Fishing, shipping and trade have been a source of living for many. With its changing face and magical power, it has also inspired artists. As the well-known 19th century novelist Alexander Kielland wrote:

"Nothing is so boundless as the sea, nothing so patient." [1]

Kielland, who was born and raised in Stavanger, could hardly suspect the inconceivable wealth the sea was so patiently concealing under the sea floor.

Chart: GDP per capita in 1971

The discovery of oil was the start of an amazing era for the Norwegian economy. When the first oil was brought to the surface in 1971, income levels in Norway were low compared with other western countries.

Chart: GDP per capita in 2013

The picture has reversed since then. We have gradually caught up to the wealthiest nations. Measured by GDP per capita, Norway now ranks at the top.

From the beginning, it was established that the oil and gas resources belong to the Norwegian people. The tax system and framework conditions for the petroleum industry were designed so that the large revenues would accrue to the state. The stage was set for greater prosperity, with prospects for growth in both public and private consumption.

Developing a new industry and spending the associated revenues also entailed challenges. The challenges were discussed in a white paper in 1974, Report no. 25 to the Storting, entitled "The role of the petroleum industry in Norwegian society". If room was to be provided for supplying the oil sector other industries would have to give way. The changes would come about through domestic cost pressures. Wage earners would find better paid jobs, while companies who could not bear increased costs, would be forced to downscale.

The country was indeed braced for structural changes and the attendant costs. But the white paper made it clear that restructuring was a necessary precondition for reaping the benefits of economic growth.

We now know, more than 40 years later, that the structural changes did indeed come to pass. The industry structure of our economy has changed.

A growing number of firms, not only manufacturing companies, have targeted the oil industry. Labour shedding in some sectors has released labour for other uses.

Chart: Wages per full-time equivalent (FTE) by industry

Oil companies have shown the capacity and the willingness to pay. Tax rules have favoured investment spending. Earnings have been solid. The companies' employees have been wage winners here in Norway.

A state-of-art oil service industry has emerged. New products and technological solutions have been developed. For many, the contracts on the Norwegian continental shelf have been a springboard to new export markets.

The oil and gas industry has been decisive for the strong growth in the Norwegian economy over the past 40 years. The past 15 years stand out. From the end of the 1990s, the price of North Sea oil rose from about USD 10 per barrel to over USD 100 per barrel.

Chart: Business investment

High oil prices and a profitable petroleum production industry have been accompanied by record-high oil investment in recent years. The level in 2014 was equivalent to total investment in domestic non-oil industries. Employment has remained high and unemployment low, even when the financial crisis hit in 2008.

The Norwegian economy has made use of the tailwinds and seized the opportunities offered. The other side of the coin is an economy that has become increasingly dependent on oil, and thereby more vulnerable to changes in oil prices and petroleum revenues.

About 1 in 9 jobs in Norway, a total of 300 000, are linked to the oil industry.[2] Exports from Norway to the oil industry in other countries account for a growing share of this activity.

Chart: Labour costsrelative to trading partners

Moreover, labour costs in Norway have reached high levels. The cost level in the business sector has increased sharply in relation to our trading partners. With lower activity and earnings from the petroleum sector, oil service companies must seek other markets, which may be demanding with a high cost level.

From a unique economic position to restructuring

Oil prices have fallen by nearly 50 percent since last summer. The price decline comes on top of a planned adjustment to a lower activity level in the Norwegian oil sector.

Low growth in the world economy has restrained growth in oil consumption, while the high prices prevailing in recent years have led to increased supply and more energy-efficient production methods. Last year, growth in global oil demand hit a five-year low, while non-OPEC production was record-high.

Chart: US crude oil production

New shale oil extraction technology has boosted the global supply of oil. Over three years, US oil production rose by more than 50 percent. The additional supply from US shale oil is more than twice as high as Norwegian oil production.

Looking ahead, we must prepare ourselves for an environment of lower oil prices compared with the levels seen in recent years. It would be unwise to act on the assumption that oil prices will again settle around USD 100 per barrel.

This does not mean that Norway's oil age is coming to an end. Nearly half of known oil and gas reserves on the Norwegian continental shelf have not yet been extracted.[3] Over the past few years, large new discoveries have been made. One of them – Johan Sverdrup – is soon ready for development. The Norwegian oil service industry can expect new orders. Nonetheless, the Norwegian economy must adapt to considerably lower demand from the oil sector. From being in a unique economic position, Norway now faces a period of restructuring.

The Norwegian business sector showed a high degree of willingness and ability to shift to oil-related activity during the boom. The shift to an oil-driven economy with a high wage capacity has been a comfortable journey. The journey forward, where the oil service industry must downscale and other trade-exposed industries must grow, will be more challenging.

Chart: Labour costsrelative to trading partners

After many years of relatively high wage growth in Norway, the domestic cost level must again be brought more into line with that of our trading partners.

A necessary adjustment of the cost level in Norway can occur by two means; lower wage growth in Norway than in other countries and a depreciation of the krone exchange rate. The economic policy pursued will be of importance for how the adjustment takes place.

Without our own national currency the situation would be more challenging. The social partners would then have to do the job alone. The experience of other countries shows that this can be demanding.

Chart: Labour costsrelative to trading partners with 2015

With a floating exchange rate, the necessary adjustment of the cost level can take place faster, and may prove less painful. The krone exchange rate can function as a stabiliser. The depreciation of the krone through autumn last year indicates that this mechanism is functioning.

The monetary policy credibility built up over the years is now of considerable benefit. Continued confidence that inflation will remain low and stable over time is a necessary precondition for a pronounced weakening of the krone concurrent with a low key policy rate. The benefit associated with a currency of our own disappears if the temporary rise in inflation associated with a krone depreciation is countered by higher wage increases. The result would be a higher key policy rate and a stronger exchange rate than would otherwise be the case and, not least, higher unemployment. The social partners have a particular responsibility in this regard.

Norwegian government finances are solid. This has been of great benefit, particularly during the financial crisis. It may be tempting to increase public spending to soften the impact of a fall in oil prices on the real economy. The risk is that this may hold back the restructuring needed if oil prices remain low for a long period. Increased public spending may push up the cost of labour and crowd out other exposed industries.

When the economy meets a severe downturn, with a pronounced rise in unemployment, fiscal policy can help support economic activity. But the Norwegian economy is presently far from being in a crisis situation. Unemployment remains low.

The international economic picture is mixed

Six years have now passed since the global economy was severely hit by the financial crisis. The Norwegian economy quickly rebounded, supported by robust public finances and strong growth in the petroleum sector. Other advanced economies have experienced a more difficult time. Excessive debt, in both the private and public sector, has led to weak activity and high unemployment in many of those countries.

Chart: Gross domestic product

The situation in the euro area appears to be particularly problematic. A large portion of the workforce is idle alongside production equipment. Inflation is worryingly low. Elevated uncertainty surrounding economic developments, high corporate debt and tight bank credit standards are holding back the willingness and ability to invest. The result is a self-reinforcing mechanism that is difficult to escape.

Even though growth in the world economy is gradually picking up, it is unlikely that we will again see the high growth rates observed in the years prior to the financial crisis. Perhaps this is not something to wish for either. Recent high growth was partly driven by unsustainable borrowing.

Chart: Productivity growth in the OECD area

Several conditions suggest that the traditional advanced economies are facing more deep-rooted challenges. Productivity growth has declined since the 1970s. Through several decades to the end of the 20th century, an expanding labour force and higher education attainment contributed to driving the economy forward. Growth was accompanied by solid returns and considerably higher real interest rates than observed in recent years.

These growth impulses are fading away. The labour force is expanding at a slower pace in many countries. If productivity and labour force participation do not increase by a considerable margin, the return on fixed investment will fall. Low growth and low real interest rates may be the new norm.

The Government Pension Fund Global – further growth depends on future returns

Over the past 20 years, Norway has accumulated considerable foreign financial assets. The Government Pension Fund Global (GPFG) represents our collective savings and is to be managed to the benefit of both current and future generations. As an investor, the fund makes capital available for economic activity in other countries. The return on our capital will thereby be a result of the value added in those countries.

So far, our nation has earned a solid return on its financial assets. The cumulative return on the fund since its inception amounts to over NOK 2 000 billion. This is equivalent to about a third of the fund capital at the end of 2014.

Chart: Exports and the GPFG's dividend, interest and rental income

Given its increasing size, the fund's cash flow – dividend and interests - has also become substantial, and is now higher than the revenues from major exports such as fish and metals.

Chart: International real interest rates

Over a third of the fund is invested in bonds. The real interest rate on high-grade government bonds is the starting point for calculating the rate of return. In recent years, those yields have been close to zero.

Historically, equities have yielded higher returns than bonds. We also expect that to be the case ahead. But it is doubtful that equity prices will continue to rise at the same pace as in recent years. Weak or moderate growth in the real economy will feed through to the return on equities.

So far, the fund has earned an annual real return of 3.8 percent. We must be prepared for the possibility that it will be lower, perhaps below 3 percent.

Chart: Petroleum revenues and petroleum revenue spending

Since the turn of the millennium, the government has received substantial revenues from the petroleum sector. A large share has been saved and transferred to the pension fund. At the same time, the spending of petroleum revenues over the fiscal budget has increased. The revenue stream from the continental shelf is now declining.

Chart: Transfers to GPFG

We are approaching the point where government spending of petroleum revenues will exceed the revenues deriving from the petroleum sector.

At today's oil price, transfers to the fund will quickly fall towards zero, soon leading to a situation where its current income is limited to interest and dividend income. Next year, it may be necessary to spend some of the return to cover the non-oil budget deficit.

The GPFG is nearing the peak

The decline in oil revenues ahead gives rise to new challenges for the Norwegian economy. But we must not forget that we have a good starting point. During a period of high oil prices, we have transformed oil in the ground into financial wealth. We have avoided making public sector budgets dependent on volatile income. The fund and the fiscal rule have been the main elements of the policy pursued.

Under the fiscal rule, government spending over the annual budget, on average over an economic cycle, should equal the expected real return on the Fund – estimated at 4 percent annually. This way, the capital will also benefit future generations.

Recent years have been characterised by wide fluctuations in returns, with extreme variability during the financial crisis. Volatility on the world's stock exchanges and in financial markets impacts the market value of the fund and thereby the anchor for fiscal policy. Although the depreciation of the krone has increased the fund's current value in krone terms, this veils the fact that its international purchasing power is unaffected by changes in the krone's value. Such volatility has become more difficult to manage as the fund has grown in size.

At an oil price of around USD 60 per barrel, transfers to the fund may come to a halt. Rather, it seems that at today's level of petroleum revenue spending there will soon be a need to make transfers from the fund to the fiscal budget. Measured as a share of GDP, the oil fund may have already reached the peak.

Chart: Different return and oil price scenarios for the GPFG

The broken red line shows the trajectory for fiscal space assuming a real return of 4 percent. The estimation is based on the oil price level prevailing late last summer.

If the return is closer to 3 percent, there will be little room for increasing petroleum revenue spending over the fiscal budget. On the contrary, in the course of a couple of decades, petroleum revenue spending as a share of GDP will have to be reduced. Fiscal policy will have to be tightened.

If the oil price settles more permanently around the level observed so far this year, fiscal policy must be adjusted earlier. If petroleum revenue spending follows the real return, we will be heading for a period of sizeable fiscal retrenchment each year. At the same time, pension obligations will show a pronounced rise further ahead.

The fall in oil prices has been a reminder of the uncertainty surrounding future petroleum revenues. The same applies to the return on the fund. The three paths illustrate the uncertainties we are facing, but they also illustrate another important point.

Spending the return will ultimately lead to a flattening of the fund capital, which will then decline as a percentage of GDP. It has always been clear that this will happen at some point in the future. What is new is that this may be the case here and now. At today's oil price, the fund may have reached the peak. In that case, petroleum revenue spending as a percentage of GDP must be reduced to avoid using more than the return on the fund.

Even if the oil price and the rate of return follow a path that allows the fund to grow for a period ahead, petroleum revenue spending should be restrained. By keeping spending well below the upper bound, the need for fiscal retrenchment further ahead can be reduced.

The fiscal rule has functioned as a long-term guideline for fiscal policy for nearly 15 years. It has served its purpose. The time has now come to show restraint. A sensible risk strategy is now to refrain from increasing petroleum revenue spending further from today's level. The era of rising
petroleum revenue spending may be behind us.

Conclusion

The more than forty-year-old white paper on the role of the petroleum industry in Norwegian society was far-sighted and proved to be on the mark. The structural changes described in it have come to pass. The growth in prosperity was more difficult to predict. The development of an advanced oil service industry is an industrial adventure in its own right. We have extracted large quantities of oil and gas at very favourable prices, and have set aside a sizeable portion of the revenues – to the benefit of future generations.

Norway's oil age is far from over. But activity in the petroleum sector has passed the peak. In addition, we must be prepared for lower returns in the oil industry.

The white paper also provides a glimpse into a time when belief in government intervention in the economy was far greater than today. That regulatory optimism has diminished significantly. We are left with an important recognition: The key to economic progress is the ability to restructure.

We cannot rely solely on the sea to carry us forward: Let me again quote Kielland:

"It is not true that the sea is faithless, for it has never promised anything..."

Where our journey takes us is our own responsibility.

Thank you for your attention.

Footnotes

[1] Alexander Kielland (1880): *Garman & Worse* (Translation by W.W. Kettlewell).

[2] Estimate based on calculations in Blix Prestmo, Strøm and Midsem (2015): *Ringvirkninger av petroleumsnæringen i norsk økonomi* [Spillovers from the petroleum industry to the Norwegian economy]. Forthcoming report from Statistics Norway. Petroleum-related exports from mainland Norway are also included.

[3] Including reserves that have been approved for development by holders of oil rights and other proven resources in fields and discoveries. Source: *The shelf* in 2014, Norwegian Petroleum Directorate