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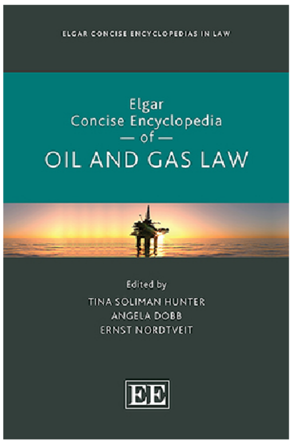

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Ole Gunnar Austvik:

The Norwegian petroleum model

As a newcomer to the industry in the 1970s, in a unique government-business mixture, Norway succeeded in building a competitive national oil and gas industry in only a couple of decades. It is now Norway's largest industry. The Norwegian state acted with a firm hand as soon as it was clear that reserves were large and extractable. With industrial and market maturity, changing oil prices, and a more liberal international economic regime, the model changed dynamically from a strongly interventionist one to a more regulative. The state remained at the helm to maintain political control and to collect most of the economic rent. As the biggest capitalist in the sector, the Norwegian state now possesses the world's largest Sovereign Wealth Fund (SWF), the "Petroleum Fund", worth some 1.5 trillion U.S. dollars (2024), protecting the country against Dutch Disease and resource curse problems. However, the focus on non-petro industries has been weakened, and, together with climate change and security concerns, has added a need for policy to be considered in a broader way.[1]

[1] Austvik 2012 provides a theory-based discussion of the shifting roles of the Norwegian state as landlord and entrepreneur in the petroleum sector. Austvik 2014 provides more empirical description of the developments. Austvik 2019 discusses Norwegian energy and the EU. Much of this article is based on these three publications. Detailed and updated facts and figures about Norwegian petroleum activities can be found at norskpetroleum.no.

Initially, the prospects for Norway to become a petroleum producer were bleak. In 1958, the Norwegian geological survey (NGU) stated in a letter to the Ministry of Foreign Affairs (MFA) that it was impossible that the Norwegian Continental Shelf (NCS) could contain any "oil, coal or sulphur" at all. With low oil prices at the time, this perception contributed to a limited interest from the international oil companies in the 1960s.

Accordingly, exploration efforts started with rather liberal conditions for companies after the first round of concessions in 1965. In the second concession round in 1969, the state put stricter regulations into effect to secure economic interests and to support the Norwegian supply industry and labor interests (Rudsar 1998, 22). After it was anticipated that production would become profitable, especially after the discovery of the Ekofisk field in 1969, political ambitions for national control were strengthened. It was agreed across party lines that oil revenues, and particularly the expected economic rent, should "benefit the whole nation".

The vision and goals for the establishment of an independent Norwegian petroleum administration and industry were expressed in the Storting (the Parliament) in 1971, later known as the "10 oil commandments". The commandments should secure national and state control over operations and revenues, including the establishment of a national oil company (Statoil, changed name to Equinor in 2018).[2]

Statoil was established by a unanimous Parliament decision as important in developing a national petro-industrial system. The Norwegian Petroleum Directorate (NPD) (from 2024: Norwegian Offshore Directorate) was established at the same time as a regulatory body under the Ministry of Industry, later the Ministry of Petroleum and Energy (MPE) (from 2024: the Ministry of Energy).

Norwegian authorities had high political ambitions about controlling the industry and the international oil companies. The Norwegian referendum in 1972 not to join the European Economic Community (EEC) reinforced national energy policy efforts. The development was also influenced by the oil crises in 1973/74 and later in 1979/80. Firstly, the high prices led to an industry that was far more profitable than previously expected. Secondly, the nationalization of the oil companies and the strong state involvement in member states of the Organization of Petroleum Exporting Countries (OPEC) reinforced the national and international acceptance of a strong state engagement. The continued associated membership in the International Energy Agency (IEA) from 1974 showed that as a petroleum producer, Norway wanted to play an as independent role as possible within the Western community. This in-between position was later underlined when Norway started a careful interplay with OPEC to stabilize oil prices in 1986.

The Labor Party, being dominant after WWII, often placed their own party members in leading positions in the bureaucracy and state-owned companies. The MFA was from the start important in making border treaties with countries, such as the United Kingdom and Denmark. Tight links between Statoil, the bureaucracy and the government were established through the Labor party.

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[2] Stortingsmelding 1971; unofficial translation by the Norwegian Petroleum Directorate (NPD 2000).

Statoil was to be the most important instrument for the development of a Norwegian oil industry and a locomotive for the rest of the Norwegian industry. Statoil was also given huge shares of the most attractive fields and preferentially treated in several ways. Oil policy also became nation building. Some even argued that the interests of Statoil were synonymous with Norwegian national interests.

However, Norway needed the assistance of international companies' competence and capital. The internationals were from the start invited as minority partners in most fields to acquire technology and knowledge to explore, drill, produce and sell oil and gas. After a period of infant industry protection, Norwegian companies could gradually take over the roles of the internationals.

In these processes, the government represented by the MPE should approve all steps at all levels to promote both competition and cooperation such that the value of each license would be maximized (MPE annual). The State by the Ministry of Finance took all taxes (except local property taxes), including a special tax on petroleum activities to capture most of the rent.[3] By coupling with international companies, an internationally competitive Norwegian petroleum industry was built in a relatively short time.

With lower profitability after 1986, however, as in many oil-producing countries, private companies become more important. The lowest oil prices since the first oil price shock in 1973/74 showed how vulnerable the oil and gas industry were to changes in this single variable. The new situation changed the Norwegian state's petro-political entrepreneurship. Lower profit margins made companies stronger in relation to the state, while the situation also showed that the state and the companies had many interests in common.

It was difficult to lower costs in the short run. Investments were irreversible, organizations were slow to change, and political parties (or interest groups) resisted (Engen 2002, 158-201). Consequently, the industrial structure of the early 1990s looked much like the one from the 1970s and 1980s. Many of the solutions required more than the efforts of single companies.

The government again took on the role of catalyst and coordinator in what from 1993 was known as the NORSOK (Norwegian Shelf Competitive Position) cooperation. The content of the role this time was to release and accommodate industrial solutions in accordance with the interests of the state, oil and gas companies, the supply industry and the trade unions. NORSOK contributed to the introduction of new technology and organizational models.

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[3] The net cash flow (net government take) from the petroleum sector is at present dominated by a 78% tax on companies' economic profit (27 % general corporate tax + 51 % special tax) and 100% of net revenues from the SDFI-shares. In addition, the government receives a dividend from Statoil profits and royalties, area fee and CO_2 tax. Under the SDFI arrangement, the state pays its share of investments and costs, and receives a corresponding share of income from a production license. The expenditures are accounted when they occur, so are also revenues (no depreciation). Through the SDFI the state takes all costs and the risk, but also all the economic rent. Typically, the SDFI holds the largest shares in the biggest and most profitable fields.

However, the process lost gradually much of its momentum (ibid. 291-311). The supply industry increasingly took on sub-enterprises in projects, in contrast to the early phase when the oil companies controlled most details. The national entreprise, with Statoil in the main seat, was changed. Gradually, into a new century, the state took on a more coordinating role towards the industry, and the oil companies became the main entrepreneurs for field developments and operations. In contrast, the supply industry increasingly became larger sub-entrepreneurs.

Due to its production potentials, market shares, and the geographical localization of resources, Norwegian petroleum policy was at an early point involved in international economic conflicts of interests and political currents. A preference for Norway as a natural gas seller was surprisingly supported by an event resulting from the Cold War situation. In order to prevent Western European countries from completing a notable gas contract with the Soviet Union in 1982, the U.S. introduced a ban on all American exports to firms supporting the project to prevent it from being realized. The U.S. urged Norway to increase its gas exports as a substitute for Soviet gas. Optimism was considerable in Norway over the prospects of more and more profitable natural gas sales. However, the final terms for the Troll contracts in 1986 were adjusted to political and market realities, rather than high politics.[4]

Already the Ten Oil Commandments (1971) mentioned possible foreign policy implication of petroleum sector and has been discussed in Austvik (1989 & 1991), Kibsgaard et.al. (2000). The politicization, securitization and weaponization of energy as part of the Russian invasion of Ukraine in 2022 has more explicitly brought attention to security implication of Norwegian petroleum activities. Key companies operating (such as Equinor, Gassco, and others) were required to comply with certain provisions of the Norwegian Security Act, and key personnel in these companies to have security clearance (Støre 2022).

Gradually natural gas exports became more important in addition to crude oil, which required long-term infrastructural investments and bindings downstream to purchasers, all in the EU/UK. In the early 1970s, each gas field was sold by the respective owners ("depletion" or "field" contracts). From 1977, Statoil negotiated alone on behalf of the licensees. Then the Gas Negotiating Committee (Gassforhandlingsutvalget, GFU) was established in 1986, with Statoil as leader and no foreign participation. The GFU gained responsibility for selling all Norwegian gas independently of who owned it, but to be approved by the MPE. The purpose of the centralized gas sales was to maintain a strong market position in relation to European buyers who had organized themselves as a monopsony. A gas Supply Committee (Forsyningsutvalget, FU) was in addition established in 1993, as a counseling body for the MPE, this time with foreign companies as participants. The FU evaluated developments in individual fields and considered which should supply each contract.

Under these arrangements the Norwegian state (the MPE) directly intervened in decisions about natural gas sales and production. Statoil continued to play an

[4] For further details about the natural gas conflicts of the 1980s involving Norwegian petroleum in international conflict, see Jentleson 1986; and Austvik 1991.

important role, but government control became stronger. The establishment of Statoil was the most important single instrument used by the state to ensure that oil activities "benefit the whole nation". However, skepticism about the dominant role of the company gradually emerged. Statoil was argued to have its own ambitions and sought to influence the political debate (Grayson 1981).

To reduce the influence of the company, the State's Direct Financial Interests (SDFI) was established in 1981, which significantly reduced Statoil ownership in licenses. Investment and operational costs in the SDFI were paid directly over the state budget, and revenues equivalently accounted. With the new system the state took the largest single part of the financial risk for field developments, the entire economic rent from their part of a license, as well as an equivalent possible loss. Thus, the MPE exercised power over the industry not only as regulator and landlord, but also through direct ownership of fields and companies.

The GFU and FU arrangements were important backdrops for discussions with the EU from the end of the 1990s, towards a more liberalized European natural gas and electricity markets. The EU and the European Economic Area (EEA) agreement challenged established preferential arrangements for the Norwegian petroleum industry. On oner side, EU competition law and relevant directives appeared eventually as rather uncontroversial for the industry, as most of the supply industry had already become internationally competitive.

EU argued however that competition law was relevant also for pipelines on the NCS, and that Norway should open for Third Party Access (TPA) (EU 1998). This was for a long time resisted by Norway. Furthermore, the EFTA Surveillance Authority (ESA)[5] examined legal aspects concerning the GFU arrangement. After long discussions the Norwegian government decided to terminate the GFU-FU arrangements for gas production and sales in 2001 (EU 2002). A TPA system was eventually established, and contracts were to be made directly between individual producers and purchasers in the market, not by the GFU. However, some 2/3 third of contracts were still signed by Statoil (owned by the state) or as representative of natural gas in direct state ownership.

EU demands in the late 1990s and onwards took place at the same time as Statoil's partly privatization in 2001. As privatized company the decisions that formally had been internalized as a state company had now to be defined and made explicit as to how the state should take care if its interests. Two new fully owned state agencies were created. *Petoro* should take of the SDFI, while *Gassco* should secure open access for transportation of natural gas. Earlier, both the SDFIs and most of the transportation system were handled by Statoil. The new *Gassled* tariff system was also introduced and offered equal tariffs for everyone using the Gassco system (MPE 2002).

Even with a more liberal EU regime and a privatized Statoil, the Norwegian government managed to give the new structure a form that, at the same time, maintained national control. As the state remained a 100% owner of the SDFI and main shareholder in Statoil (some 70% of the shares), it could still have strong *de*

[5] ESA plays the same role towards European Free Trade Association (EFTA) countries in controlling the implementation and practicing of EU law and directives in the same way as the EU Commission does towards EU member states.

facto direct say in decision-making. The concentrated ownership structure also implied that it remained a dominant seller of Norwegian gas, even though the GFU and FU constructions were abolished. The new government – business mixture implied more state organs, new companies, and regulatory agencies, but at the same time less, direct interventions in commercial decisions.

In terms of broader social perspectives given an industry as more profitable than others, fear was early on Dutch Disease, and even more resource curse, problems. Especially the dramatic drop in oil prices in 1986 showed that the oil sector was not only filled with money and opportunities, but also great risk. A relatively careful attitude towards the management of petroleum resources, coupled with concerns over the macroeconomic effects of the sector, led in the 1970s to a decision that production should be limited to between 50 and 90 million tons of oil equivalents (mtoe) per year. This regulative measure on production was replaced by a regulation of investments in 1983 ("Tempoutvalget"). However, none of the measures were part of any unified plan for production levels and the management of oil and gas revenues. Instead they were an expression of a lack of macroeconomic government control (Noreng 1984).

The state, through the SDFI, a strong taxation system and ownership in Statoil, took most of the losses at the time when prices fell, even though companies also lost. Macroeconomic experiences from the 1970s and 1980s initiated a discussion about establishing a fund to split oil money earnings from expenditures. The idea was to transfer resources from the NCS to international financial markets, which would give a higher and more stable yield over time. This was in line with the Hotelling rule (1931), to protect the economy from boost and boom cycles, and to use of the income in a smooth and long-term (and over generations) manner.

The resulting establishment of the Petroleum Fund in 1991 ensured that annual public budgets were no longer directly influenced by fluctuations in oil and gas revenues. When petro revenues were not changed into NOK, the pressure for an appreciation of the Norwegian currency was weakened, as well as domestic demand was controlled. The fund had also significant effect on oil and gas production policy. Not only earnings and expenditures were decoupled, but also activity level on the NCS and macroeconomic concerns. The removal of production restraints increased the domestic maneuvering room for oil and gas investments. However, how the Petroleum Fund is eventually to be used is still rather unclear, in spite of renaming as a pension fund (from 2006 it is formally called the Government Pension Fund – Global). Among the global SWFs it ranks top and it owns 1-2 per cent of world share capital and government bonds.[6]

Significant efforts have been made to ensure against its domestic misuse, such as the 3 per cent Fiscal Rule ("Handlingsregelen"), determining how much can be

[6] Source: International Forum of Sovereign Wealth Funds, www.ifswf.org. A SWF is a state-owned fund held by the respective national central banks. They are investing globally in real and financial assets such as stocks, bonds, real estate etc. SWFs are funded by revenues from trade surpluses and the accumulation of foreign-exchange reserves. Since the turn of the century they are created by commodity exports (such oil and gas for Norway and countries in the Middle East) or from general trade surpluses (such as for China).

used to consolidate state budgets. There appears to be a consensus across party lines that the amount of petro money to be used in the economy should not contribute to increased inflation. There is little controversy (although not zero) in Norway about the model – most people are content to have a professional petroleum industry, a healthy fund, and political control.

However, after the partly privatization of Statoil in 2001, governance of petroleum policy is weakened through state inaction, across party-lines. There was not much political discussion about the company's merger with Hydro in 2007, nor about its many losses in its foreign investments, or its international growth strategy. Most important, the focus on non-petro industries and diversification of the economy has been weakened (the "Oil Shadow"). Fish farming has grown to be Norway's second largest export industry (most raw and untreated salmon), but for longer-term sustainability, the economy needs diversification towards knowledge-based industries, whether based on fish or energy as raw materials, or other input factors.

Maturation of the energy industry and of markets, environmental and climate concerns and risks involved, have contributed to gradually move policy from focus on energy and money themselves mostly, to a broader and more holistic perspective, partly in realist vs. idealist domestic disputes, including relations to the EU. Some of it is referred to as a "Climate Split" between desire for energy and economic growth on the one side, and nature, environment, and climate on the other. With the Russian invasion of Ukraine with following politization, securitizing and weaponizing of energy production, infrastructure, and markets, security policy is another externality concern of the activities. Challenges are now multi-sectorial. In the transition to a greener, more sustainable, and secure society, consensus-based long-term goals will be central for a continued active Norwegian state to be as successful as it was in the build-up of the petroleum sector from nothing.

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