

How Norway Captures a Higher Share

Norway's management of its upstream oil and gas resources is legendary. Norwegians are proud of their success and the Government enjoys the respect of industry and the confidence of Norwegians.

Norway captures a high share and at the same time promotes cost control and innovation so that the resource value is maximized for all participants. Norway then adds to these two already remarkable achievements by investing its petroleum revenues in a way that generates added benefits in terms of interest earned on these investments, which in turn leads to broader economic diversification.

How is Norway able to capture such a high share? This question is often asked and almost always answered incorrectly. Most answers attribute the high share to Norway's state owned company – StatOil or, more recently, to the State's Direct Financial Interest (SDFI).¹ This attribution is also false. While Norway indeed benefits from its equity share, the SDFI is essentially subject to the same taxation regime as all companies. StatOil is managed as a completely private company, although the government of Norway does own shares from which it receives dividend payments. Others see the answer simply as Norway being tough negotiators with industry because they are socialists.² Again, this answer is ill informed. Interestingly, Norway's high government share is almost never attributed to the application of competitive-market principles. The fact is that Norway applies these principles more broadly and consistently than any other oil and gas jurisdiction.

¹ SDFI was created on January 1, 1985 as a separate juridical entity managed by Statoil. Subsequently (2001) a new state-owned management company - Petoro - was created to manage the SDFI.

² Socialism is often associated with communism and government control of the economy, and contrasted with capitalism. This causes confusion. Communism, where the means of production are owned by the State is better contrasted with individualism or private ownership. Capitalism has nothing to do with either. The goods and services of all modern economies are produced predominately by machines and other forms of capital. This is true of the United States, Canada, and China. Socialism, on the other hand, is the view that private ownership can lead to extreme income inequality and concentrations of power to the detriment of the overall economy. Socialism sees these extremes as market failures that need to be corrected, not only to produce a fair distribution of income, but ultimately, a more viable economy.

While it is not necessary, or even desirable, for other jurisdictions to adopt the Norwegian model exactly, it would seem reasonable for any resource owner to fully understand this world class success story in oil and gas resource management.

Norway's success is due to its full application of competitive market economics.

Norway simply understands better than most how the market economy generates wealth. Included in this understanding is the clear appreciation that the so called free market is not perfect. While it is very useful as a concept its limitations for the practical world need to be recognized. One obvious limitation is the assumption that the market is characterized by perfect competition which itself includes the assumption that all market participants, including citizens and consumers, have perfect knowledge. Of course, if this were true, there would be no excess profits – no economic rent.

As already mentioned, Norway's success is often attributed to its state participation share. That Norway benefits from its direct equity participation is beyond question. The nature of this benefit is not so clear. While the reason for state participation in the upstream oil and gas sector is most often described as a source of government revenue, the more immediate reason for most jurisdictions is a desire to correct a market failure; that is, these resource owners desire to correct a decided disadvantage that they face due to a lack of industry knowledge, most notably around costs.

While many jurisdictions choose to develop their oil and gas resources primarily through their state company; e.g., Saudi Arabia and Venezuela, with participation shares in excess of 50%, most state equity shares are modest in the 5% – 15% range. This share is sufficient for the jurisdiction to gain important industry knowledge that in fact facilitates competitive markets by helping to level the playing field between resource owners and producers. At the same time it leaves most of the development opportunities in completely private hands, again a contribution to competitive markets.³

³ While some jurisdictions do not pay their full share of costs (clearly unfair) many do.

Approximately one-half of countries world-wide include an option for state or national oil company (NOC) participation. Of the 74 jurisdictions with NOC participation, 20% are on a full working interest basis; e.g., Nigeria, Norway, and Venezuela. The remaining jurisdictions enjoy what is referred to as a carried interest. Of these “carried” jurisdictions, 70% repay their share of costs – either partially or fully. The Canadian Province of Newfoundland & Labrador applies a 5% - 10% carried interest which is repaid with interest following development plan approval.

An equity share also benefits international private companies by helping to mitigate exposure to exploration and market risks, and thereby avoid Gambler's Ruin.⁴ While this benefit is essentially no different than that achieved among international oil companies (IOCs) through the normal farm-out process it is nevertheless a component of the Norwegian system that helps reduce costs and thereby grow the size of the pie.

The world average government share (GS%) is in the order of 65%.⁵ Norway's share is 78%, consisting of a 27% corporate income tax (CIT) and an additional 51% special petroleum tax. To help reduce administration costs and facilitate transparency the special tax is largely an increment on the CIT. Benefits received by Norway from its air emissions taxes, including a USD 65/t/CO_{2e} levy, or from its state participation are additional to the 78% direct fiscal share. Norway's 78% share is directly comparable to, for example, an approximate 55% Federal government share for the USA deep water Gulf of Mexico or a 45% - 56% combined Federal and Provincial share for Canada's oil sands.^{6,7}

To understand how Norway is able to capture a higher share it is useful to consider how the CIT cash flow compares to that of a private sector working interest partner. Most have no difficulty accepting that if, for example, four IOCs participate equally in a given upstream project each should pay 25% of the costs and, as a result, receive 25% of the profits. Many

⁴ Gambler's Ruin is a concept that recognizes that; for example, a 9 out of 10 chance of drilling a dry hole does not mean that 10 wells will necessarily yield one that is successful.

⁵ Government share, more commonly referred to as government take, is the share of project revenues, after direct capital, operating costs, and transportation costs, that the resource owner receives through application of the fiscal system – royalties, taxes, and other fiscal levies; e.g., bonus payments, carbon taxes, area rentals. Share is a more accurate label than "take" as the resource owner does not see these levies as taking anything. Instead they are seen as a price charged by right of ownership, essentially no different than the price charged by other suppliers of goods and services.

⁶ Both the oil sands and Gulf of Mexico shares include bonuses. While bonuses are a legitimate part of the resource owner share they serve in fact to reduce the share from what it could have been otherwise. This is because bonuses are paid upfront before investors have received any cash flow, thereby adding risk for which the resource owner ultimately must pay. Norway does not include bonuses as part of its oil and gas fiscal regime. High bonuses can be sign that the overall fiscal system is not capturing the full share for resource owners.

⁷ These comparisons do not imply that the U.S., for example, should increase its share to that of Norway. Norway's share is higher because: (a) it enjoys the position of being an energy exporter and (b) it has a fiscal structure that better shares risks - one that can accommodate a higher share. Also, the U.S. share is relatively low because it is an oil importer with a policy to stimulate domestic production. The oil sands share is similarly low due to a policy to stimulate incremental levels of investment.

however do not appreciate that this is precisely how the CIT is structured. While a 25% CIT rate takes 25% of the profits it also bears 25% of the costs.

Figure 1 illustrates two situations for the private investor – farm-out 25% of the project or accept a 25% CIT. The graph shows that both options produce exactly the same impact on the investor’s bottom line. This means that the tax is no more onerous on the investor than that from inviting a 25% farm-in from another investor.⁸ While the actual D&A schedule is somewhat different for Norway, this chart serves to illustrate that Norway shares in the risk in the same way as would a private investor. This is why, subject to investor tax position and the rules for D&A, the CIT applied by all jurisdictions is sometimes referred to quasi-equity participation. This policy reduces up front risk from what it would be otherwise, thereby affording a corresponding higher government share. In Norway’s case, the combined government share is structured to essentially mirror the CIT calculation. While Norway’s government share is 78% it also shares 78% of the costs.

Figure 2 provides a real-world example, comparing the investor cash flow stream without government (black line) to that with the Norwegian fiscal system (dashed blue line) and the USA GoM fiscal system (red line). The investor cash flow is clearly higher with the USA fiscal terms, however the negative cash flow before production start is also larger. This difference in the treatment of pre-production costs exerts a tremendous impact on the rate of Return (ROR), as shown by the inset table. The table shows that while Norway’s GS% is 78% compared to 49% for the USA system, the investor ROR from Norway’s system is actually higher, at 42% vs. 39% under the USA system.⁹ This win-win result under the Norwegian system is entirely due to the nature of the after-tax cash flow – in other words, to the minimization of risk from front-end fiscal loading. While the U.S. shares 35% of the costs through the tax system compared to Norway’s 78%, the U.S. adds significant front end loading through bonus payments and fixed-rate royalties that apply fully before costs can be recovered.

⁸ This situation is for illustration, with the exact matching due to the assumption that all costs are depreciated or otherwise amortized (D&A) at 100% from the date incurred and that the company is in a fully taxable position. While most jurisdictions permit immediate write-off of exploration costs, other assets typically receive a slower D&A schedule. The schedule for Norway is 100% for exploration and 16.67% per year for 6 years for all remaining asset classes. The United Kingdom permits full immediate write-off of most costs.

⁹ There are other important investment decision-making criteria employed by investors. ROR however is also important – it is widely applied and it provides a good measure of capital efficiency.

Figure 1

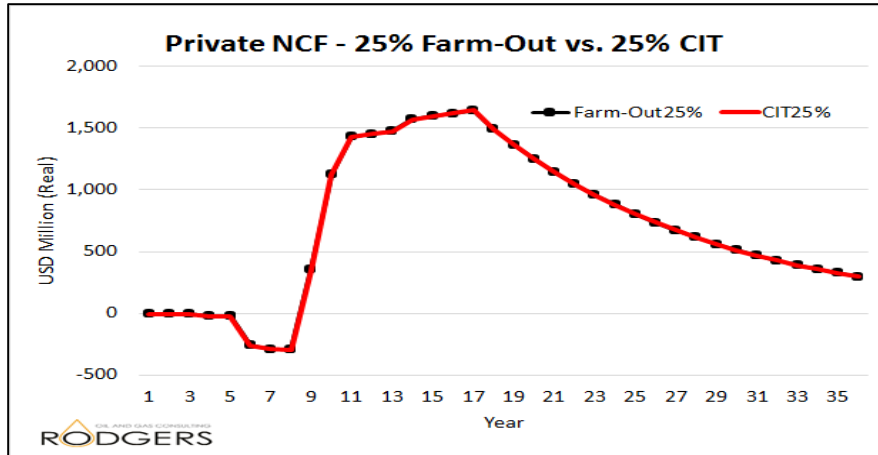
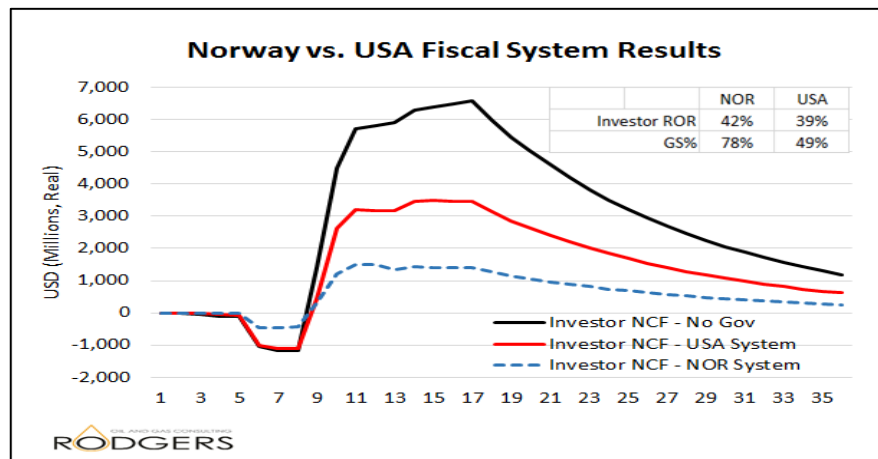


Figure 2



One other important market-based policy adopted by Norway as part of its resource management framework (perhaps the most important) is the decision to save resource revenues. In addition to being sound policy, particularly when managing a non-renewable resource, this decision provides for future generations and it has distinct advantages that contribute to the high government share:

- It promotes economic diversification, including the earning of additional revenue in the form of interest;
- It contributes to cost control and operational efficiency by not putting undue pressure on the local economy;
- It lessens the need for up-front payments to government, thereby increasing the prospect for an overall higher government share; and,
- It provides negotiating strength when prices are low, thereby avoiding the need for government to react in haste during cyclical downturns.

Norway attempts to approximate the ideal fiscal system as far as is practical. As such, the system is designed to accomplish three broad goals:

1. Maximize and capture the economic rent¹⁰ ;
2. Promote economic efficiency – this includes cost reduction and control, thereby contributing to increasing the rent available for capture; and,
3. Allow the development of all fields that can yield overall net benefits for society – this goal is viewed in the context of goals 1 and 2. It does not mean that all fields identified for potential development would necessarily go ahead, even if they would contribute incremental investment and jobs. A field with zero economic rent might be developed but in principal a field that required special fiscal relief that brought the rent below zero would not. This approach is followed by most jurisdictions and does not mean that there are no special cases. It generally means that if resource owners cannot receive a price for their resources the resources should not be developed. The U.S. for example sets the absolute minimum royalty rate to 12.5%, irrespective of a given well's costs or the prevailing price environment. As already pointed out the high front end royalty in the U.S. system can cause a violation of Goal 3. While this does not meet the conditions for ideal fiscal system design, the system is viewed in the U.S. as reasonable in that a relatively high royalty encourages potential developers to vigorously pursue cost control and innovation.

¹⁰ Economic Rent is the share of project revenues remaining after the investor has earned a competitive rate of return and all costs have been recovered, including exploration, investment, risk, and uncertainty. This is the price that the owner of a natural resource charges for granting developers the right to profit from the resource.

Norway is able to capture a relatively large share of resource revenues not by demanding an unfair price but by sound fiscal design – by putting in place a revenue sharing framework that aligns with competitive market-based principles. The tax system is robust, transparent, and stable, it shares risks and minimizes front-end-loading, and it promotes maximum resource value through cost reduction and control.