

## ***Chapter 6***

# **EU REGULATION AND NATIONAL INNOVATION: THE CASE OF NORWEGIAN PETROLEUM POLICY**

***Ole Gunnar Austvik***

## **INTRODUCTION**

This chapter discusses to which degree a powerful interventionist policy of a nation-state can be adjusted to EU's more liberal way of organizing and regulating economic activities, while simultaneously maintaining nationally defined goals. Norway's integration with the EU and the impacts on her strong state policy in the oil and gas sector is used as an illustration or case.

The point of departure is that Norwegian petroleum (oil and gas) industry was developed as a political enterprise by the Norwegian state from the early 1970s. As a political entrepreneur, the state was engaged in the industry as production entrepreneur, as well as being a political and economic risk-taker. As a political entrepreneur the state could define social goals for activities and use regulative, legal and political measures to reach goals that private entrepreneurs do not have at their disposal. The Norwegian state did not limit itself to the regulation of activities on the Norwegian Continental Shelf (NCS), but instead took on the role of innovator and leader of economic change and development. After only a couple of decades Norway had become the third-largest petroleum exporter in the world after Saudi Arabia and Russia.

When Norway entered the 1990s and EU integration processes were increasingly evident, her petroleum policy and natural-gas strategy was under strong political control through a nationally developed system of institutions, regulations and direct engagements. The European Economic Area (EEA) agreement going into effect in 1994 made Norway a full participant in the EU Single Market in all areas except for agriculture and fishery. Through the 1990s the energy sector became part of the Single-Market liberal restructuration processes. A special focus was placed upon electricity and natural-gas markets, for which directives were eventually approved, and on the application of EU competition law. Strong pressure was put on the Norwegian petroleum model, and significant changes resulted in

2001/2002. The state now became more regulative than directly interventionist, but with substantial retention of control.

The EEA agreement, together with the degree and scope of economic, regulative, and market change within the EU, contributed to change the Norwegian model by taking away opportunities for policy-making, but also creating new ones. They contributed to the promotion of liberal ideological principles for economic activity, with an accompanying influence on Norwegian norms, institutions, and law.

This chapter analyses in which ways the EU system has influenced and contributed to change the strong Norwegian state system in the petroleum sector. In the first and theoretical half of the chapter, first, it is argued that the impacts from economic-integration processes on national policy-making must be analysed by the support of more than one discipline. The interaction between the chosen disciplines of economics and political science is made operational through multi-disciplinarity within an International Political Economy (IPE) framework. Secondly, the characteristics of the role of a state as political entrepreneur in developing a national industry are outlined. Thirdly, the multifaceted processes of how economic integration influences national policy-making are discussed.

Fourthly, in the second and empirical half of the chapter, the role of the EEA agreement in the Norwegian-EU relationship is outlined. Fifthly, a discussion of how the Norwegian state has acted as a political entrepreneur for her oil and gas sector is provided. Sixthly, the process of conflict, cooperation and adaptation in the bargaining between Norway and the EU about introducing EU directives and competition law in Norway is discussed. Seventhly, *de jure* and *de facto* effects on the Norwegian state's petroleum entrepreneurship from these changes are analysed. Eighthly and finally, some conclusions about the manoeuvring room for nation-state policy in a liberal international economic and political superstructure (as the EU) are drawn.

## ECONOMIC INTEGRATION AND POLITICAL ECONOMY

The IPE approach in this chapter combines economics and political science analyses through multidisciplinarity. Multidisciplinarity is a non-integrative mixture of disciplines where each discipline retains its methodologies and assumptions, unaffected by changes and developments in other disciplines. Two disciplines may study various aspects of an object and integration is achieved by combining the two studies, or by taking conclusions from one discipline and using them as input factors in the research of the other.

In a multidisciplinary approach, disciplines are combined by aggregation. [The cooperation between the disciplines] ... may be mutual and cumulative but not interactive (Augsburg 2005:56).<sup>1</sup>

Using more disciplines in interaction rather than one single discipline in the analyses should increase the potential for reaching a comprehensive understanding of how changes in Norwegian *de jure* relations to the EU economic-integration processes *de facto* have influenced the Norwegian state's entrepreneurial manoeuvring room and policy choices in the oil and gas sector. The multidisciplinary choice is made owing to, first, the pressure that

<sup>1</sup> Interdisciplinarity, on the other hand, attacks a subject from various angles, and blends practices and assumptions of each discipline involved in a common core of concepts and methods (Klein 1996 and Klein 1990:19).

economic integration places for legal, political, institutional and ideological change; secondly, the mixed role of a political entrepreneur in industrial developmental processes; and thirdly, the politicization of the international energy industry and markets.

The academic boundaries of IPE are generally flexible, and along with acceptable epistemologies the subject of robust debate. Most scholars concur however that IPE is ultimately concerned with the ways in which political forces (states, institutions, individual actors, etc.) shape the systems through which economic interactions are expressed, being local, national or international – or by sector. Conversely IPE is also concerned with the effects that economic interactions (including the power of common markets and individuals acting both within and outside them) have upon political and administrative structures, actors and outcomes. Unlike conventional theories of international relations in political science, power in IPE is understood to be both economic and political, and interrelated in complex manners. Unlike conventional economics, market behaviour and market outcome is understood also in relation to the different strategic types in political and state behaviour and ideology, and not only among market participants.

Alternative ideological perspectives in IPE (such as the various types of liberalism, realism, structuralism, and constructivism) demonstrate how different ideologies can lead to different policy and economic strategies in a nation in situations which in other respects are considered the same. In addition, there are also different views on how to understand *de facto* European integration processes. The debate between liberal neo-functionalists, on the one side, and intergovernmental theorists, on the other, about whether or not the bargaining and consensus-building techniques of the Community method should be considered to be refinements of intergovernmental diplomacy, or an ultimate transfer of power to supranational EU institutions, is an important example (see for example Cini 2007). In addition to different perceptions about EU functioning, there are also variations in administrative and social traditions within a given formal international superstructure with resulting different outcomes to be understood, such as the divisions between the Continental, Anglo-Saxon, and Scandinavian models (Veggeland 2007).

Since ideology, perceptions, and traditions influence how a system *de facto* functions (and is designed) are echoed in different political practices, they must be understood to explain what happened in a specific area, why it happened, and what may happen in the future. The ability to innovate, develop, and design policy and economic strategy depends, on national as well as on EU level, on traditions and values related to development or the active creation of visions and ideology, or both. National adaptation depends *inter alia* on perceptions of how the system functions and how norms, traditions, and institutions lead development into specific paths (March and Olsen 1998:959, Keohane and Milner 1996:20).

Thus, when the Norwegian petroleum model met the EU model in the 1990s it represented a confrontation between two different systems of both economic, legal, political, institutional, and ideological factors and mechanisms. The Norwegian petroleum sector was developed by a strong and interventionist (and partly realist) state, while the principles for (liberal) European economic integration prerequisite a predominantly regulatory role of both the EU and member-state governments in economic activity and political practices.

## THE STATE AS POLITICAL ENTREPRENEUR

In this chapter the term *political entrepreneur* rather than just *state policy* is used for the type of activity the Norwegian state represented when developing her petroleum industry. This choice is made because the initiatives taken by the Norwegian state to create and maintain her petroleum industry, to control it, and to take most of the economic revenues from it resembles more an entrepreneur in an international market economy than a state that limits itself to encouraging or discouraging private economic actors to invest in and run an industry. Although ambiguous in the literature, in this article we focus on a political entrepreneur as a government or a state system that acts in an entrepreneurial way in order to create economic activities, with the private sector as full or partial commercially collaborating actors.<sup>2</sup>

Public sector entrepreneurship occurs whenever a political or governmental actor is alert to and acts on potential profit opportunities (Shockley, Frank and Stough 2002:12).

This type of political entrepreneur takes the initiative in an industrial-innovation process, rather than the private entrepreneur. Most studies of entrepreneurship are however concerned with private entrepreneurship with a limited focus on the political economy of entrepreneurship, not to say on political entrepreneurship itself (as for example demonstrated in Fagerberg, Mowery, and Nelson 2005). The characteristics of a political entrepreneur share many similarities with the private entrepreneur, as one who enters into the role of innovator and leader of economic change. However, while private entrepreneurs are mostly driven by the pursuit of their own profit, a political entrepreneur has social goals, in addition to company profit, for its actions. A social or political entrepreneur is concerned with values

... in the form of large-scale, transformational benefit that accrues either to a significant segment of society or to society at large (Martin and Osberg 2007:34).

Social goals include long-term concerns for society, and a more comprehensive view on economic activity in the country (or region or sector) that each company is too small and, hence, unwilling to internalize in their decision-making processes.

A political entrepreneur also has instruments and means to reach his goals not possessed by a private entrepreneur. The political entrepreneur can engage himself in a business directly, in a similar manner to a private entrepreneur and act as a production entrepreneur. Additionally, however, he can make use of interventionist or regulative measures in order to influence the economic, political and legal framework for economic activities in ways in which innovations take place (as a regulatory or interventionist entrepreneur). An entrepreneurial state can also be a substantial risk-taker in political as well as monetary terms.

The policies of the entrepreneurial state ... include generation of venture capital for selected and growing businesses (Eisinger 1988:9).

Some projects can be of such a character that they would never be realized if political entrepreneurship was not exercised. It can be argued to be the case when a competitive national Norwegian petroleum industry was created following the discovery of the petroleum resources.

Entrepreneurship is generally about innovatively creating new economic activity. After a build-up period, the state has no longer the same entrepreneurial reason to directly control

---

<sup>2</sup> Austvik 2009b:40-42. See for example Taewook 2004, Schneider and Teske 1992:737, Abel 2003, Rickets 1987 for alternative definitions and understandings of the concept.

companies. However, other reasons for owning and controlling them can be important in a 'late-industrial' phase. In the petroleum sector it can be a desire to control the industry from a democratic perspective, to secure that long-term interests are ensured against the short-term time perspective of commercial businesses, to internalize positive and negative externalities in company decisions, and to perform an optimal resource management when such concerns are not easily regulated. The state can also remain a direct owner of an industry in order to collect more economic rent than what results from the corporate tax system, which is partly the case in the Norwegian petroleum sector.

There are however different degrees and scopes of political entrepreneurship depending on ideological perspective. Michael Porter (1990:131-175) emphasizes that forces that create the ability to innovate and consequently to provide for a country's competitive position, function as a dynamic system. He gives political actors and public authorities an explicit role in the improvement of the factors needed to make an economic system (or the 'diamond' as he calls it) competitive, and to innovate and function better. Such policy measures include first and foremost all infrastructural developments considered important for the areas where innovation may take place: roads, rail, broad band, research and development, culture, competition rules, and institutions.

While Porter argues strongly against public support for individual enterprises, he opens up for support to help sectors and geographical clusters through the use of such widely defined infrastructural measures. Bureaucracy in this context should ensure that the infrastructure functions properly. A bureaucrat is in this sense however not an entrepreneur because, '... in bureaucratic organizations those in charge are obliged to conform to the rules and statutes laid down by a higher authority' (Mises 1943:52).

Porter's (1990:680-682) liberal but active approach to the role of public authorities to a large degree resembles what the EU sees as her role in promoting economic development, such as in her Lisbon strategy (EU 2005). Governments have a role to play in shaping and promoting visions to help private and public actors work towards common goals. Clearly, if public authorities do not adopt this visionary and ideological role, the whole system will be weakened and somebody else will formulate goals, such as strong private entrepreneurs, in some countries the church or others.

The visions set up for the Norwegian petroleum industry however, such as in the 10 Oil Commandments (Report to the Storting 1970-71:76) greatly transcended this type of 'Porterian' policy roles for governments, also with respect to the role of bureaucratic functions on the ministerial level. The instruments used were also far more interventionist than what EU regulations promote, such as direct state participation, political interventions, preferential treatment of and regulation for national companies and a strong fiscal and regulatory regime to Norwegianize the industry, and to ensure that the state earned more rent from this sector than from any other.

A neo-Schumpeterian understanding of trade and international competitiveness supports the significance of (private) entrepreneurship and innovation in maintaining and creating competitive advantages (Fagerberg 2007). For a political entrepreneur, it is similarly the *relative* ability to develop policy that is important for a country to remain competitive in an economically integrated world. This parallels what Michael Posner (1961) has identified as respectively innovative and imitative countries and industries experiencing technological and commercial change, where the continuous ability to innovate is a force used by the leading country to maintain its advantage and achieve the highest economic standards.

Like Alice and the Red Queen, the developed region has to keep running to stay in the same place (Krugman 1979:262).

To which extent and how a country is *de facto* influenced by *de jure* common rules and regulations in an integration process depends consequently on whether it is even in political understanding and beneficial national adaptation, and whether it is able to influence the policies of integrating countries and superstructure so as to maintain advantages and freedom of action, compared to a potentially more passive (imitative) political attitude. The dynamism based upon the technological, commercial and political ability to innovate will be decisive for degree of *de facto* policy harmonization and adaptation.

Determining how to *measure* results of a particular policy and changes in entrepreneurship from exogenous change (introducing EU regulations in a national economy) is however a challenging task in itself. While there is considerable interest in entrepreneurship and innovation processes world-wide, there are, as of yet, no common concepts and definitions or an agreed upon list of key indicators that are required to improve the collective understanding of entrepreneurship and its impacts, although the need appears obvious. Entrepreneurial activity, firm creation, and business growth all occur within a complex, dynamic, and in our case politicized sector and economy. The measurement of political entrepreneurship can be considered even more complex than the challenges arising with the measurement of private entrepreneurship as it involves a wider set of objectives and instruments to be used. The Organization for Economic Cooperation and Development (OECD) however sets out that:

The practical definition and measure of entrepreneurship that one chooses will ultimately depend on the nature of the policy objective (OECD 2006:15).

Following this view as a point of departure we shall identify and measure impacts from Norwegian-EU and EU integration processes on the Norwegian state's petroleum entrepreneurship by changes in ability to reach goals, through changes in manoeuvring room and policy options, and to some extent by changes in the goals themselves. Put simply, if a new policy maintains the goals of the old policy, no change has actually taken place in the ability to reach entrepreneurial purposes.

A number of other forces for policy change than the integration processes confuse however the picture and the possibility to measure results from them. The way Norway and the EU defined interests and formulated energy policies in the 1970s and 1980s was conditioned and affected by the internal and external economic and political factors and actors at the time. Gradually, and in some important cases radically, these factors have changed. For example, with the 1991 collapse of the Soviet Union and the end of the bipolar world and diverging economic and political systems, the world became more politically integrated than before. Political systems changed and international affairs and trade relations became more globalized and in a situation of flux.

Furthermore, not only political factors influenced the situation. Neither EU energy markets nor the Norwegian petroleum industry were in their infant stages anymore in the 1990s and beyond. Different policy was needed for both as compared to in the 1970s and 1980s. Another aspect was changes in the profitability of the petroleum industry, which besides costs depends heavily on the price of oil. Relatively low oil prices in the period 1986-2001 led to a low attention to security-of-supply issues in the EU and elsewhere. Higher prices after 2001 have, on the other hand, brought back the attention to the profitability of the industry and long-term supply and prices, as in the period 1973-1985. The higher prices are

the source of more income for producing countries and have political spill-overs that increase their influence, as well as provide an incentive for the EU to think more comprehensively about her energy policy.

Hence, part of the challenge in this chapter is to isolate impacts from economic regulatory integration processes on political entrepreneurship from other forces and factors. In some situations, changes from one force can be discrete and substantial in scope or strength, or both, or induce dynamic processes for incremental change. In other situations other forces can have the strongest impact, with accompanying changed constraints and opportunities for action for involved parties.

## ECONOMIC INTEGRATION AND NATIONAL MANOEUVRING ROOM

Going from lower to higher levels of integration means that more obstacles to trade are removed and more policy is harmonized. The research question in this chapter is concerned with in which ways international economic integration processes affect national policy-making. We shall discuss five main dimensions of this change.

1. Economic integration makes countries interdependent and redistributes wealth and activity within countries with social and political spill-over effects.

Often, two main benefits emanating from economic integration are emphasized, both central to the establishment and development of the EU. First, economic integration increased wealth at aggregated national levels, as demonstrated in international trade theory in economics. Secondly, economic integration makes countries mutually dependent, as demonstrated in interdependence theory in political science.

However, although all countries generally benefit from economic integration at an aggregated level, wealth and power within countries are redistributed. Those benefiting the most will usually become politically stronger compared to other domestic actors who lose from it. Business-oriented interests will in general be given a stronger say in policy formation in a more liberal economy. Also, as foreign policy through treaties becomes an explicit factor for the organization of industrial activities, a country's Foreign Ministry with its comprehensive contact with international organizations and other countries gains a *relatively* stronger say within the government, at the expense of other ministries. The focus of domestic policy will be directed towards aggregated national economic objectives of the integration process.

Because economic integration makes countries converge in their economic goals, it not only leads to the harmonization of costs and prices, but countries also become increasingly similar and converge in their design of economic and social policy. Both legal and competitive forces generate pressure towards the harmonization of political institutions, and in many cases force them to execute policies defined by agreements and common institutions. However, the complex interdependence arising from deeper integration can lead to both more and less options in national political manoeuvring room depending on the evolution of integrating processes, national interpretation, and adaptation by domestic political and

commercial actors. Principles for non-discriminatory behaviour and reciprocity are clear, but situations and their practical implementation and understanding may vary.

2. International bindings vary across issues and international arrangements and practices.

The impacts from an international economic agreement come first through legal bindings. Common, or harmonized, laws and regulations increasingly bind national policy with higher levels of integration such as in a common market: more common rules and institutions result. The case of the independent central bank's control over monetary policy in the euro area is a case in point. Lower levels of integration, such as expanding the scope of a Free Trade Agreement (FTA) in the World Trade Organization (WTO), are, on the other hand, mainly concerned with reducing or eliminating traditional trade policy measures and negative integration, such as removing or reducing tariffs and quotas.

Hence, important to the scope and strength of an integrating process is *inter alia* the degree and scope of supranationality. *Ceteris paribus*, the manoeuvring room and policy options for a nation-state's policy are considered greater the fewer the federative aspects of the agreement. In EU studies, neo-functionalists and constructivists point to the potential for further integration and the role of a common decision-maker in Brussels. On the other hand, institutionalists and intergovernmentalists are more sceptical to both spill-overs and socialization. The institutional and policy integration are for them less likely to change in the foreseeable future, and policy will continue to be defined through diplomacy and interstate processes.

When domestic institutions are weak, the impact from exogenous change (integrating with other countries) will usually be more significant than if they are strong to a given international agreement. When institutions are strong, pressure for de-coupling from requirements in the treaty is more clearly also the product of institutions that shape (and maintain) local identities, norms, and preferences (Andersen 2006). The consideration of the EU as a 'weak' state structure resulting from intergovernmental bargaining opens a greater manoeuvring room for a national political entrepreneur, than if the EU is considered a neo-functional 'strong' state structure, in which member countries are compelled to follow a powerful (and entrepreneurial) EU Commission.

3. The integrating processes are dynamic and open for national interpretation, bargaining, and adaptation.

Within single sectors, countries try to reap the benefits of trade in general, and avoid the sectoral problems it creates at the cost of the other country, being exporter or importer. The struggle between open and restrictive trade continues after an agreement has been signed between two or more countries, which makes hidden and indirect barriers among the most important issues discussed in present trade talks. They are also central to the construction and maintenance of the Single Market.

Thus, in the Norway-EU relationship, both benefit from positioning themselves to favour free trade in general, and at the same time formulate (in parts) an independent policy as far as possible for sectoral and revenue interests, without breaking the overall deal. In this relationship, the EU appears to be far more powerful than little Norway. Small countries are

however often more unified in defining preferences and policy (Katzenstein 1985). Clever adaptation can partly outweigh an obvious formal, economic, and political asymmetric interdependence when measured by the ‘meat weight’.

#### 4. De facto outcomes from similar de jure regulations may vary.

Policy change should be less frequent when national sectoral interests are strongly opposed to unfavourable international regulations. This is especially the case when opposing a change would not affect other domestic interests (such as losing a general election). A national system may not necessarily follow a neo-functionalism view which results in a situation with *de facto* common practices, even if rules *de jure* are the same, when strong interests are to be defended.

In some cases it is the form of national arrangements that are important and must be changed to make them legally comply with an agreement and its principles, in other cases it is the substance of an issue that is central. When it is the form (*de jure*), a national government has a chance to change for example an existing organizational model within the structure of the agreement, and simultaneously maintain its purpose. The more complex the situation becomes, the more difficult it will be to reach *de facto* comprehensive supra-national arrangements. Comprehensive formal arrangements may provide the opportunity for substantial autonomous national interpretation.

#### 5. Domestic and international policy-making is interactive and dynamic.

The two-level game (Putnam 1988) shows, paradoxically, that the greater the degree of autonomy a country chooses in an economically integrated world, the less influence the country will possess over its own situation. International rules of competition and market mechanisms will in many situations *de facto* override national decisions, and the country will increasingly be left to adaptation.

Hence, the *de facto* degree and form of national-policy coherence, adaptation, and influence on international common rules depends on how able the government is continuously to interact simultaneously in domestic and international arenas. The definition of what is a ‘national interest’ is ambiguous and depends *inter alia* on the constellation of domestic actors. Domestic change takes place with international change and *vice versa*. The nation-state’s ability to work at ‘all tables’ simultaneously and over time may in many cases be decisive for the *de facto* outcome of an international agreement. As with innovative processes in entrepreneurial activities, such policy coordination in economic integration processes may take place in an incremental manner, but it is sometimes also discrete or radical.

Different studies of EU and European integration processes, being uni-, inter- or multidisciplinary, include discussions about how participating nation-states are affected by economic integration. In the field of economics, discussions generally follow neo-functionalism and liberal market logics of how institutions and policies change when a country enters into deeper levels of integration with other countries. The political approaches often contrast or complement this view with various degrees of intergovernmental, institutionalist, and constructivist understandings of the political development of the EU. Such perspectives attempt to explain whether or not, and if possible how, nation-states influence the EU and *vice versa*.

Even though it is not a question of returning to laissez-fair economics and a totally politically passive state in industrial (and social) affairs, international economic integration is a step supporting an ideological view that the state should adopt a weaker and more regulative political hand on industrial (and social) policy as compared to more interventionist attitudes in Europe after World War II. A more liberal ideology and economic integration weaken the nation-state (Mann 1997). It has however long been argued that an effective state is an integral part of a successful competitive capitalist system (Evans and Rueschemeyer 1985). For developed economies, Mjøset and Andersson (1987) argue that

... policies should aim to promote flexible specialization making the welfare state a comparative advantage in connection with industrial policies, by extending efforts at democratization of decisions concerning labor process organization and work environment.

In a “flexicurity” approach for welfare states, Noralv Veggeland (2007) similarly argues that flexible labour markets also ‘... depend, *per se*, on the continuing existence of universal social security and public neighborhood services’. High public-welfare expenses and a heavy tax burden can be ‘compensated by high work productivity, low unemployment, flexible labor market, and encouraging subsidiarity policies’ (*ibid.*).

As a consequence, there is a continuous debate about the formulation of social and industrial policy, and what will be the best for trade and fair competition within a liberal paradigm, with a focus on more than costs. John Maynard Keynes was for example also a liberal, but a rather interventionist one, compared to dominant present-day perceptions of the more passive role of the state in industrial policy. Debates over types of design of a liberal economic system and varieties of capitalism, as in Hall and Soskice (2001) and Mjøset and Clausen (2007), demonstrate that liberalism is not necessarily be orthodox. Possible variations in a liberal system are compatible with the basic ideology of the EU system, albeit in opposition to those suggesting a change to a non-liberal economic system (e.g., Elster and Moene 1989).

Taken together, the increased complexity of decision-making indicates that more, not less, political competence is required in comparison with the 1970s and 1980s, when national interests were defended among integrating countries. This challenge appears to be especially great for newer member countries to the EU, as well as developing countries in the poor world. But, it also exists for rich Norway with her (in some areas) diverging interests in the EU with respect to the petroleum sector. The ability and desire to interplay dynamically in the multifaceted integration processes is decisive for how they *de facto* affect national political manoeuvring room and policy-making.

## THE EEA AGREEMENT

The EEA agreement was signed in 1992 and became operative on 1 January 1994. The European Free Trade Area (EFTA) Surveillance Authority (ESA) was set up to fulfil the control function towards EFTA participants in the EEA area (now only Lichtenstein and Iceland, in addition to Norway), similar to the control function of the EU Commission in relation to EU member countries. EU Single-Market regulations and law from this point

onwards also became Norwegian regulations and law, even though Norway through the agreement gained no voting rights over policy-making.

The agreement made it possible for the three EFTA countries (Norway, Lichtenstein, and Iceland) that joined to participate in the Single Market in line with EU members. The main sectors exempted were agriculture and fishery. Another EFTA member, Switzerland, did not join the EEA agreement and deals with her relationship with the EU through bilateral agreements. The EEA agreement involves transferring sovereignty from the nation-states to ESA and the EFTA court, but not formally to the EU. The three countries can participate in preparing cases by participating in the EU committees that suggest new rules or changes in rules. The EU, however, makes the final decision without their involvement, that is, there is no vote from EFTA countries.

The Agreement gives them the right to be consulted by the Commission during the formulation of Community legislation, but not the right to a voice in decision-making, which is reserved exclusively for Member States (EU 2007a)

EFTA countries must unanimously accept a rule, which means that a single country has a right to reserve itself by vetoing against its implementation in the EEA committee (Report to the Storting 2001-2002:27). So far, the right to veto has not been used by any EFTA country. This is partly due to the fact that, in case of a veto (reservation), the EU can take the entire area in question out of the agreement, which may incur substantial disadvantages for EFTA countries.

The EEA agreement is dynamic in the sense that new rules for the Single Market are designed and applied across the entire EEA area (the EU plus EFTA minus Switzerland). New subject areas can be introduced, and old ones can be taken out of the agreement. When the EU has expanded with new member countries the agreement has been renegotiated, implying mostly that EFTA countries had to pay more for market access, and to support financially the poorest countries in the EU.

The EEA agreement is such a fragile construction which probably is more important for Norway and the other EFTA countries to keep alive than it is for the other signatories (Arnesen 1995:663, my translation).

For many EFTA countries it became evident that the EEA agreement would not be satisfactory, and they regarded it as a stepping-stone to full EU membership, rather than as a permanent alternative. Finland, Sweden, and Austria joined the EU as full members in 1994, while Switzerland chose neither to become an EU member nor to sign the EEA agreement. Only Liechtenstein, Iceland, and Norway remained. The three EEA states have taken on board some 4000 legal acts of the EU Single-Market regime as of 2009 and implemented them into national law; the EU is the policy-maker and the EFTA countries are the policy-takers.

According to the EEA agreement EU regulations for the Single Market must be applied for the whole EEA area, such that the free movement of products and services, labour and capital are promoted. While Norway has the right to reserve herself against the domestic implementation of, for example, an energy directive in Norway, she cannot veto against its implementation in the EU area. General rules, as, for example, in the practice and application of competition law, however, cannot be vetoed, and are handled by supranational organs such as the ESA and the EFTA court (Graver 2000).

The situation for Norway is that she ended up as a full participant in the Single Market, but not as a full member of the Union. This means that she has achieved a position, as many other countries, where scope and strength of integration with the EU is different to the position of the core EU countries. However, the EEA agreement was for Norway not designed to defend petroleum interests, but for the interests of the rest of her economy. Strictly speaking, Norway did not need an EEA agreement to sell oil and gas to the EU. It was the rest of the economy that had or has a major economic interest in securing market access and rules of fair competition. *Ceteris paribus*, it would have been better for Norway not to have petroleum activities included in the agreement, if the only goal had been to maintain as large as possible manoeuvring room for the national petroleum entrepreneurship. However, the integrating process required that singular interests were balanced against other economic interests.

With the EEA agreement's passive character for Norway, her influence on EU policy is more limited compared to that of member countries. If Norway becomes an EU member and gains the right to influence the formulation of regulations, she might seek to shape them in her favour. If a trade agreement was the alternative, as in the case of Switzerland, she could explicitly try to exempt natural-resource management as far as possible. Both membership and the trade-agreement alternatives appear as better political frameworks for the manoeuvring room for the state's petroleum entrepreneurship than the EEA agreement.

Norway has, as a consequence, also put herself in a different situation than Europe's (and the world's) largest combined oil and natural gas exporter, Russia. Norway and Russia, on the other hand, to a large extent share interests in natural-gas market developments, besides being competitors. Norway has also an interest in what the Russians as market leaders do domestically, as well as in her relations with the EU in the energy sector. European-integration processes, market liberalization, and diverging economic interests between producers and consumers especially in the field of natural gas have offered the Norwegian state a new dimension in her relation to Russia.

## THE NORWEGIAN STATE AS PETROLEUM ENTREPRENEUR

From its very start in the early 1970s, Norwegian authorities had high political ambitions about controlling the petroleum industry and the international oil companies, as expressed in the 10 Oil Commandments in 1971 (Hanisch and Nerheim 1992). To begin with however, neither the Norwegian state, nor Statoil or other Norwegian companies possessed sufficient competence to develop petroleum activities on their own. Norway needed the assistance of international companies' competence, and also their capital. Industrial and technological cooperation with the internationals was important (Nore 1979, Noreng 2004). Through access to advanced technology and knowledge, Norwegian companies should after a learning period, become more independent of the internationals. For example, Mobil was replaced by Statoil after 15 years as operator at the Statfjord field in 1987. As the then head of Statoil claimed, 'You cannot learn to drive by sitting in the back seat' (Ask 2006, quoting Statoil head Arve Johnsen when the takeover took place)

The system established that while the oil companies were able to provide ideas and do the practical work, the government was to (understand and) approve all steps on all levels of

activity. In order to promote both competition and cooperation, licenses were awarded to a group of companies, rather than to a single company, in general with Norwegian ownership dominance. Companies were chosen from geological and technological expertise, financial strength, and previous experiences. The idea was that they would share ideas and experiences, as well as costs and revenues from the license. Through competition and cooperation, the value of each license would be maximized. At the same time, the licensees acted as a controlling system, as each company had an interest in securing that the work of the chosen operator was undertaken in the most cost-effective way (Ministry of Petroleum and Energy (MPE) annual). All taxes went to the state, except for local property taxes where a terminal was built on land. The Ministry of Finance (FIN) managed to introduce a special tax on petroleum activities to capture most of the rent. Later arrangements with the State's Direct Financial Interests (SDFI) ensured that the entire rent from these shares went to the state.

The Norwegian state used several instruments in a combination to reach the established goals: regulations, direct participation and political interventions, and preferential treatment of Norwegian companies. Policies were developed with high ambitions with regard to national sovereignty and control of the industry, an optimal resource management, and to capture as much rent as possible through taxation and direct participation. In addition to being the regulator, legislator, and policy-maker, the state became itself an industrial actor, and in periods also a substantial financial contributor to developments. Governmental policy and industrial structures changed as the industry matured, and markets, international affairs, and technology changed. The state not only ensured the establishment of the industry, but maintained its role as a driving force looking after and contributing to change and evolution, to the intended benefit of the industry and the state itself.

The establishment phase with a strong state entrepreneurship represented a radical innovation in Schumpeter's terms. It was a mixture between a strong state and private companies, and was different from how the petroleum sector was organized in other countries. From nothing, the state built a new company (Statoil), and protected the Norwegian supply industry in its coupling with international companies. The system of companies, institutions, regulations, and politics should provide a 'Porterian' type of dynamism in the national petroleum cluster, making it internationally competitive as soon as possible. The direct interventions went however far beyond Porterian type of policy.

The special Norwegian policy created and developed was based on a strong desire to control the value chain from the reservoirs and as far as possible down to consumers; in practical terms this largely meant to the borders of downstream importing countries for natural gas, and from export terminals (platform or onshore) for crude oil. Important policy measures were the establishment of a state oil company (Statoil), the regulation and optimization of production levels to favor Norwegian companies when awarding licenses, protecting the supply industry, controlling the transportation infrastructure and maintaining concentrated gas sales.

To begin with Statoil to a large extent implemented policy together with the MPE. Later, the MPE's direct engagement increased at Statoil's expense. The ownership of Statoil's oil and gas fields was also split into a larger share to the State's Direct Financial Investments (SDFI) and a smaller one to Statoil. *Forsyningsutvalget* (FU, the Supply Committee) and *Gassforhandlingsutvalget* (GFU, the Gas Negotiation Committee), supervised directly by the MPE, replaced and supplemented important Statoil policy-functions in the gas sector.

The GFU gained from 1986 responsibility for selling all Norwegian gas independently of who owned it. The purpose of centralized gas sales was to maintain a strong market position in relation to European buyers who had organized themselves as a monopsony. In this phase the big transmission companies on the Continent (such as Ruhrgas, Gasunie, and Gaz de France) collaborated as buyers ('the consortium'). To prevent these companies (through their owners) sitting on both sides of the table in gas negotiations, foreign companies were not allowed to participate in the GFU.

The FU was established in 1993 as a counselling body for the MPE, this time with foreign companies as participants. The FU evaluated developments in individual fields and considered which fields should supply each contract. The FU's goal was to secure the exploitation of scope economies and optimal resource management across fields, and between oil and gas production. The MPE was to make the final decision concerning whether a gas contract was to be ratified, and which fields were to supply the contract (these were 'supply contracts' as opposed to 'depletion' or 'field' contracts from the 1970s).

As the leader of the GFU, Statoil remained in a strong bargaining position vis-à-vis foreign buyers, but Hydro and Saga also increased their influence, and the MPE obtained more direct insight into and control of negotiations. Together, the GFU/FU system, SDFI ownership, and Statoil, all under the control of the MPE, represented a 'Norwegian Gas factory' where national policy instruments made it possible to achieve lower costs through economies of scope, better resource management, and a strengthened market position for Norwegian gas production and its sale.

The state model was made in the interplay between domestic and international factors and actors. A political consensus across party lines supported a state-controlled entrepreneurship domestically. Discussions were not about whether or not the state should be engaged in the industry, but rather how. The nationalization of multinational oil companies in the 1970s supported a strong national policy. Significant price variations and the politicization of the European gas market changed the external framework for policy in the 1980s. The US embargo of Soviet gas in 1982, with a desire that Norwegian gas should replace Soviet gas (Jentleson 1986, Austvik 1991), and the British rejection of the Sleipner deal in 1984 were examples of external political pressures (Stern 1986). Domestically, a gradual maturation of the industry and a new balance between political parties modified the situation. The model was eventually adjusted in the mid-1980s, but its state controlled style was retained.

The strong state control was in line with the social democratic spirit and Scandinavian administrative traditions dominant after WWII, and with the state occupying more roles as owner (Grønlie 1990). The state had from early in the twentieth century exerted strong control over, for example, hydro-power developments and many other industries considered to be public utilities. The relatively loose international framework for trade at the time, as expressed in the General Agreement on Trade and Tariffs (GATT) and EFTA cooperation, provided an international framework that made it possible to discriminate in favour of Norwegian companies.

Public ownership and engagement in the energy sector was however not a particularly Norwegian or new phenomenon. Since 1914 a number of states had participated actively in the oil industry as part or full owners of companies (Yergin 1991). In 1970 however, state-owned companies represented only six per cent of international oil trade (Noreng 2000). The nationalization of the petroleum industries in OPEC countries in the 1970s implied a dramatic increase in state participation in the oil companies in most producing countries. The

nationalization made it difficult for the outside world to criticize Norway in building her own national oil company. With the establishment of Statoil, the control mechanisms became however so strong that 'the limits for what a capitalist state can do if it wants to remain capitalistic' were approached (Olsen 1989:104, my translation).

Although state control was essential to the Norwegian model it was different to models of nationalized oil industries, as both Norwegian and international private companies were invited as important partners to acquire capital, competence, and technology. The model was as such not an imitation of other countries' practices, but an innovation in itself, combining state control with market principles. The innovative solution in between complete nationalization (as in most OPEC countries) and more or less free-market principles (as in the United States) were unique at the time.

National control of a very profitable petroleum industry was important to most oil-producing countries through the 1970s and until prices fell in 1985-1986. Lower profit margins made companies stronger in relation to the state, but the situation also showed more clearly than before that the state and the companies had many interests in common. A general understanding of the need for more foreign technological competence evolved (Ryggvik 1997:61-62). The Norwegianization policy led to employment, growth, and competence in Norwegian companies and regions (Olsen and Reiersen 1991:9-20). However, the lower profit margins weakened the state's power to require that the companies should also satisfy national (industrial policy) goals (Nerheim 1996).

The Petroleum Fund, established in 1991 and the first deposits were made in 1995, also had significant effect on oil and gas production policy. The Fund ensured that annual public budgets were no longer directly influenced by fluctuations in oil and gas revenues.<sup>3</sup> What was not used of revenues was to be accumulated in the Fund. When petroleum revenues were not changed into Norwegian krone, the pressure for an appreciation of the currency was strongly weakened, and domestic demand would be kept under control. A Norwegian Dutch Disease was avoided.<sup>4</sup> The Fund is administered in a separate section of the Central Bank (NBIM = Norges Bank Investment Management), and the Parliament decides upon how much of it should be used in the annual budgets.

Not only earnings and expenditures were however decoupled, but also activity level on the NCS and macroeconomic concerns, despite the impact from the huge oil and gas investments in themselves on the Norwegian economy. FIN had a strong constraining role on production levels in the 1970s, but has in public not said much on the issue after the Fund was established.

<sup>3</sup> The net cash-flow (net government take) from the petroleum sector is at present dominated by a 78 per cent tax on companies' economic profit (28 per cent general corporate tax plus 50 per cent special tax) and 100 per cent of net revenues from the SDFI shares (representing 59 per cent and 36 per cent of total net cash flow, respectively, in 2008). In addition, the government receives a dividend from Statoil profits and royalties, area fees, and CO<sub>2</sub> tax (4 per cent and 1 per cent of the total, respectively, in 2008). The combined net cash-flow amounted in the year 2008 to 416 Billion Norwegian krone, BNOK (some 50 billion euro or 70 billion USD). 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 for 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 (MPE annual).

<sup>4</sup> The term 'Dutch Disease' was used first time in an article in *The Economist* ('The Dutch Disease' 28 Nov. 1978:82-83). It was soon established as the diagnosis on the problems a country can get from domestic use of petroleum revenues.

The establishing of the Petroleum Fund was another radical innovative step and obviously wise from a macroeconomic and financial point of view. Without the Fund, production increases making Norway the third biggest combined oil and gas exporter in the world would have been most difficult from a macroeconomic point of view, and would most likely have been resisted by the FIN. The removal of production restraints increased the domestic manoeuvring room, as well as for consuming countries that were able to pressure Norway for higher production. This implied that the Win-Set (Putnam 1988) for Norway was expanded; with the Fund in place it became more difficult for Norway to reject pressures for increased production, for example, from the EU, if she has available resources.

The coupling between structural changes in the Norwegian petroleum industry, the changed role and maturity of Statoil, and the establishment of the petroleum Fund is important in understanding the de-politicization of policy and adjusting to an increasingly more liberal economic international world. With the alliance with British Petroleum (BP) in 1989 Statoil also started to internationalize the company in countries like Angola and Azerbaijan. Technological change and international expansion should now gradually bring progress for the company, more than domestic developments.

Hence, the de-politicization of the role of Statoil came gradually before its privatization in 2001. It was Statoil's own initiative to become partly privatized. Its main arguments were that it had become a mature enterprise, and wanted to grow more internationally than domestically. After the privatization, Statoil was to carry on with what had become an industrial entrepreneurship for the company, with the goal of becoming a strong international oil company. Privatization made the company freer in its business decisions. The state was to take the back seat as the biggest owner, but with the opportunity to intervene in decisions, if it was willing and considered it necessary.

## **EU AND NORWAY: FROM CONFLICT TO COOPERATION AND INNOVATIVE ADAPTATION**

The first adjustment of Norwegian petroleum policy to EU regulations came in the early 1990s, when the EEA agreement challenged established preferential arrangements for Norwegian supplies to the sector. At the time, however, most of the supply industry had become competitive and the industry itself did not any longer consider continued protection an important issue. Access to markets in other countries was considered more important. The EU Concession Directive (EU 1994) appeared eventually as rather uncontroversial for the industry. However, it provided a signal that the EU had become an important force in Norwegian petroleum policy-formation. National policy now had to be made according to EU rules and their interpretation by the ESA and not only to the defined national interests. The price transparency (EU 1990) and the electricity (EU 1997) directives did not qualify much for a Norwegian policy adaptation either, because she was not affected much (the transparency directive) or had already implemented similar policies (the electricity directive).

The gas directive (EU 1998) introduced in 2002 and revised in 2003 (EU 2003)<sup>5</sup> represented however political decisions that wanted to create a more liberal European gas

---

<sup>5</sup> A proposal for a new revision of the directive was put forward in 2007 (EU 2007b).

market. In the highly concentrated structure of the European gas market, gas was (and to a large extent still is) sold and resold many times on its way from the fields of production to the final user, often between monopolies (or oligopolies) and monopsonies (or oligopsonies). Generally, producers (exporters) sold gas to transmission companies (pipelines) who act both as transporters and merchants in the market. The gas the pipelines buy at its entry, they resell at its exit at the city-gate to their customers; local distribution companies (LDCs), power plants and large industrial users. The LDCs also act as both transporters and merchants, as pipelines do, and resell the gas to final consumers (end-users) in private households and businesses. In general, producers and pipelines have written long-term Take-or-Pay (TOP) contracts (up to 20 years), while pipelines signed medium-term contracts with its customers (one to five years). The gas directive intended to change this imperfect structure and to separate activities throughout the gas chain. The directive was considered far more important than the other petroleum-related directives and threatened, together with EU competition law, the structure of the Norwegian petroleum cluster (Stern 1998:164-170).

Statoil's privatization took place at the same time as the EU demands, and was adjusted to these. With privatization, the company could no longer take care of the same functions for the government as before. Privatization required a clearer definition of the role of the state in taking care of its own interests, and new ways of promoting efficiency, distribution, and political and social aspects of petroleum activities in line with EU ideology, rules, and practices. Hence, the substantial reorganization of Norwegian oil and gas activities in 2001/2002 must be understood as the result of three factors: the privatization of Statoil and the twin pressure from the EU to make her adapt to EU competition law and the gas directive, respectively.

The GFU and FU arrangements and existing transportation solutions were long defended from a Norwegian national point of view. The arguments were that 'free competition' in production and sale between companies might contribute to weaker resource management, a larger supply of gas in the market and put pressure upon prices, particularly in the short and medium term. The impaired possibility of exploiting economies of scope by opening the Norwegian pipelines through a Third Party Access (TPA) arrangement might technically make things more complicated and expensive. The advantages of scope between Norway as a gas seller and the large transmission companies on the Continent, expressed through the long-term TOP contracts, were also pointed out. The GFU was regarded as part of the Norwegian resource management system and the MPE (1997) did not 'consider the EEA agreement applicable to the establishment and functioning of the GFU'.

Maintenance of the model would assure that Norway was still able to appear as a stable supplier of gas with 'factory gates' in Emden, Zeebrugge, Dunkerque and St. Fergus, the MPE argued. A change in joint management might put long-term investments at risk and through that weaken the supply of gas, which would be a disadvantage, also to purchasing countries in the long-run.

The argument about maintaining market power through the GFU was clearly contrary to the principles of a liberalized gas market, as well as the direct interests of consumer countries (EU member states). On the other hand, the principles for how FU worked were not automatically at variance with EU's Single-Market principles, as long as MPE did not discriminate between who was to receive licenses on the NCS. The Norwegian arguments for optimal resource management and the exploitation of economics of scope are something that the EU also should take into consideration and furthered in their liberalization efforts.

At the same time, it was not obvious that the GFU maintained in its old shape was an organ that was sufficiently dynamic to safeguard Norwegian interests when many smaller and more short-term contracts were evolving in the market. The market had been undergoing fundamental changes for some time through an extensive growth and infrastructural developments. A changed role for the GFU could have been in Norwegian interests anyway. Both market developments and political efforts pointed towards that producers increasingly should sell gas directly to the customers of gas. The buyers of 'new' Norwegian gas (new contracts) would not (only) be the same as before (the transmission companies), but also the transmission companies' customers (distribution companies, the industry and gas power plants). Future gas contracts were to be made on a more fragmented basis than before.

A similar tension over legal aspects concerning Norwegian petroleum policy emanating from the EEA agreement as with GFU/FU issues, arose when Norway decided to support OPEC efforts to reduce production, in order to stabilize prices in 2001, although not equally controversial. In the OPEC case, the European Commission charged Norway with contravention of Article 12 of the EEA Agreement, which prohibits quantitative restrictions on exports, as well as competition provisions of the EEA agreement. Norwegians, however, considered that

... petroleum produced on the NCS should (consequently) not be regarded as an EEA product. ... Non-discriminatory regulations of production (and exports) should not conflict with EEA rules (Arnesen 1995: 528, 530-539, my translation).

Nevertheless, the Commission wanted to highlight Norway's failure to notify its action to the appropriate EEA forum. The situation did not lead to a case before the EFTA Court, 'since the EU itself has an interest in oil price stability' (Emerson, Vahl, and Woolcock 2002:13).

This tension in Norway's relations to the EU might, however, return to haunt a weak oil market situation at a later point in time. Norway desires the freedom to interplay with OPEC, as she has done since 1986 (Austvik 1989), 'while it is very formally associated with the EU. There can be times when the two relationships do not ride well together' (Emerson, Vahl, and Woolcock 2002:13).

Any similar interplay with Russia in the future with the goal of stabilizing European gas prices in a weak-market situation would certainly be met with much harsher reactions from the EU than was the case in the OPEC example.

Norway resisted moving towards a more open and flexible transportation solution on the NCS and the abolishment of GFU/FU arrangements. Eventually, however, she was forced to follow the gas directive and to introduce TPA on the NCS. She was also forced to abolish the GFU and FU arrangements according to the interpretation of EU competition law and moved from a position of conflict to a position of cooperation with the EU. The actual outcome of the changes was however more à-la-Norvège, and implied that most goals of the political entrepreneurship could be maintained.

To take care of the SDFI, the new fully state-owned company *Petoro* was created. The company assumed responsibility for administering the ownership interests of the state, monitoring Statoil's production and sales activities, and doing the accounts for the SDFI. In order to secure an open access for transportation of gas on the NCS, the new fully state-owned company *Gassco* was established. Gassco took Statoil's role as operator for

transmission systems to the Continent and the U.K. These systems had different tariff practices and were organized as separate companies, where each could deny third parties' access to their systems. The *Gassled* system offered in principle equal tariffs for everyone using the system, as an adjustment to the EU gas directive (MPE 2002).

Within this new framework the Norwegian government (including the bureaucracy in the MPE) showed high competence in giving the Norwegian structure a new form, while at the same time maintaining control. Important part of the solution was increased direct state participation (Gassco and Petoro); another part was new regulations (*Gassled*). EU principles and regulatory requirements were translated into a form that made it possible to maintain important policy goals. The negotiating position towards the buyers was weakened, but not in a fundamental way. Downstream markets had also become more open than before, on the positive side, as seen from a Norwegian perspective.

The MPE appeared through the changes again with increased relative political power, as Statoil was in a position to act more (or only) commercially. With its privatization, the perspective for Statoil became more short-sighted as the capital market, rather than political decision-making, was to guide corporate strategy. As the dominating owner, the state would now prioritize Statoil profits and shareholders value. Statoil's responsibility for the SDFI shares, transportation and processing of the oil and gas systems, and other political consideration and factors that were not directly related to Statoil's own interests, were taken over by state organs, new companies, and regulatory agencies.

Statoil continued however as the single seller of the SDFI and Petoro oil and gas. The links between state and company remained strong, partly because the state maintained its position as majority owner with some two-thirds of the shares. Government policy and structures changed with industrial and market maturation, in addition to the impacts from Norwegian-EU integration. The state gained a more regulative than interventionist role, but remained the main rent collector in the sector, and could continue in a role as a political industrial entrepreneur and innovator when considered necessary, albeit with changed political tools.

## THE EEA AGREEMENT AND NORWEGIAN PETROLEUM POLICY

The EEA agreement's impact on the Norwegian petroleum industry represents a broader political change. The agreement aimed at bringing the petroleum sector more in line with how other sectors are managed politically. It implied, 'as other international agreements, that the state is not only the regulator, but is also object for regulation' (Arnesen 1995:659, my translation). What previously had been a 'political question about which rules should be in force in Norway, was now to be ... a judicial question about the content of policy' (ibid.).

While being strongly focused on the role of the entrepreneurial Norwegian state as an explanation for market imperfections in her petroleum sector, the EEA agreement has not challenged the role of the state as the dominant owner, the main capitalist in the sector and the establishment of more state agencies. The heavy taxation system and the arrangement with the SDFI to capture a maximum share of the economic rent for the state have been maintained. The agreement strongly affects however domestic competition policy. It ended for example the policy of choosing developmental concepts and materials specifically

designed to fit the Norwegian supply industry (Arnesen 1995:343-393), which actually was a *de facto* protectionist measure in favour of Norwegian suppliers.

The agreement sets limits for the content of normative political measures; non-discriminatory restrictions are allowed, while discrimination between firms and persons is not allowed, independently of whether it is a state or a private firm that runs the business. What changed was that national goals could no longer be reached by normative political means alone, but must be complemented by the state as an actor and regulator, respectively, in relevant situations. The result of the EEA agreement is that more decisions are made by independent market actors, but there can also be more state involvement through state ownership or regulatory intervention in markets and private actors' behaviour, or both.

The EEA agreement also contributed to changing the constellations of domestic actors relevant for petroleum policy-formation. Within the government the Ministry of Foreign Affairs (MFA) returned as a more important ministry, as it was in the 1960s and 1970s when the processes around the law of the sea contributed to the development of the emerging Norwegian petroleum sector at the time. The Ministry of Justice and its sub-organs have in the areas where the EEA agreement largely applies, gone from being a domestic law-maker to an external law-taker, and in relevant cases override what the MPE otherwise would have done in the petroleum sector. Before the EEA agreement came into effect, the MPE would have rather asked the Ministry of Justice to make laws that supported her policy objectives.

Both privatization and EU pressure induced new government-company relationships and made Statoil more independent from the government. As the company became 'only commercial', questions gradually re-emerged, as in the early 1980s when the company was wing-clipped, of whether the government had also become the 'junior partner to business' (Wood 2001) in petroleum policy. One example was when Statoil and Hydro, and not the government, took the initiative to merge in 2006/2007. Statoil even suggested that it should claw back the SDFI shares that were taken away politically in 1984, in order to become internationally competitive. It would have made it the fourth biggest oil company in the world in terms of production at the time.

In the establishment phase of the Norwegian petroleum industry it was clear that business was a 'junior partner to government' (*ibid.*). As the roles of Statoil as an instrument for the state was wing-clipped and the company eventually privatized, it became a Norwegian multinational oil company with engagements in many countries. This coincided with a strong increase in international trade and direct foreign investments. Now the Norwegian state supports StatoilHydro's international engagements in countries such as Azerbaijan, Angola, Algeria, Libya, Russia, and Venezuela. At the same time, Statoil is promoting its interests at home in an expansion on the NCS (as for example through an increase in Troll production, rejected by the MPE in the fall of 2007). As the company has become 'only commercial', questions have once again been asked about whether the government has become a 'junior partner to business' (a principal-agent problem), as it was in the early 1980s. The political wing-clipping and privatization have offered Statoil greater freedom in how to influence policy and to act as grown cuckoo at home.

The formal position of the government was however not changed in 2001-2002, other than that she was still able to exercise strong authority over domestic petroleum policy through the new institutions and regulations, as well as towards StatoilHydro as a company, if she so desires. The ESA's evaluation of the GFU system was coloured by formality, but also by the interests of Norway and her bargaining with the EU system. The StatoilHydro merger,

which formally increased seller concentration of Norwegian gas, and the company's continued sales of SDFI gas, were not met by criticism from the ESA. Taken together, to date EU regulations in this sector have in sum *de facto* ended up being more about form than substance. This conclusion is supported by a number of downstream impediments on the Continent compared to the purposes of the gas directives and EU competition law (Austvik 2009a). The regulations to a large extent represents changes where,

'fuzzy liberalization' – universal free-market rules that are open to a wide range of interpretations by governments, companies and the courts – is becoming the norm, even when there is broad agreement on liberal market principles (Andersen and Sitter 2009).

Dag Harald Claes studied how four types of cumulative factors influenced how Norway has adapted to the EU energy sector in the Single Market: affectedness, policy similarities, bargaining opportunities, and legal proceedings. He found that

there is considerable variation in domestic adaptation to the EU even within the case of Norwegian energy adaptation ... [due to] variations in the policy fits and misfits, but more interestingly due to the dynamic interactions between actors' interests and the institutional aspects of the adaptation processes (Claes 2002:306).

The price transparency, concessions, and electricity directives did not qualify much for a Norwegian policy adaptation because of either low affectedness bargaining opportunities or (existing) policy similarities. The gas directive however represented a strong conflicting interest between Norway and the EU, especially when Norway did not obtain bargaining opportunities. Norway did however to a large extent manage to adapt to the new situation. In spite of her legal 'defeat', she did not lose the essentials of the petroleum model's entrepreneurial purpose when it was reorganized to comply with EU directives and competition law.

The complexity of the petroleum sector implies that when a judicial review of whether a measure is necessary to take care of the concerns in which it is anchored, doubtfully will be very intense. ... [The] ESA will most doubtfully be able to deal with other than striking violation of rules (Arnesen 1995:662, my translation).

To some extent this is also true in the EU itself:

The 'fuzziness' of the rules have meant that even court cases against national import/export monopolies are only met with partial success (Andersen and Sitter 2009).

The integration with the EU modified however the nationally defined ideological platform for industrial and social goals of Norwegian petroleum policy. The move was towards more liberal ideas, as compared to the interventionist and realist attitudes in the 10 Oil Commandments, and as practised in the 1970s and 1980s. However, already in the early 1990s, attitudes that the state should hold a weaker and more regulative political hands-on industrial policy began to inform policy in Norway. At the same time, as the EEA agreement was signed, a government report stated that state control should 'mainly be executed through laws, provisions and other administrative measures, rather than through direct interventions' (Report to the Storting 1993-1994:26). The process of integration with the EU strengthened liberal ideology and an emphasis on a New Public Management (NPM) type of policy. The

tradition in Norwegian petroleum policy had been to look for broad compromises across institutions and political parties and a bureaucracy that formulated policy. Only in foreign and security policy areas were otherwise consensus procedures explicitly sought. Initiatives for changing the petroleum sector were taken by companies of interests and the EU. This occurred in what was a radically changed liberal ideological environment. While the OPEC revolution gave strong support for independent national policy-making in the 1970s, the liberal sphere of the 1990s provided disincentives.

A relevant counterfactual question is what would have happened if Norway had not entered the EEA agreement, and instead chosen the Swiss model or full membership, respectively, for her EU relations. To answer this question it is important to note that independently of the EEA agreement, in the 1990s, both the international and domestic situations were substantially changed for Norway, as compared with the early years when it was the state that took the initiatives to create Statoil, separate out the SDFI shares, and make the GFU and FU arrangements.

Many changes in Norwegian politics would most likely have also taken place without the EEA agreement (Claes and Tranøy 1999, my translation).

In addition, how EU regulations and rules can be translated (Veggeland 2009) into domestic policy changes over time and depends on the situation. The domestic impacts of any exogenous change tend to be heavily coloured by incumbent ideology and governmental institutions. This path-dependency includes strong elements of stability, predictability and sustainability:

... history is path dependent in the sense that the character of current institutions depends not only on current conditions but also in the historical path of institutional developments (March and Olsen 1998:959).

In the long run the EEA agreement may continue to weaken the state's ability to intervene in oil and gas affairs. But the debate over the degree and scope of policy that best serves a liberal society's competitive situation will continue, not to say that the liberal idea as such of framing economic and political affairs may be modified. In the case of petroleum, the difference to a Swiss model and full membership would for Norway most likely have been of modest significance. This demonstrates that the distinction between the different perspectives on international affairs and international political economy often cover aspects of the same story:

The sharp disagreement between realism and liberal theory is overstated. In fact, the two approaches can be complimentary (Nye 1988:238).

The state gained a more regulative than interventionist role caused by integration with the EU, but also owing to industrial and market maturity. The scale and scope of the *de facto* results from policy depended on the Norwegian state's understanding of the situation and eventually interplay with the EU as international superstructure. Most interestingly is that it appears to be the hostile perceptions of and attitudes towards the integrating processes that was more decisive for outcomes and the ability to maintain policy goals than the scale and scope of *de jure* new regulations.

## CONCLUSION

As political entrepreneur the Norwegian state combined several instruments when creating and developing her petroleum industry. Measures were regulative as well as interventionist, and Norwegian companies received preferential treatment in the infant stage. From the very start, the state also engaged itself directly in the industry through its own company. Important goals were to defend national control of the petroleum sector, to optimize resource management, and to capture as much rent as possible. With substantial political and financial risks the state managed not only to establish the industry, but to also be the driving force in taking care of and contribute to change and evolution. Without these efforts Norway, as many other resource rich countries, could have been another victim of elements of the resource-curse paradox (Auty 1993).

Being blessed with large petroleum resources is not enough to assure that their management will lead to social well-being (Estrada 2006).

Through several discrete and incremental innovative changes the state managed to create a competitive Norwegian petroleum industry from nothing in only a couple of decades, and to take most of the profits from the activities itself. *Ex post facto*, policies turned out to be largely successful.

Many factors have contributed to this success, but it is the mixture of strategies that seems to have worked (Gordon and Stenvoll 2007).

The EEA agreement challenged and contributed to change the Norwegian petroleum enterprise. Her government, however, succeeded in entrepreneurial re-regulation and finding new ways of intervening in the sector within the new legal framework. The new policy could largely maintain the goals of the old policy in a context of industrial and market maturity and competitiveness. Norway would however have had great difficulties building a national petroleum industry from nothing if the resources were found now and not in the 1970s. It would under the agreement be difficult to give Statoil the best licenses and not at the outset to more efficient foreign competitors. It would be especially difficult to discriminate to the advantage of the Norwegian supply industry. A government cannot any more address support towards specific companies, a situation different to the 1970s. Political measures must in terms of single companies be neutral.

This neutrality does however not mean that policy today must be neutral to economic growth, employment or regional development. In Norway it is difficult to avoid the state becoming an important participant in one way or another in the development of large industries. First, as in any other country, the state must be an important actor as a 'Porterian' infrastructural provider. Secondly, the Norwegian state owns the now enormous Petroleum Fund and possesses the largest bulk of financial resources in the country. Thirdly, the state owns about 40 per cent of combined Norwegian industries. When the government has expressed desires for a larger and more efficient private ownership to act as entrepreneur in Norwegian industry (as in the Report to the Storting 2002-2003:22) the state must remain an important partner different from the state in many other market economies.

Today the possibility of the state following an innovative industrial policy within the EU economic paradigm appears to apply to the case of 'normal' industries and does not equally well appear to fit a situation when the economy experiences an exogenous shock, as through

the discovery of the huge petroleum reserves, and the subsequent desire of the state to build a national industry to deal with such an event. Many of the state entrepreneurial efforts from the 1970s and 1980s would today be in conflict with present international trade regulations (EU and the WTO).

On the other hand, even if the national political tool-box is changed, it is not empty when dealing with discrete and powerful exogenous change. One example is the tremendous growth in the Norwegian Petroleum Fund after 2001, which can today be considered a new exogenous shock to the Norwegian economy and society, parallel to the discoveries of the petroleum resources after 1969. Norway has not put down labour or capital to create the Fund (it is the accumulation of economic rent from the NCS and returns on international financial investments), nor did she do anything to bring the resources under the bottom of the North Sea millions of years ago. To use part of the Fund's foreign earnings to long-term building of alternative domestic sectors through support of 'Porterian' infrastructure in a wide sense is possible within the new international framework; social security, roads, rails, air, harbours, education, research and development, culture, etc. Some of these investments could even be state (or publicly) run. Should she learn from the petroleum enterprise acting to the best for Norwegian state and society, such (massive and) discrete investments could be considered a responsible response to this second exogenous petroleum gift, and possible within the existing international and European economic superstructure.

Within an orthodox liberal framework, governments should not however have roles in the form of direct involvement in business activities, in terms of policies that favour certain business or branches, or through massive infrastructural investments based on public money. We argue, however, that such an approach to the role of a government is unrealistic in a complex economic system, where a myriad of regulations and programs are in place, particularly in the petroleum sector.

Under such circumstances, talk of substituting global governance for the primacy of the national state is in vain (Gilpin 2001:402).

Hence, the scope and scale of the national political manoeuvring room depends on how the EU itself evolves. The EU represents today a regulated market economy (and not a laissez-faire) system. Entrepreneurship and innovation is however about individuals taking actions on their own. But the EU has changed much over the past decades, and it may continue to change in the future. If the EU allows for more national interventionism and political innovation in economic activities it will not necessarily break with the overall idea of the Union. A liberal economic model can be interpreted within the 'variety of capitalism' literature, with different state-industry mixtures and optimization purposes.

How the EU develops further depends on circumstance, ideological perspective, and intra-EU developments, and will contribute to defining the manoeuvring room and policy options for the Norwegian state, as well as in economic activity in general. It will be important for any European state with the aim of promoting national economic interests to follow how EU's economic, political and *de jure* regulations and practices will change with ideological change. The resulting *de facto* national political manoeuvring room within these developments is eventually determined by each country's innovative ability to interpret, adapt, and influence the processes.

## REFERENCES

- Abel, F. (2003). The political entrepreneur and the coordination of the political process: A market process perspective of the political market. *The Review of Austrian Economics*, 16:2/3. pp.153–168
- Andersen, S.S. (2006). The mosaic of Europeanization: An organizational perspective on national re-contextualization. In From & Sitter (Eds.), *Europe's nascent state: Public policy in the European Union*. Oslo: Gyldendal Akademisk
- Andersen, S.S. & Sitter, N. (2009). The European gas market: Differentiated integration and fuzzy liberalization. In Ferman (Ed.): *The political economy of energy in Europe*. Berlin: Berliner Wissenschafts Verlag.
- Arnesen, F. (1995). *Statlig styring og EØS-rettslige skranner [State steering and EEA legal barriers]*. Oslo: Universitetsforlaget
- Ask, A.O. (2006). *Mennene som skapte oljegiganten: Statoils historie er også beretningen om Olje-Norge [The men who created the oil giant: Statoil's history is also the story of Oil-Norway]*. www.e24.no
- Augsburg, T. (2005). *Becoming interdisciplinary: An introduction to interdisciplinary studies*. New York: Kendall/Hunt Publishing
- Austvik, O.G. (Ed.) (1989). *Norwegian oil and foreign policy*. Oslo: NUPI / Vett and Viten
- Austvik, O.G. (1991). Norwegian energy in an international context: The U.S. embargo of Soviet gas in 1982. In Austvik (Ed.), *Norwegian gas in the new Europe: How politics shape markets*. Oslo: NUPI / Vett and Viten
- Austvik, O.G. (2009a). EU natural gas market liberalization and long-term security-of-supply and demand. In Ferman (Ed.), *The political economy of energy in Europe*. Berlin: Berliner Wissenschafts Verlag. pp. 61-94.
- Austvik, O.G. (2009b). *The Norwegian state as oil and gas entrepreneur: The impact of the EEA agreement and EU gas market liberalization*. PhD Thesis. Saarbrücken: VDM Verlag
- Auty, R.M. (1993). *Sustaining development in mineral economies: The resource curse thesis*. London: Routledge.
- Claes, D.H. (2002). The process of Europeanization: Norway and the internal energy market. *Journal of Public Policy*, 22, 3: 299–323
- Claes, D.H. and Tranøy, B.S. (Eds.) (1999). *Utenfor, annerledes og suveren? Norge under EØS-avtalen [Outside, different and sovereign? Norway under the EEA agreement]*. Bergen: Fagbokforlaget
- Cini, M. (Ed) (2007). *European Union politics*. Oxford: Oxford University Press
- Eisinger, P.K. (1988). *The rise of the entrepreneurial state: State and local economic development policy in the United States*. Madison WI: The University of Wisconsin Press
- Elster, J. & Moene, K. (1989). *Alternatives to capitalism*. Cambridge: Press Syndicate of the University of Cambridge
- Emerson, M., Vahl, M. & Woolcock, S. (2002). *Norway, the European Economic Area and the European Union*. Brussels: Centre for European Policy Studies (CEPS).
- Estrada, J. (2006). *The Norwegian petroleum model and its benefits*. Mexico City: Analitica Energetica S.C.

- EU, European Union (1990). *Council directive of 29 June 1990 concerning a community procedure to improve the transparency of gas and electricity prices charged to industrial end-users.* CEL-Title: 90/377/EEC. Brussels: EU
- EU, European Union (1994). *On the conditions for granting and using authorizations for the prospection, exploration and production of hydrocarbons.* Council Directive 1994/22/EC, 30.5 1994. Brussels: EU
- EU, European Union (1997). Restructuring the community framework for the taxation of energy products: Proposal for a council directive COM (97) 30 Final 97/0111 (CNS) 12.3.1997. Brussels: EU
- EU, European Union (1998). *The single market for natural gas.* IGM Directive 98/30. Brussels: EU
- EU, European Union (2003). *Common rules for the internal market in natural gas and repealing Directive 98/30/EC.* Council Directive 2003/55/EC, 26.6.2003. Brussels: EU
- EU, European Union (2005). Working together for growth and jobs: A new start for the Lisbon Strategy. COM(2005) 24 final Brussels, 2.2.2005. Brussels: EU
- EU, European Union (2007a). *The European Economic Area (EEA): Overview.* Legal notice. October. Brussels: EU
- EU, European Union (2007b). *Common rules for the internal market in natural gas.* Proposal for a Directive of the European Parliament and of the Council amending Directive 2003/55/EC of the European Parliament and of the Council of 26 June 2003. COM (2007) 0529. Brussels: EU
- Evans, P.B. & Rueschemeyer, D. (1985). The state and economic transformation: toward an analysis of the conditions underlying effective intervention. In Evans, Rueschemeyer & Skocpol (Eds.), *Bringing the state back in.* Cambridge: Cambridge University Press
- Fagerberg, J., Mowery, D.C. & Nelson, R.R. (Eds.) (2005). *The Oxford handbook of innovation.* Oxford: Oxford University Press
- Fagerberg, J. (2007). The dynamics of technology, growth and trade: A Schumpeterian perspective. In Hanusch & Pyka (Eds.), *Elgar companion to neo-Schumpeterian economics.* Cheltenham: Edward Elgar Publishing
- Gilpin, R. (2001). *Global political economy: understanding the international economic order.* Princeton NJ: Princeton University Press
- Gordon, R. & Stenvoll, T. (2007). *Statoil: A study in political entrepreneurship.* Policy Report. Texas: The James A. Baker III Institute for Public Policy, Rice University
- Graver, H.P. (2000). *Supranationality and national legal autonomy in the EEA agreement.* Working paper no 23. Oslo: Arena
- Grønlie, T. (1990). *Statlig industrietablering som politisk reiskap: Norge i vest-europeisk sammenheng [Establishment of industry by the state as a political tool: Norway in a western European context].* Notat no. 1. Bergen: LOS-senteret
- Hall, P. & Soskice, D. (2001). *Varieties of capitalism: the institutional foundations of comparative advantage.* Oxford: Oxford University Press
- Hanisch, T.J. & Nerheim, G. (1992). *Norsk oljehistorie: Fra vantrol overmot? [Norwegian oil history: From disbelief to arrogance?]* (vol. I) Oslo: Leseselskapet
- Jentleson, B. (1986). *Pipeline politics: The complex political economy of east-west energy trade.* Itacha NY: Cornell University Press.
- Katzenstein, P. (1985). *Small states in world markets: Industrial policy in Europe.* Itacha NY: Cornell University Press.

- Keohane, R. & Milner, H. (1996). *Internationalization and domestic politics*. Cambridge MA: Cambridge University press
- Klein, J.T. (1990). *Interdisciplinarity: History, theory, and practice*. Detroit: Wayne State University
- Klein, J.T. (1996). *Crossing boundaries: Knowledge, disciplinaries, and interdisciplinaries*. Charlottesville VA: University Press of Virginia
- Krugman, P. (1979). A model of innovation, technology transfer and the world distribution of income. *Journal of Political Economy* 87, 253-266
- Mann, M. (1997). Has globalization ended the rise and rise of the nation-state. *Review of International Political Economy* Vol 4, No 3
- March, J.G. & Olsen, J.P. (1998). The institutional dynamics of international political orders. *International Organization* 52, 4
- Martin, R.L., & Osberg, S. (2007). Social entrepreneurship: The case for definition. *Stanford Social Innovation Review*
- Mises, L.von (1943). *La Bureaucratie [Bureaucracy]*. Paris: Librairie de Médicis.
- Mjøset, L. & Andersson, L. (1987). The transformation of the Nordic models. *Cooperation and Conflict*, 22, 227-243
- Mjøset, L. & Clausen, T.H. (2007). *Capitalism compared. Comparative Social Research* (vol. 24). Amsterdam: Elsevier
- MPE, Ministry of Petroleum and Energy (annual). *Fact sheet*. Oslo.
- MPE, Ministry of Petroleum and Energy (1997). *Memorandum on the establishment and functioning of the GFU*, January 20. Oslo.
- MPE, Ministry of Petroleum and Energy (2002). *Draft Royal Decree regarding amendments to Regulations to Act relating to petroleum activities of 27 June 1997 No. 653 and Draft of new Regulations for determining tariffs*, September 2002. Oslo.
- Nerheim, G. (1996). *Norsk oljehistorie. En gassnasjon blir til*. [Norwegian oil history: A gas-nation comes into existence] (vol. 2). Oslo: Leseselskapet.
- Nore, P. (1979). *The Norwegian state's relationship to the international oil companies over North Sea oil, 1965-75*. London: Council for National Academic Awards
- Noreng, Ø. (2000). Statselskap – et gode for nasjonen? Internasjonale erfaringer – Statoil som norsk tilfelle [State company: Good for the nation? International experiences – Statoil as a Norwegian case]. Presentasjon på PETROPOLs seminar: *Privatisering av Statoil og SDØE's framtid* [Privatization of Statoil and the State's direct financial interest (SDØE)] Oslo 23. oktober.
- Noreng, Ø. (2004). Norway: Economic diversification and the petroleum industry. *Middle East Economic Survey*. Nicosia. VOL XLVII no. 45.
- Nye, J. (1988). Neorealism and neoliberalism. *World Politics* 15(2): pp. 235-51
- OECD, Organization for Economic Cooperation and Development (2006). *Understanding entrepreneurship: Developing indicators for international comparisons and assessments*. STD/CSTAS (2006)9. Paris: OECD
- Olsen, J.P. (1989). *Petroleum og politikk – det representative demokratiets møte med oljealderen* [Petroleum and politics: Representative democracy's meeting with the oil era]. Oslo: TANO.
- Olsen, O.E. & Reisersen, J.E. (1991). *Svart gull på alles fat? Oljevirksomhetens regionale fordeling* [Black gold in everyone's barrel? Regional distribution of oil activity]. Oslo: Kommuneforlaget.

- Porter, M. (1990). *The competitive advantage of nations*. London: Macmillan Press Ltd.
- Posner, M.V. (1961). *International trade and technical change*. Oxford Economic Papers 13: 323-341
- Putnam, R.D. (1988). Diplomacy and domestic politics: the logic of two-level games. *International Organization*, 42(3). pp. 427–460.
- Report to the Storting (1970–1971). *Undersøkelse etter og utvinning av undersjøiske naturforekomster på den norske kontinentsokkel m.m.* [Search for and extraction of undersea natural deposits on the Norwegian Continental Shelf, etc.] Oslo: Industridepartementet Nr. 76
- Report to the Storting (1993-1994). *Ufordiner og perspektiver for petroleumsvirksomheten på kontinentsokkelen* [Challenges and perspectives for petroleum activity on the Norwegian Continental Shelf]. Oslo: Nærings- og energidepartementet, Nr. 26.
- Report to the Storting (2001-2002). *Om EØS-samarbeidet 1994-2000* [On EEA co-operation: 1994-2000]. Oslo: Utenriksdepartementet 26 April 2002. Nr. 27.
- Report to the Storting (2002-2003). *Et mindre og bedre statlig eierskap* [A smaller and better state ownership] Oslo: Nærings- og handelsdepartementet, nr. 22
- Ricketts, M. (1987). *The new industrial economics*. New York: St. Martin's
- Ryggvik, H. (1997). Norsk oljepolitikk mellom det internasjonale og det nasjonale [Norwegian oil policy between the international and the national]. In Olsen and Sejersted (Eds.), *Oljevirksomheten som teknologiutviklingsprosjekt* [Oil activity as a project of technological development]. Oslo: Ad Notam.
- Schneider, M. & Teske, P. (1992). Toward a theory of the political entrepreneur: Evidence from local government. *American Political Science Review* Vol. 86 No.3
- Shepsle, K. (1979). Institutional Arrangements and Equilibrium in Multidimensional Voting Models. *American Journal of Political science* 23. pp. 27-59.
- Shockley, G.E., Frank, P.M. & Stough, R.R. (2002). Toward a theory of public sector Entrepreneurship. *The school of public policy, George Mason University NCIIA* 7th Annual Meeting: Big Ideas in a Small World March 20-22 Boston, Massachusetts.
- Stern, J. (1986). After Sleipner: A policy for UK gas supplies. *Energy Policy* vol 14 no.1.
- Stern, J. (1998). *Competition and liberalization in European gas markets: A diversity of models*. London: Royal Institute of International Affairs
- Taewook, C. (2004). Promoting a northeast Asia economic integration policy. *Korea Focus*, vol 12, no 2.
- Veggeland, N. (2007). *Paths of public innovation in the global age*. Cheltenham: Edward Elgar Publishing
- Veggeland, N. (2009). *Taming the regulatory state*. Cheltenham: Edward Elgar Publishing
- Wood, S. (2001). Business, government, and patterns of labour market policy in Britain and the Federal Republic of Germany. In Hall and Soskice (Eds.), *Varieties of Capitalism*. Oxford: Oxford University Press.
- Yergin, D. (1993). *The prize: The epic quest for oil, money and power*. New York: Simon and Schuster.