Øystein Olsen: Managing natural resources - lessons from Norway

Speech by Mr Øystein Olsen, Governor of Norges Bank (Central Bank of Norway), at the seminar "Preparing Mozambique for natural gas", Bank of Mozambique, Maputo, 27 March 2019.

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Accompanying slides.

Let me start by expressing my heart-felt sympathy for the victims of the cyclone that struck your country. I am both honoured and saddened to be here at this difficult time. I can hardly imagine the pain and sorrow so many of your people are now experiencing.

Mozambique is a country of great beauty and is now an emerging leader in the natural gas industry.. For Norway, on the other hand, petroleum production peaked some years ago. As a nation, we have benefited tremendously from the revenues and the activities. Let me share some of our experiences with you.

Norway is a small, open economy, which was transformed by the discovery of oil on our continental shelf almost 50 years ago. Back in 1970, the year after the first discovery, income levels were relatively low compared with other western countries. That picture has changed completely. Today, Norway ranks among the richest countries in the world.

For some countries, natural resource discoveries have been identified as a curse. For Norway, the discovery of oil has been a blessing. We have managed to transform oil and gas resources into real and financial assets. Luck has been supplemented with what I dare to claim is sensible resource management, based on a well-functioning democracy and longstanding and trustworthy institutions.

The first point I would like to emphasise is related to ownership of the natural resources. At an early stage, it was concluded that such resources belong to the Norwegian people.

Direct government participation in the industry and an extraordinary tax rate on oil company profits, currently 78 percent, ensure that most of the resource rents flow into government coffers. The government also has direct ownership stakes in the most profitable oil fields.

Chart: From natural resources to financial wealth

Petroleum revenues have been redistributed to all inhabitants in form of investment in infrastructure and public services, such as education and health care. At the same time, revenues have been put aside.

This brings me to my second main point. It is important to remember that although revenues from the extraction of a depletable resource count as income in the national accounts, these revenues are of a special kind. In many ways, it would make more sense to view them as transformation of wealth – from natural resources in the ground to financial assets. This is the idea behind the Norwegian sovereign wealth fund, known as the Government Pension Fund Global.

Chart: The petroleum fund mechanism

All oil revenues are channelled to the fund. The fund’s capital is invested abroad, mainly in equities, but also in bonds and real estate. Investments are spread across most markets, countries and currencies to achieve broad exposure to global growth and value creation, and ensure good risk diversification.

The fund was established in 1990, during Norway's deepest recession in the postwar period. At the time, it was not obvious that the fund would gain much in value. The government ran budget deficits in the following years. The first capital transfer to the fund was made in 1996, reflecting a net fiscal surplus. From then on, the value of the fund started to increase rapidly. Higher oil revenues towards 2000 led to calls for higher spending. Political pressure to spend more evolved. A fiscal rule was established in response to this development. The aim was to phase petroleum revenues into the economy gradually.

The fiscal rule guides the annual transfers from the fund to the fiscal budget. It limits average petroleum revenue spending over the cycle to the expected real return on the fund – currently estimated at 3 percent – over a business cycle.

The rule established a long term petroleum revenue spending strategy. The government may deviate from the 3 percent rule depending on the circumstances. If the economy is facing a severe downturn, there should be room for a more expansionary policy. During the great financial crisis, the Norwegian government was able to allow public spending to increase in order to counteract the downturn. More recently, petroleum revenue spending over the fiscal budget has been less than 3 percent of the value of the fund. This has happened in a situation where the economic cycle has turned up at the same time as the value of the fund has increased rapidly. Fiscal restraint has proved to be a wise policy.

Together, the oil fund and the fiscal rule have shown themselves to constitute a robust framework. This framework enjoys cross-party support. After the fiscal rule was introduced in 2001, all succeeding governments have based their policy on this guideline

The advantages of this framework are many. First, it allows us to separate spending from income. When we smooth petroleum revenue spending over time, we reduce the risk of crowding out private businesses. At the same time, we protect public budgets from substantial fluctuations in revenues.

Second, the considerable savings amassed in recent years mean that future generations will also benefit from petroleum revenues. Norway's petroleum wealth does not only belong to those living today. We try to be good stewards, like the farmer who cares for the soil and passes it on to succeeding generations so they too can harvest from it. In the case of Norway, we pass our natural resource wealth on to our descendants in the form of financial assets.

Chart: The GPFG – Governance model

Before continuing, let me say some words about the fund's governance structure and the interaction between the Norwegian parliament, the Ministry of Finance and Norges Bank. Norges Bank has been tasked with managing the fund since its establishment. The legislative basis for the fund is decided by the parliament, while the Ministry lays down the management mandate that is issued to Norges Bank. Moreover, the Ministry has established a practice whereby decisive changes are submitted to the parliament for approval.

According to the management mandate, the Norges Bank shall seek to achieve the highest possible long-term real return with moderate risk. The mandate sets the benchmark index and tracking error limits. In addition, the mandate imposes constraints on the fund's investment universe. The investment strategy is largely determined by the mandate. The role of the Bank and its Executive Board in formulating and elaborating the management mandate is to advise the Ministry. This is an important job.

For the Ministry, the formulation of the management mandate, reporting and supervision will be important tools for ensuring that investments are managed in line with objectives. Thanks to its extensive reporting, the fund enjoys a reputation of being one of the world's most transparent sovereign wealth funds. For a fund with the entire population as actual owners, transparency is vital for ensuring democratic control and confidence in investment management.

Chart: A large fund

Since the first transfer to the fund was made in 1996, the value of the fund has risen to almost three times mainland GDP. During periods of substantial oil and gas revenues, large capital transfers have been made to the fund. In this chart this is shown as the dark blue bars. The return on the fund has been solid, as shown as the light blue bars. The accumulated income from financial assets makes up a significant part of the fund's current value. The yellow bars in the chart show fund withdrawals used to finance the structural non-oil budget deficit.

Both returns and exchange rates vary over time. Rising equity prices have generated substantial gains for the fund in recent years. But this means we must also be prepared for losses when markets turn, as they did last year.

As I have said, Norwegian society has gained in several ways from petroleum extraction. The earnings from selling oil and gas are only a part of the story. The emergence of a highly advanced and skilled offshore industry is another part. This is the third experience I would like to share with you. From the start of Norway's petroleum era, we needed foreign technical expertise. Foreign oil companies were required to develop the petroleum fields in partnership with a state-owned oil company. Just as important as a certain degree of national control was the transfer of knowledge.

There was also a clear expectation from the very beginning that Norwegian industry and service providers should be involved. The timing was perfect. In the 1970s, the Norwegian shipbuilding industry faced a sharp drop in demand for ships. The industry had resources and skills that could be reoriented to production of platforms and other oil industry inputs.

Since then, Norway has benefitted greatly from the opportunities that the petroleum sector has provided. The spillover effects from the oil sector to the wider Norwegian economy are substantial. Oil-related jobs can be found throughout the country. More than 10 percent of all employed persons in Norway either directly or indirectly work for the oil industry. Innovation and skills development in the industry have also benefitted other sectors.

From where Norway stands today, one may get the impression that our history as an oil nation is only a story about success. This is not the case.

Chart: Oil and gas revenues and government spending

Policymakers' handling of Norway's newly discovered petroleum wealth got off to a rather bumpy start. During the first 25 years of oil production, Norway experienced two deep recessions. Both downturns were rooted in wildly optimistic income expectations. In the 1970s, public spending surged before oil export revenue started to kick in. Eventually the government had to tighten fiscal policy. In the 1980s, a credit-fuelled consumption boom in the private sector led to necessary cut-backs after the oil price plunge in 1986. The turbulence made clear how vulnerable a small economy is to terms of trade disturbances. Let that part of our history stand as a warning. But lessons were learned, and formed the basis for the framework that was put in place from 1990 and onwards.

During the past 50 years, Norway has experienced how oil prices can change almost overnight in response to international politics, economic disturbances or disruptive technologies. Recently, a new risk factor has emerged. Impacts of global warming are high on the international agenda. Policy measures and shifts in consumption patterns and production methods towards lower emissions will reduce demand for fossil fuels. The change to a more climate-friendly policy may have a considerable impact on petroleum prices.

Looking ahead, Norway must now be prepared for a time when the petroleum industry is no longer expanding, but gradually declining. We will need innovation and growth in other industries to pick up the slack. We have always known that oil and gas activities will be phased out sooner or later. Oil and gas are non-renewable resources. A stricter global climate policy or a green-technological breakthrough may mean that this will occur sooner than foreseen earlier.

In contrast to Norway, Mozambique is at the beginning of its gas era. I hope the lessons from Norway can give you some guidance on your way forward.

One main lesson is that depletable natural resources must be viewed as part of a country's wealth. Revenues from extracting oil and gas is just a transformation of this wealth and should be managed with a long-term prospective.

At the same time, the development of oil and gas reserves can have valuable spillovers to the rest of the economy. Not only demand from the petroleum industry, but also innovations and technological skills developed in the industry can be of great value to other sectors. The productivity gains to the economy can be more long lasting than the petroleum industry itself.

And never forget: The real test of how a petroleum producing country has managed its fortune, will come when the boom in the petroleum industry ends. Oil and gas resources do not last forever. Emphasis should therefore be given to further development of human capital as the primary source of long-term prosperity and wealth.

Thank you for your attention.