Øystein Olsen: Managing Norway's oil wealth

Speech by Mr Øystein Olsen, Governor of Norges Bank (Central Bank of Norway), at the "Desemberkonferansen" oil and gas conference, Kristiansund, 3 December 2015.

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Accompanying charts can be found on the Norges Bank's website: Charts (PDF).

Please note that the text below may differ slightly from the actual presentation.

In 1969, on the day before Christmas Eve, Norway as a nation received the gift of the century: we struck oil! The Ekofisk oil field was the largest subsea oil field ever discovered. The discovery of oil was the start of an extraordinary era for the Norwegian economy.

Chart: OECD countries' per capita GDP in 1971

When the first oil was brought to the surface in 1971, income levels in Norway were low compared with other western countries.

Chart: OECD countries' per capita GDP in 2014

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

It was established at an early stage that Norway's 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 from this sector would accrue to the state. The stage was set for greater prosperity, with prospects for growth in both public and private consumption.

The discovery of oil in the North Sea generated a wealth of opportunity for Norwegian business and industry. The extraction of oil at great sea depths would require the development of new technologies. This entailed the building up of expertise in our own country, which would secure a full order book for many years ahead – and not only off our own shore. The activities on the Norwegian continental shelf would also provide a boost to other industries in Norway.

Chart: A new market for the shipbuilding industry

And the timing was perfect: economic stagnation and competition from Asian countries had brought the Norwegian shipping industry to the brink of a crisis. With the discovery of oil, an adaptable shipbuilding industry and the oil companies were soon on good terms.

Building up a new industry and spending the revenues generated also brought a new set of challenges, and in 1974 these challenges were the subject of a government white paper, Report no. 25 to the Storting, entitled "The role of the petroleum industry in Norwegian society". To provide room for the oil sector and higher consumption of goods and services, other industries had to give way. The mechanisms described in the white paper are familiar:

> *"A transfer of production and jobs between firms and industries can occur via increased domestic cost pressures."*

So, the nation was prepared for restructuring and for the costs this would involve. But the white paper also made it clear that, in order to reap the benefits of economic growth, restructuring would be necessary.

We now know, more than 40 years later, that structural changes were indeed made. The industry structure of our economy has changed. A growing number of firms, and not only in the engineering industry, have targeted the oil industry. Labour shedding in some sectors has freed up labour for other uses.

Chart: High wages in the oil industry

Oil companies have had the capacity and the willingness to pay. Tax rules have favoured investment spending and earnings have been solid. Oil company employees have been wage winners here in Norway.

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

Chart: Growth in oil investment

High oil prices and a profitable petroleum production industry have led to record-high oil investment in recent years. The level of investment in 2014 was equivalent to that of all the domestic non-oil industries combined. The positive spillovers to the oil service industry and other firms have been substantial. Employment has remained high and unemployment low, even when the financial crisis hit in 2008.

A large share of the business sector and the labour market is now linked to the oil industry. A relatively small number of jobs are directly involved in oil and gas production. But if account is taken of all the suppliers to the petroleum sector, about 1 in 9 jobs in Norway, a total of about 300 000, were linked to the oil industry in 2014[1]. A growing number of these jobs are related to exports of oil extraction equipment.

The oil and gas industry has played a decisive role in the strong growth of the Norwegian economy over the past 40 years. The past 15 years stand out in particular. But this dependence on oil has also made the Norwegian economy vulnerable to changes in oil prices or a decline in petroleum revenues.

Chart: High wage growth (not incl. the krone depreciation over the past two years)

High domestic labour costs have also increased the Norwegian economy's vulnerability. The cost level in the Norwegian business sector has increased sharply in comparison with our trading partners.

A rise is followed by a fall, and oil prices have fallen by more than half since last summer. As activity and earnings from the petroleum sector decline, oil service companies must seek entry into other markets. With a high domestic cost level, that task may prove demanding.

Chart: Fall in petroleum investment

A decline in activity on the Norwegian continental shelf has long been anticipated. The fall in oil prices has accelerated and amplified an announced decline in activity. Norwegian exports to other oil-producing nations are also in decline.

This does not mean that the oil age is now nearing an end. Nearly half of known oil and gas reserves on the Norwegian continental shelf have not yet been extracted[2]. Large new discoveries have been made over the past few years and the Norwegian oil service industry is still receiving new orders. Nevertheless, the Norwegian economy must now adapt to considerably lower demand from the oil sector.

After many years of relatively high wage growth in Norway, the domestic cost level must again be brought more closely into line with that of our trading partners. A necessary adjustment of the cost level can occur in two ways: through lower wage growth than in other countries or through a depreciation of the krone exchange rate.

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[1] 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.

[2] Including reserves approved for development by holders of oil rights and other proven resources in fields and discoveries. See *The shelf in 2014*, Norwegian Petroleum Directorate.

Over time, monetary policy can only influence inflation. Monetary policy cannot assume a primary responsibility for delivering the necessary structural changes in the Norwegian economy. But via the exchange rate channel, monetary policy can help facilitate the necessary restructuring process.

Chart: High wage growth (incl. the depreciation of the krone)

Without our own national currency the situation would have been more challenging. The social partners would have had to go it alone. The experience of some European countries shows that this can be demanding. With a floating exchange rate, the necessary adjustment of the cost level can take place faster and be less painful. The krone exchange rate functions as a stabiliser. The depreciation of the krone through the past year indicates that this mechanism is functioning.

As long as there is confidence that inflation will remain low and stable over time, the krone can depreciate markedly even if the key policy rate is low. The benefit of a national currency is lost if the temporary rise in inflation due to the depreciation is countered by higher pay increases. The result could then be a higher key policy rate and a stronger exchange rate than would otherwise be the case, and higher unemployment. The social partners have a particular responsibility in this regard.

Oil companies had already given notice of lower investment, workforce reductions and cost cuts in winter 2014. This tendency has been reinforced by the sharp fall in oil prices, resulting in spillover effects on the mainland economy and rising unemployment.

Chart: Key policy rate reduced

As long as inflation expectations are firmly anchored, monetary policy can serve as a first line of defence when the economy turns down. Since December 2014, Norges Bank has reduced the key policy rate by a total of 0.75 percentage point, to 0.75 percent. The weaker outlook for the Norwegian economy has been given weight in our assessments.

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. Large shares of the sizeable revenues from the petroleum sector over the past 20 years have been transferred to the oil fund. Norway's sound public finances have been a great advantage to the economy, particularly through the financial crisis. But the management of the government's large petroleum revenues through our 40 year-long oil history has not always been equally well planned. In the mid-1970s, the budget deficit – including petroleum revenues – reached a high level. And we could not know then that oil prices would more than double a few years later – with the second oil shock in 1979, known as OPEC II.

But we learned from our mistakes. The oil fund mechanism in 1990 and the fiscal rule in 2001 were introduced to discipline fiscal policy in such a way that Norway's petroleum wealth would also benefit future generations. Oil fund assets are now equivalent to more than twice the GDP of Norway's mainland economy, and the oil fund, or the Government Pension Fund Global (GPFG), is today one of the world's largest sovereign wealth funds.

The GPFG represents the nation's savings, to be managed for the benefit of both current and future generations. As an investor, the GPFG makes capital available to other countries for economic activity, and the return on that capital will depend on the economic performance of those countries.

The GPFG is a long-term, responsible investor. The objective of investment management is to achieve the highest possible return at an acceptable level of risk.

Chart: Change in market value since January 1998

So far, our nation has earned a solid return on its financial assets. The cumulative return on the GPFG since its inception amounts to over NOK 2 600 billion, equivalent to about a third of total GPFG capital at the end of 2014.

Chart: Lower yields

Over a third of the GPFG is invested in bonds. Real yields on high-grade government bonds provide a basis for the rate of return that can be expected ahead. In recent years, those yields have been close to zero.

Low bond yields reflect global economic conditions: Governments, businesses and households are seeking to save more, while demand for safe investments has increased. Central banks' substantial asset purchases are pushing in the same direction. However, low yields may also reflect modest expectations of economic growth further ahead.

There is no return without risk. The GPFG features a very long investment horizon and a sizeable capacity to bear short-term risk. This is why the chosen allocation to equities is relatively high. It is also the reason why the GPFG has moved into real estate. The authorities have asked Norges Bank to assess whether the allocation to real assets should be increased. Any increase in the allocation to real assets will probably be at the expense of bonds.

Chart: Spending of petroleum revenues almost level with revenues

Petroleum revenue spending over the fiscal budget has increased since the turn of the millennium. The revenue stream from the continental shelf is now declining. We are approaching the point where government spending of petroleum revenues will exceed the revenues deriving from the petroleum sector.

Chart: Transfers to GPFG at an end

At today's oil prices, transfers to the GPFG will soon fall towards zero. We will then be in a situation where the GPFG's current income is limited to interest and dividend income. According to the 2016 government budget, some of the return on the GPFG will be used to cover the non-oil budget deficit.

Oil prices have fallen sharply over the past six months. Even if prices edge up again, we have been reminded of the uncertainty associated with future revenues. The oil fund mechanism shields fiscal policy from such revenue fluctuations in the short term.

We have the fiscal space to stimulate overall demand if this should prove necessary again. But we must also remember that, with lower oil prices, the government will over time have less money to spend. Fiscal tightening may become necessary further ahead. Refraining from increasing petroleum revenue spending further from today's level is a sensible risk adjustment. The era of rising petroleum revenue spending should for the most part be behind us.

The more than 40-year old white paper about the role of the petroleum industry in Norwegian society was both far-sighted and accurate. The restructuring it described has occurred, although the growth in prosperity that followed in its wake was more difficult to predict. The emergence of an advanced oil service industry is an industrial success story. We have extracted large quantities of oil and gas in a period of very high prices. And we have set aside a large proportion of the revenues – for the benefit of future generations. In spite of some mistakes and a fair share of luck along the way, we would have to say that Norway's petroleum wealth has so far been managed well.

Norway's oil age is far from over. But activity in the petroleum sector has passed the peak. We must also be prepared for lower returns in the oil industry. In the period ahead, we should keep an important insight in mind: the key to economic progress is the ability to restructure.

Thank you for your attention.