

Innovation in the supply and procurement of rig services ¹

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Overview

Substantial elements of innovation have been observable during recent years in rig supply, in particular regarding contracts and organisation. This trend has been driven by the fact that rising costs over many years have put profitability under pressure. On the basis of theory and available empirical insights, the paper outlines the conditions where specific organisational and contractual solutions are best suited. Optimum rig procurement will depend in part on whether the oil companies have time-critical drilling targets, the ability and willingness of the parties to bear risk and the purchaser's competence and capacity to manage and follow up procurement.

Method

The paper builds on general economic incentive and contract theory, and on more specific research in the drilling field, such as Corts (2000) and Osmundsen et al (2006, 2008). In addition, I have had a series of meetings and conversations with specialists closely involved with decisions related to rig procurement, including technical and organisational conditions, legal aspects and taxation. I have also had access to rig contracts that are used on the NCS.

It should be noted that the subject is complex, with no clear and simple answers to the issues involved. A multitude of different company and contractual structures exist for rigs, production ships and so forth worldwide, depending on tax regime, ownership systems in licences, market conditions and so forth. Theoretically, players often weigh up different considerations when choosing contractual and organisational solutions. Empirically, successful companies applying different solutions can be found side by side in a sector. And a correspondingly wide array of approaches to rig procurement exists internationally. A number of interesting general insights of a conditional nature can nevertheless be found. On the basis of theory and available empirical considerations, something can be said about the conditions where specific organisational and contractual solutions are best suited.

Results

Substantial elements of innovation have been observable during recent years in rig supply and organisation on the NCS. This trend has been driven partly by the fact that rising costs over many years have put profitability under pressure, and partly by the entry of new oil companies on the NCS with different needs from the large established players. Innovation has occurred along several dimensions. One is technical innovation, with the development of new and more specialised rig types. The idea is that units should be more cost-effective and

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productive when they are purpose-designed for more specialist tasks. New rig categories have encountered short-term resistance from contractors, but will probably play a key role in a future Norwegian rig market. It will be easier to establish specialised rigs when the market is less tight. Much innovation has also occurred with contracts and organisation. Examples include changes to risk-sharing in contracts and vertical integration. Some of these changes might be determined to a certain extent by economic conditions. One example could be oil companies owning rigs. Other innovations will represent lasting adjustments to collaborative relations between oil companies and contractors. New oil companies are less keen than the established players to build up large internal staffs to supervise drilling operations. This will mean a trend towards contractors taking on more functions than has been usual on the NCS. A greater use of turnkey contracts and integration of services can be seen. That makes big demands on the breadth of contractor knowledge, and calls for greater willingness and ability to bear risk. This is likely to create a number of challenges in a transitional phase.

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