

CICERO Working Paper 2008:03

Sovereign Wealth Funds as a New Instrument of Climate Protection Policy?

**A Case Study of Norway as a Pioneer of Ethical
Guidelines for Investment Policy**

Prof. Dr. Danyel Reiche

November 2008

CICERO

Center for International Climate
and Environmental Research
P.O. Box 1129 Blindern
N-0318 Oslo, Norway
Phone: +47 22 85 87 50
Fax: +47 22 85 87 51
E-mail: admin@cicero.uio.no
Web: www.cicero.uio.no

CICERO Senter for klimaforskning

P.B. 1129 Blindern, 0318 Oslo
Telefon: 22 85 87 50
Faks: 22 85 87 51
E-post: admin@cicero.uio.no
Nett: www.cicero.uio.no

Tittel: Sovereign Wealth Funds as a New Instrument of Climate Protection Policy? A Case Study of Norway as a Pioneer of Ethical Guidelines for Investment Policy

Forfatter(e): Prof. Dr. Danyel Reiche

CICERO Working Paper 2008:03
17 sider

Finansieringskilde:

Prosjekt: E.ON Ruhrgas Scholarship Program for political science

Prosjektleder:

Kvalitetsansvarlig: Guri Bang

Nøkkelord: klima politikk, etikk

Sammendrag:.

Title: Sovereign Wealth Funds as a New Instrument of Climate Protection Policy? A Case Study of Norway as a Pioneer of Ethical Guidelines for Investment Policy

Author(s): Prof. Dr. Danyel Reiche

CICERO Working Paper 2008:03
17 pages

Financed by:

Project: E.ON Ruhrgas Scholarship Program for political science

Project manager:

Quality manager: Guri Bang

Keywords: climate policy, ethics

Abstract: Norway's abundance of natural resources is the deciding factor in explaining how the north European state ranks among countries worldwide with the highest standard of living. A sovereign wealth fund was established in 1990 in which surpluses from oil and gas industry sales have been and will continue to be invested.

At the end of the 1990s Norwegian public opinion insisted that the sovereign wealth fund should not only be used for intergenerational justice, but should also contribute to the implementation of universally accepted values and norms. At the end of 2004 the parliament (*Storting*), on the basis of the Graver Report, finally agreed on ethics guidelines for investments made by the sovereign wealth fund. The fund now aspires to include in its portfolio only businesses that adhere to specified ethical regulations. This report illustrates the emergence and outcome of this development. It concentrates on analyzing to what extent sovereign wealth funds could be a new instrument of climate protection policy. For this purpose, the contribution of the two main instruments of ethical regulations—"active ownership" and the exclusion of businesses from the fund portfolio—are analyzed, as well as the instruments that have been created for their implementation. This report also analyzes the drawbacks and constraints of a dissemination of the Norwegian regulations to other financial actors and their initial diffusion effects. Finally, it discusses ongoing evaluations of the ethical regulations.

Språk: Engelsk

Language of report: English

Rapporten kan bestilles fra:
CICERO Senter for klimaforskning
P.B. 1129 Blindern
0318 Oslo

The report may be ordered from:
CICERO (Center for International Climate and
Environmental Research – Oslo)
PO Box 1129 Blindern
0318 Oslo, NORWAY

Eller lastes ned fra:
<http://www.cicero.uio.no>

Or be downloaded from:
<http://www.cicero.uio.no>

Contents

1 Introduction 1
2 Natural resources as a basis for sovereign wealth funds 2
3 From the first Norwegian oil fields to sovereign wealth fund..... 3
4 From intergenerational justice to contemporary ethics 5
5 Application of the ethical regulations in the domain of environmental and climate protection..... 6
6 Contribution of the ethical regulations to climate protection: restrictions and successful application 9
7 Evaluation of the ethical regulations 10
8 Diffusion of the ethical regulations 12
9 Outcomes and future prospects 13

Acknowledgements

The present text draws on a two-month research visit in May–June 2008 at CICERO, which was sponsored by the E.ON Ruhrgas Scholarship Program for political science.

1 Introduction

In Norway a sovereign wealth fund was established in 1990, in which surplus revenues from oil and gas industry sales have been and will continue to be invested. The Norwegian Governmental Pension Fund, with ca. 8,000 shareholdings and fixed assets of more than 438 billion USD (282.13 billion €),¹ is among the world's largest sovereign wealth funds. The fund will secure the state's ability to continue in the post-fossil-fuels era.

At the end of the 1990s, Norwegian public opinion insisted that the sovereign wealth fund should not only be used for intergenerational justice, but should also contribute to the implementation of universally accepted values and norms. At the end of 2004 the parliament (*Storting*), on the basis of the Graver Report,² finally agreed on ethical guidelines for investments made by the sovereign wealth fund. The present report will trace the emergence and outcome of this development. Why were the ethical guidelines decided? Which instruments were introduced for their implementation? This report will give examples of the use of the instruments. Which actors have been created for their implementation? This report discusses to what extent sovereign wealth funds can be a new instrument in climate protection policies.³ What are the possibilities, but also limitations, in stimulating the global discussion of climate protection? Are there initial diffusion effects from the Norwegian case to other sovereign wealth funds or financial actors?

In addition to analysis of documents and policy papers, interviews were conducted with relevant actors, among them representatives of the institutions that are involved in the governance of the ethical guidelines: the Norwegian State Bank, which interacts with businesses in the fund's portfolio to sensitize them to the values and norms of the ethical guidelines (so-called active ownership); the Ethics Council, which has the task of submitting proposals for the exclusion of businesses from the fund's portfolio; and the Ministry of Finance, which has the right of final decision regarding exclusions.

Section 2 argues that natural resources and revenue from their sales frequently are the impetus for the development of sovereign wealth funds. International comparisons demonstrate that Norway currently possesses the second largest sovereign wealth fund in the world. Subsequently, a short historical summation of Norwegian oil and gas production illustrates the creation of the fund in 1990. Section 3 deals with the mechanisms that ensure that the petroleum revenues benefit the fund, on the one hand, but, on the other hand, also prevent a deficit in the state budget.

¹ Status as of late 2007, Deutsche Bank Research, http://www.dbresearch.com/PROD/DBR_INTERNET_EN-PROD/PROD000000000219224.pdf, last accessed 29 May 2008. All amounts in this report are from 20 June 2008 and measured using the currency converter at <http://www.oanda.com/convert/classic>. In this case 1 NOK, 0.12453 €, converts to 0.19335 USD.

² On the basis of a parliamentary resolution from June 2002, a commission was formed under the chairmanship of Oslo law professor Hans Petter Graver that would operate from October 2002 until June 2003 to write a report that would provide the foundation from which the parliament would decide the ethical regulations in late 2004. For its part, the Graver Report conducted ample lobbying on the part of nongovernmental organizations (NGOs), especially Future in our Hands and the umbrella organization Forum, for the integration of ethical criteria in the investment policies of the sovereign welfare fund. Integration of these criteria was supported from the beginning, in particular by the Socialist Party. Interestingly, the rightist Progressive Party (FrP) also agreed to the proposals, with a strong disposition to profile the petroleum revenues for social domestic purposes, in a transsituational alliance in the appointment of the Graver Commission (Interview Graver).

³ Other aspects of the ethical regulations such as human rights are not further explored because they fall outside the scope of this report.

Section 4 explains how the fund, alongside the claim of guaranteeing intergenerational justice (maintenance of the Norwegian welfare state, both today as well as after the depletion of oil and natural gas resources), has currently been formulated with the values and norms of ethical regulations. The ethical regulations' main instruments will be constituted by the so-called active ownership, the exclusion of businesses, and the participation of responsible actors such as the National Bank, Ministry of Finance, and the Ethics Council. Subsequently, Section 5 analyzes the results of the application of ethical regulations.

The sovereign wealth fund rests on the possibilities and constraints of ethical regulations with which it is able to contribute to global climate protection, the theme of Section 6. Section 7 reviews the possible results of the currently ongoing evaluation of the ethical guidelines, which should end in final modifications by parliament in the spring of 2009. The possibilities and constraints of an adoption of the Norwegian regulations by other actors in business finance are examined in Section 8, as well as the initial diffusion effects. Finally, Section 9 concludes with a look at the position and perspective of Norwegian climate protection policy.

2 Natural resources as a basis for sovereign wealth funds

Norway is ranked among the countries with the highest standard of living in the world. In corresponding rankings such as the Human Development Index (HDI), which measures the state of human developments⁴ and is published annually by the United Nations Development Program (UNDP), the north European countries continually are placed in the top group. In the HDI rankings of 2007–2008, Norway takes second place behind Iceland and ahead of Australia.⁵

Norway owes its prosperity largely to its oil and gas deposits. However, it has attempted to minimize the use of these fossil resources domestically in order to primarily export them to further the nation's prosperity. As a result, the monarchy has set goals for the domestic use of renewable energies: 98.2 percent of all domestically produced electricity (figures for 2007) would be produced in comparatively environmentally friendly and affordable hydroelectric power plants.⁶ Interestingly, the largest hydroelectric stations were put into service between 1970 and 1985—*after* the oil and gas long-range goals were already established. Norway is the sixth largest hydroelectric power producer in the world, although no other country produces as much hydroelectricity per inhabitant. The energy need per person in Norway is so high because electricity in the majority of households is also used for heat.⁷

Most sovereign wealth funds are found in states generously equipped with deposits of fossil fuels and other natural resources. They therefore serve as the depository of excess income from the sales of natural gas, petroleum, and other resources, and therefore countries

⁴ Parameters are based on the [Gross National Product](#) per [inhabitant](#) of a country, [life expectancy](#) and education level incorporating the [literacy rate](#) and the rate of enrolment of the citizens.

⁵ United Nations Development Programme, <http://hdr.undp.org/en/statistics/>, last accessed 29 May 2008.

⁶ 0.7 percent of the electricity was produced by wind power, 1.1 percent in thermal power plants. The total amount of electricity produced in Norway in 2007 was 136.1 TWh. See http://www.nve.no/modules/module_109/publisher_view_product.asp?iEntityId=11476, last accessed 10 June 2008.

⁷ Ministry of Petroleum and Energy, <http://www.regjeringen.no/en/dep/oed/Subject/Energy-in-Norway.html?id=86981>, last accessed 30 May 2008.

want to secure against price declines. If the price of raw materials falls, the sovereign wealth fund's reserved assets, which stem from a period when prices were higher, may be utilized. Some countries recognize that sovereign wealth funds are a precaution for the day when resources are depleted and cease to generate income. At that time the funds would pay, for example, for pension payments or other state programs. In addition, investment in sovereign wealth funds should stop the overheating of national economies. For instance, Norway's revenues from oil and gas sales are so high that their full use domestically could result in extreme inflation.⁸

The Norwegian Governmental Pension Fund, which will be examined below, was the second largest sovereign wealth fund in the world in late 2007. Only the investment volume of oil revenues by the United Arab Emirates was larger (see Table 1).

Table 1: The largest sovereign wealth funds (status as of late 2007)

Country	Investment volume in billions USD (€)
United Arab Emirates	\$875 (563.62 €)
Norway	438 (282.13)
Saudi Arabia	300 (193.24)
Kuwait	200 (128.83)
China	144 (92.76)
Russia	140 (90.18)

Source: Deutsche Bank Research, http://www.dbresearch.com/PROD/DBR_INTERNET_EN-PROD/PROD000000000219224.pdf, last accessed 29 May 2008.

3 From the first Norwegian oil fields to sovereign wealth fund

Since 1959, when the Groningen natural gas field was developed in the Netherlands, the search for oil and gas deposits in the North Sea has increased. A decade later the first oil field was developed in Norwegian territory. In June 1971 production in the Ekofisk oil field began. Norway is the fifth largest oil and third largest natural gas exporter, as well as the tenth largest oil and fifth largest natural gas producer, in the world. The European Union has a significant strategic interest in Norway,⁹ which is the largest supplier of natural gas to the EU after Russia and reliably accounts for about one-third of the imports to Western Europe. Germany is Norway's main buyer of natural gas, and the German company E.ON Ruhrgas is Norway's largest single customer of natural gas. The Norwegian government assumes that production from fossil fuel sources within its national borders will increase. Indeed, oil

⁸ Norwegian Ministry of Finance 2006. For general information on the subject of sovereign welfare funds, see also <http://wissen.spiegel.de/wissen/dokument/75/10/dokument.html?titel=Staatsfonds&id=55700157&top=Start&suchbegriff=staatsfonds&quellen=&vl=0> as well as <http://de.wikipedia.org/wiki/Staatsfonds>, last accessed 30 May 2008.

⁹ For purposes of this relationship, the EU-Norway Energy Dialog has been ongoing since September 2006. The parties have agreed to strengthen in particular exchange and cooperation in the area of CO₂ deposits and storage. See the press release of the EU Energy Commissioner Andris Piebalgs dated 25 July 2007.

production will fall as reserves of oil are depleted, but this will be overcompensated by further growth in natural gas production.¹⁰

In 1990 revenues from oil and natural gas sales began to be set aside in so-called petroleum funds.¹¹ In 2004, when ethical regulations had been established (see below) for the funds' investment policy, a name change took place: it has since been called the Norwegian Governmental Pension Fund. There are actually two funds: the Norwegian Governmental Pension Fund–Global and the Norwegian Governmental Pension Fund–Norway; the latter invests in businesses in Norway and neighboring Scandinavian countries. In late 2007 around 95 percent of the funding assets were invested in the Norwegian Governmental Pension Fund–Global. To prevent the domestic economy from overheating, the Norwegian Governmental Pension Fund–Global invests its assets completely overseas. Stock shares hold 60 percent of funding assets, and the other 40 percent are fixed in bonds.

The cash flow from oil and natural gas activity is invested in the Norwegian Governmental Pension Fund, which includes the difference between revenue (such as taxes and dividends from energy-producing companies, some of which the state receives) and the expenses of the state's oil and natural gas transactions. In 2007 this income provided surpluses of 316 billion NOK (39.40 billion € see Table 2). Norway's structural national deficit without its oil and natural gas income is made up with the earnings from the state fund.¹² The parliament (*Storting*) has decided that to avoid inflation and overheating of the domestic economy, a maximum of 4 percent of fund returns should be incorporated into the national budget. Fund returns over 4 percent are placed as additional earnings in the Governmental Pension Fund. Therefore, the recent high earnings due to high oil prices contribute to a further growth of fund in addition to the current income. In 2007 alone the Government Pension Fund has grown to 392 billion NOK (48.81 billion € see Table 3).

Table 2: The Norwegian oil and gas sector (in billions NOK)

	2007	2008	2009	2012	Oil price sensitivity 2008 ¹
Assumptions:					
Crude oil (NOK per barrel)	423	500	408	400	
Production (millions m ³ oil equivalent)	238	240	249	251	
Crude oil and natural gas	148	141	140	136	
Export value ² (billions NOK)	509	600	528	502	7.3
Accrued taxes and royalties ³ (billions NOK)	197	233	187	153	6.0
Paid taxes and royalties ³ (billions NOK)	191	216	210	156	3.0
Net cash flow ⁴ (billions NOK)	316	356	332	268	5.5

Source: Statistics Norway; Ministry of Finance, <http://www.regjeringen.no/en/dep/fin/Press-Center/Press-releases/2008/revisted-national-budget-2008-sound-fisca.html?id=511405>, last accessed 30 May 2008.

¹Effects of an oil price increase of NOK 10 per barrel.

²Crude oil, natural gas, NGL, and pipeline transport.

³Income and property taxes, surtax, production tax, area tax, and CO₂ tax. NO_x-tax in 2007 and 2008.

⁴Taxes and excise duties, net revenues from State Direct Financial Interest, and dividends from Statoil.

¹⁰ Ministry of Petroleum and Energy, <http://www.regjeringen.no/en/dep/oed/Subject/Energy-in-Norway.html?id=86981>, last accessed 30 May 2008.

¹¹ Until this time the revenue was applied to the general budget.

¹² The deficit in 2007 amounted to 1.3 billion NOK (161.89 million €), the budget forecast for 2008 saw a deficit of 13 billion NOK (1.62 billion €), and in 2006 it was actually 44 billion NOK (5.48 billion €).

Table 3: National budget und government pension fund in overview (in billions NOK)

	2006	2007	2008
1. Fiscal Budget			
Total revenues	994.9	1 030.1	1 119.5
Revenues from petroleum activities	376.6	337.4	381.4
Revenues excluding petroleum activities	618.3	692.7	738.1
Total expenditures	683.5	715.1	776.9
Expenditures on petroleum activities	21.2	21.1	25.7
Expenditures excluding petroleum activities	662.3	694.0	751.1
Fiscal budget surplus before transfers to the Pension Fund: Global	311.4	315.0	342.6
– Net revenues from petroleum activities	355.4	316.4	355.7
= Non-oil budget surplus	–44.0	–1.3	–13.0
+ Transfers from the Pension Fund: Global	57.4	2.8	13.0
= Fiscal budget surplus	13.4	1.5	0.0
2. Government Pension Fund			
Net transfer to the Pension Fund: Global	298.0	313.6	342.6
+ Dividends on the Pension Fund	64.1	78.4	81.6
= Surplus in the Pension Fund	362.1	392.0	424.2
3. Fiscal Budget and Government Pension Fund consolidated surplus			
	375.5	393.5	424.2

Source: Ministry of Finance, <http://www.regjeringen.no/en/dep/fin/Press-Center/Press-releases/2008/revised-national-budget-2008-sound-fisca.html?id=511405>, last accessed 30 May 2008.

4 From intergenerational justice to contemporary ethics

The launching of the Norwegian sovereign wealth fund can be characterized, in the words of Hans Jonas, as an “ethic of distant responsibility.”¹³ The objective is that abundance of national resources should not only prosper for one or two generations in the present, but also provide for future generations. When oil and gas are no longer available, the fund should have enough reserves that future generations are able to maintain the current high living standard (see Section 1). This claim of intergenerational justice enjoys wide acceptance in Norwegian society. The late 1990s introduced discussion that the “sovereign wealth fund and ethics” theme has yet another facet: what will concretely be produced with the reserved money? Does it contribute to the spread of values in the Scandinavian state, or does it work against them?

The discussion that money is not neutral and apolitical, but can significantly influence social development, is not new. In the nineteenth century church groups across the world,

¹³ Hans Jonas, *Das Prinzip Verantwortung: Versuch einer Ethik für die technologische Zivilisation*. Frankfurt/M., 1979.

particularly in the United States, began defining exclusion criteria for the investment of their assets: businesses selling products such as alcohol, tobacco, and pornography would be considered taboo for monetary investments. Inspired by social developments such as the environmental and feminist movements or, for example, the establishment of gay rights organizations, a development in the area of the private investments came out of the United States in the 1970s that also strongly takes ethical principles into consideration. In doing so, fund exclusion criteria were formed (e.g., no money should be invested in nuclear power, genetic technology, or firms refusing to hire homosexuals) while other investment criteria rest on positive criteria. Accordingly, either money is placed in certain model industries such as renewable energies or organic farming, or it pursues the so-called best in class objective, in which an “ethics champion” is selected for investment in each of various fields, such as telecommunications and auto manufacturing.

Norway is the only state to have formulated so-called ethical regulations for its sovereign wealth fund.¹⁴ A central feature of this philosophy is the concept of “active ownership” to inform companies of the general expectations inherent in the ethical guidelines and to ensure that they have established internal procedures to verify that these expectations are being met. Otherwise, in cases of noncompliance, shares in the companies are sold and excluded from the fund’s portfolio. The Ethics Council that has been established submits to the Ministry of Finance proposals for businesses to be excluded for noncompliance. The Ministry of Finance has the right of final decision; however, reportedly it has to date always followed the suggestions of the Ethics Council. Guidelines for the three relevant actors (Bank, Ethics Council, and Ministry of Finance) are the ethical regulations passed by the Norwegian parliament in late 2004, which stem from the Graver Report.

Businesses that produce weapons (or conduct transactions with businesses that do) or negatively impact fundamental human rights in their normal application are to be excluded from the fund’s investments. Firms that contribute to serious or systematic human rights violations, including malicious deaths, torture, denial of freedom, forced labour, the worst forms of child labour, and other exploitation of children are to be banned from the portfolio. These ethical guidelines also include ancillary adverse effects on individual rights in situations of war and conflict, such as corruption and other serious violations of fundamental ethical norms. Furthermore, the ethical regulations affirm that businesses should be excluded if they contribute to a serious impairment to the environment. The next section will elaborate on this point.

5 Application of the ethical regulations in the domain of environmental and climate protection

One can easily imagine what falls under the category of so-called unethical weapons and can promptly understand their association with landmines, cluster bombs, and the like as well as the worst forms of child labour. These are comparatively comprehensible criteria and pose a question as to what three straightforward words in environmental protection—“severe environmental degradation”—mean in practice. When do businesses contribute to serious harm to the environment? What are the goals of active ownership in the case of environmental protection? What is the position in discussions with businesses on what should be

¹⁴ The sovereign wealth funds in Islamic countries follow the regulations of Islamic banking. Following these, they apply social and ethical exclusion criteria, such as the banning of investments in alcohol producers and distributors and companies that deal in prostitution, pornography, gambling or the processing and trade of pork. See http://de.wikipedia.org/wiki/Islamic_Banking, last accessed 2 June 2008.

accomplished? How does a business disqualify itself so as to lead to its exclusion from the portfolio?

In this section the concept of active ownership will be explained as an important instrument for the implementation of ethical regulations before the second instrument—the exclusion of businesses—is elaborated.

The Norwegian State Bank interacts with businesses from its portfolio in order to sensitize them to the values and norms of the Norwegian sovereign wealth fund. Along with ethical regulations, the bank, in its work for “sustainable business,” refers to international agreements in its goal of conducting responsible business, according to the managers of the Corporate Governance Unit, which is specifically mentioned by the UN Global Compact, the Organisation for Economic Co-operation and Development (OECD) Principles of Corporate Governance, and as the OECD Guidelines for Multinational Enterprises. Contained therein are concerns that may be raised, such as the proportionality of executive boards’ salaries, meaning with an appropriate reflection of current business performance; that stockholders are transparently informed about all relevant aspects of the firm’s operations and would offer ample voting possibilities to business groups; and that corruption is not tolerated.

Activity reports for the fund give impressive figures on how many business groups participate and how many proposals for investments were put forward. Nevertheless, the 10-person Corporate Governance Unit of the bank knows its limitations; this group is dealing with an asset selection pool of ca. 8,000 businesses with further shareholdings between approximately 800,000 and 1 million businesses. Therefore, the bank’s approach is to set internal preferences for the so-called active ownership, focusing on certain regions and sectors that will be structurally pursued. In the area of environmental protection, and in light of the American presidential and congressional elections in November 2008, the decision has been made to concentrate active ownership on the area of climate protection in the United States. The director of the Labour Unit has justified this in light of the United States’ disproportional contribution to global warming. In the bank’s view, it makes sense to concentrate on this major country in which there is still a backlog in climate protection policies.

Target groups of the discussion have therefore been major enterprises in the fields of energy and transport whose policies are decisive for the operations of political actors on the federal level. Were changes in the U.S. Congress to be made, the worldwide debate could be positively influenced. Therefore, the bank meets with firms from its portfolio that organize lobbying activities against planned climate protection laws in the Senate and House of Representatives. The goal is to convince these businesses of the various advantages of a proactive climate protection policy and of the corresponding expectations of the Norwegian sovereign wealth fund. A focal point is specifically trading of emissions credits—how the businesses’ operations conform to the EU’s emissions credits system (which Norway has joined¹⁵ as the first non-EU-country to take part),¹⁶ as well as the impetus that the companies would give to efforts in the United States for the implementation of an emissions credits trading system.

¹⁵ Norway has been a part of the EU emissions credits trading system since the start of the second phase on 1 January 2008. Forty percent of the Norwegian CO₂ emissions are integrated in the trading system with the EU. In the trial phase in Norway, which ran similar to the first phase of the EU system from 2005 to 2007, only 10 percent of the CO₂ emissions from the system were covered.

¹⁶ Norway is, along with the EU, a member of the European Economic Area and is closely connected with other member countries in addressing economic concerns. EEA is an agreement between the member states of the EU such as Iceland, Liechtenstein, and Norway to expand the single market of these states. For reference see www.bundesregierung.de/Content/DE/Lexikon/EUGlossa/E/2005-11-22-europaeischer-wirtschaftsraum-ewr.html.

In accordance with these goals, discussions with company representatives sought to target the Lieberman-Warner Climate Security Act. In October 2007 the U.S. Senate proposed a bill from Senators Joseph Lieberman (I-CT) and John Warner (R-VA) that envisions the implementation of a national emissions credits trading system, in which, by 2050, the greenhouse gas emissions in the United States would be reduced by 63 percent from levels in 2005 (with concrete interim goals for 2012 and 2020).¹⁷

According to statements from the director of the Corporate Governance Unit, there had been astonishment in the discussions with large enterprises from the area of energy and transport that the bank was meeting with high-ranking representatives of the firms to press this issue. From the first, bank directors were given the impression that the bank's concerns would be taken seriously. Meanwhile, many businesses in the United States have argued for the implementation of an emissions credits trading system on the federal level in general, in particular the Lieberman-Warner bill. Even partially affiliated networks (such as the automobile and truck manufacturer Ford) have lobbied for a Cap and Trade System, such as the United States Climate Action Partnership (USCAP).¹⁸ It is difficult to measure how much the Norwegian bank has contributed to the rising acceptance for the introduction of new policy instruments such as an emissions credits trading system, but the bank hopes to have made a contribution.

The outcomes of the work of the five members of the Ethics Council,¹⁹ who direct a Secretariat with six full-time co-workers, are measurable, or are at least more transparent than the active ownership. Since the implementation of the ethics principles, the Ministry of Finance has, on the recommendation of the Ethics Council, banned 28 businesses from the portfolio of the sovereign wealth fund. Twenty firms were excluded because of their production of particularly inhuman weapons (or were participants in businesses that did).²⁰ Seven businesses were banned because of violations of other ethical criteria.²¹ Two were excluded because of human rights violations, and six were accused of having made serious environmental violations: Freeport McMoRan Copper & Gold Inc., DRD Gold Ltd., Vedanta Resources Ltd. (including their shareholdings), Sterlite Industries Ltd., and Madras Aluminum Company Ltd. The last one was Rio Tinto Group which was excluded in September 2008.

Freeport was the first business banned by the Ethics Council from the portfolio for environmental reasons. It is a mining business based in the United States and operates one of the world's largest copper mines on the island of New Guinea in Indonesia. Rio Tinto Group is a multinational mining company that is also active in Indonesia. DRD Gold is a South African business that runs the Tolukuma gold mine in Papua New Guinea. In all cases the natural river systems were used as dumping sites. The Ethics Council argued that Papua New Guinea and Indonesia are the only nations that still permit dumping in rivers. Indeed, the

¹⁷ Compare <http://thomas.loc.gov/cgi-bin/bdquery/z?d110:S.2191>.

¹⁸ See <http://www.wri.org/climate/us-climate-action-partnership>. Refer for more details on the change of opinion in the United States to Danyel Reiche, Vom Schmutzdelinquent zum Öko-Pionier? Zur Neuausrichtung der US-Energiepolitik, in: *Blätter für Deutsche und Internationale Politik*, March 2007, pp. 341–347.

¹⁹ The members of the Ethics Council are available only part time and hold professions such as appointments as university professors. Expense allowances are paid for monthly sessions.

²⁰ Eight companies were excluded because of the production of cluster bombs, 11 businesses (among them Boeing) because of the production of atomic weapons, and one firm because of the production of anti-personnel landmines. Compare Council on Ethics for the Government Pension Fund–Global: Annual Report 2007, p. 10.

²¹ In two cases it has negotiated with the world's largest single retailer WalMart, once with the parent company in the United States and once with a subsidiary in Mexico. The Ethics Council systematically criticized the WalMart companies for human rights and workers' rights violations, forced overtime without compensation, and systematic discrimination of women. WalMart has not responded to communications from the Ethics Council. The United States ambassador in Norway protested against the exclusion of WalMart (Interview Lund).

Ethics Council is aware that not all environmental standards from industrial and developing countries can be implemented; however, all of the international key actors agreed that the dumping of mining waste into rivers is unacceptable because it leads to damage to the environment that is enormous, irreversible, and long lasting. Upon enquiry, both businesses showed no intention of changing their dumping practices.²²

The British metal and mining company Vedanta Resources Ltd. and its subsidiary firms, Sterlite Industries Ltd. and Madras Aluminium Company Ltd., are banned in India because of their environmental and human rights violations in the main areas of their business activities. They primarily produce copper, aluminium, and zinc. The companies have been involved in the dislocation of native tribes. Next to their contribution to massive human rights violations, their threats to the environment are considerable, especially their association with large amounts of high-risk poisonous refuse from their mining operations: through reckless, unsafe dumping, soil and ground water are contaminated with hard metals, which would continue to contaminate the soil and groundwater even despite an immediate halt of production and would lead to long-term harm to the environment. The Ethics Council also refers explicitly to the comments from a committee of the highest Indian court that criticize the companies' actions. In India, Vedanta's centers of production are predominantly located in densely populated areas, where, in addition to the numerous directly employed workers who may be harmed, many other people are drawn into contact with the company and its practices. Furthermore, because of newly planned projects that do not set higher environmental standards, the Ethics Council has seen no other choice but for exclusion.

6 Contribution of the ethical regulations to climate protection: restrictions and successful application

The use of the ethical regulations as an effective instrument in climate protection policies is restricted by the sovereign welfare fund's large portfolio. Rules are also in place for how much the fund can invest in one firm, which limits the fund's possible influence. The Corporate Governance Unit of the Norwegian States Bank as well as the Ethics Council have hit against a capacity limit with ca. 8,000 businesses that hold investments in ca. 800,000 to 1 million additional businesses. To support its work, the Ethics Council uses two specialized firms assigned to analyzing newspaper articles about activities of the businesses in the sovereign wealth fund portfolio. In this way, blatant offences against the ethical regulations can be exposed. This strategy presumes, however, that news of serious damage to the environment (and other violations of the ethical regulations, such as against human rights) also reaches the public. The Ethics Council's strategy of using press reports for this purpose comes up against barriers when analyzing businesses in different parts of the world, in particular those in countries without a free press and a responsive public. One can assume that sooner or later the public will learn about the worst instances of environmental pollution (thanks in part to the work of nongovernmental organizations).

The 10 members of the Corporate Governance Board, however, can proceed to set targeted goals only by using the Ethics Council, which has only a partly secure working base and the motto "In restriction lays the master." In 2007 the bank led a meeting with about 15 businesses, representing not more than 0.19 percent of the businesses in the fund's portfolio. To add further complexity, the fund usually has acquired only a small share of various corporations. Theoretically, the fund can purchase assets so that the majority of its holdings

²² Ministry of Finance, <http://www.regjeringen.no/en/dep/fin/Press-Center/Press-releases/2006/Two-companies---Wal-Mart-and-Freeport---.html?id=104396&epslanguage=EN-GB> as well as <http://www.regjeringen.no/en/dep/fin/Press-Center/Press-releases/2007/Mining-company-excluded-from-the-investm.html?id=462551&epslanguage=EN-GB>, last accessed 4 June 2008

are stocks from large-scale enterprises such as Daimler Chrysler, Volkswagen, Allianz, or Siemens and then try to influence the companies' business activity to meet Norwegian values and norms. For reasons of distribution of risk (and not to lose sight of the main goal of maintaining prosperity for future generations), a limit has been established for the sovereign welfare fund's purchases of shares in a business. In the past, however, this has been repeatedly lifted, the last time in June 2008, from 5 to 10 percent.²³ This theoretically increases the influence of the bank on businesses, for example, to join in a proactive stance on climate protection. On average, however, the fund nevertheless does not hold more than 0.8 percent of the shares in a given corporation.

A further restriction of the application of the ethical regulations lies in the fact that 40 percent of the holdings of the fund are fixed in bonds. Because these are predominantly state bonds, a country must be accused of unethical behaviour, something that may occur only on rare occasions. The first such exception was made in 2007 with the decision not to invest in state bonds from Burma (Myanmar).

In effect, the ethical regulations pertain primarily to 60 percent of the fund assets that are invested in stocks. Despite the addressed limitations, the actual influence of the fund may nevertheless be larger than assumed. It may be the case that no business anywhere in the world would wish to be excluded from Norwegian state fund. It is difficult to image anything worse than for a company to be excluded from the fund of a nation that has a high reputation worldwide. Moreover, the fact that businesses are already being excluded shows that the sovereign welfare fund not only uses words but, if necessary also follow through with actions. The bank's active ownership policy strengthens the main instrument of the ethical regulations. It is taken much more seriously through dialogue with representatives of companies and large enterprises than the case would probably be without the threat of exclusion of the businesses lying in the background of conversations. Indeed, the successes of active ownership are hardly measurable; however, it is unmistakable that businesses in the United States are proactively held to the goal of climate protection as well as to increasingly support the initiatives for the implementation of an emissions credits trading system, whereby a main goal of the bank is reached, although the bank itself may have contributed very little in the specific situation. Because of the United States' large contributions to global greenhouse gas emissions and the country's important role in worldwide political developments, the latest setting of priorities of active ownership is, without question, open to much scrutiny. However, the question is how the ethical regulations can, in the future, be further developed in a direction that works more toward their goals.

7 Evaluation of the ethical regulations

Recently an evaluation of the ethical regulations has begun. Two separate reports researched the work of the Ethics Council and the bank (in regard to their cooperation; Chesterman/Albright Group 2008) and the possibility of using "positive selection" as a future investment strategy (Johnsen/Gjølberg 2008). Both reports were introduced in June 2008 in a public hearing at the Ministry of Finance. A written consultation paper from the Ministry of Finance summarizes the essential statements and lays out the schedule for the evaluation process (Ministry of Finance 2008). In the spring of 2009, the Norwegian parliament should recommend a final modification of the ethical regulations.

The consultation paper reaches a positive evaluation of the existing system. It nevertheless expects that, in the future, in addition to a modification of the regulations for active ownership and notably for the exclusion of businesses (such as a newly introduced

²³ In 2000 an expansion was decided upon from 1 to 3 percent; in 2006 from 3 to 5 percent (Interview Kvam).

exclusion of tobacco companies²⁴ or—less likely—the exclusion of firms involved in pornography and those involved in gambling, which has been included in discussions) a third instrument is to be instituted: so-called positive screening (also called positive selection). This means that fund assets will focus on certain areas in which to invest. When priorities are expected to be set, businesses from the area of renewable energies have been mentioned in different interviews as likely candidates for investment. A member of the Ethics Council spoke literally about the “closest candidate.” For reasons of distributing risk, however, even in discussions with very active NGOs it was stressed that only a certain percentage of the fund assets (and not the entire capital) would be subjected to positive screening (in several discussions, the figure given was 10 percent of the fund assets). The Finance Minister from the socialist party responsible for the state fund is considered a supporter of positive screening.

The basic objectives of positive screening would be linked to something that at one time existed with the environmental investments. From the start of 2001 to late 2004, a small part of the fund assets was targeted for investments in businesses whose business practices, it was assumed, have only a comparatively small negative influence on the environment. This would fulfil the specific environmental requirements or could show definite certification. The fulfilment of the requirements were tested by the British consulting firm Ethical Investment Research Service (EIRIS). The environmental funds would not be outsourced but were still part of and would also be administered by the Norwegian State Bank. In 2001 initially 1 billion NOK (124.53 million €) was held ready for the environmental funds and, on one occasion in each following year, was increased by the same amount (in total 2 billion NOK/ 249.05 million €).

With the introduction of the ethical regulations in late 2004, the environment fund was ended because analogue criteria were to be used for the whole portfolio. Nevertheless, the environmental funds can be seen as a pioneer for the later implementation of ethical criteria, because it was the first time other criteria were used for risk distribution and profit maximizing. Should the so-called positive screening now be deployed on a large scale, the experience of the earlier environmental funds can still be drawn upon. Exciting questions for the future include: Should the positive screening approach serve to invest only in certain businesses and industries? Or should the so-called Best in Class approach be used to purchase shares, with the respective “ethical champions” from the various industries being possible candidates? Should there be definite certification prerequisites for share purchases? Or should admission be based on a specific index?

When one considers the level of investment property (status as of late 2007, 438 billion USD/282.13 billion € see Table 2) and then takes into account the discussed use of 10 percent of the state fund for investments toward positive screening of working businesses in the area of environmental protection, one can assess the huge amounts of capital that would be freed for an ecological transformation of the energy economy.

A correspondingly interesting idea which the consultation paper pursued is that up to 5 percent of the state fund’s assets should take a new form of investment for the acquisition of property, namely, closed real estate funds, that also consider “green” criteria, such as efficient energy and water consumption (Ministry of Finance 2008, p. 35f.).

²⁴ Based on reports from Norwatch, the investments of the Governmental Pension Fund in tobacco companies in 2006 were increased by 44 percent for a total of 1.29 billion € Compare Pia Gaarder, Petroleum Fund: Developing Countries Up in Smoke, www.norwatch.no, last accessed 11 June 2008.

8 Diffusion of the ethical regulations

In regard to the possibilities and limitations of the spread of ethical regulations to other countries, one may consider that in Norway a superior situation prevails: the national economy is booming, natural gas at least will still be available for many decades as an important income source for the state, there is approximately full employment, and the standard of living ranks among the highest in the world (see Section 1). In this context themes such as ethical economics and climate protection can more easily find a high position on the political agenda in an atmosphere where large parts of society may be anxious of losing their standard of living. Another factor to consider is that many other countries with sovereign welfare funds are not open democracies and do not enjoy a civil society that discusses such matters in the usual political discourse.

However, using the sale of foreign currency and gold reserves, other states such as Germany could consider creating their own sovereign welfare fund with concentration on issues such as economic activities for climate protection, thus supporting Norway's approach. In doing this, the critical majority of such sovereign welfare funds with an ethical concentration would proliferate and increase their potential global pressure. Indeed, Germany's funds are rather small in comparison with its counterparts in the United Arab Emirates and Norway (see Table 1). Still, in addition to its gold reserves, the German Central Bank handles foreign currency reserves worth just over 30 billion € most of which are invested in American debt bonds. These investments always yield lower profits because of the American low-interest-rate policy. Christian Reiermann, in his plea for a German state fund, writes, "The innovative investment strategy would not only function as a security against misbehaving foreign state funds, it would also pay off. The shareholdings return more than US-American state bonds. With the surplus earnings, additional investments would be possible, for example, in education, or debts could be repaid, making room [for new projects] in the state's budget."²⁵

However, sovereign welfare funds constitute only 2 percent of the financial market worldwide.²⁶ It will be interesting to follow the extent to which the Norwegian state fund can inspire other corporate financial actors with its ethical regulations. The first imitator of the Norwegian ethical regulations has already stepped forward. Some large Scandinavian investors followed Norway's example in 2006, among which are Oslo Pension Fund, the largest Norwegian security group, Kommunal Landspensjonkasse (KLP), and the second Swedish pension fund, Allmänna Pensionsfonden (AP 2). Quite some time after KLP had already issued ethical regulations, all four Swedish pension funds founded a combined ethical council. It plans to screen the 3,500 businesses in which the fund holds shares, in accordance with environment and social standards.²⁷

In an interview the State Secretary in the Norwegian Ministry of Finance, Roger Schjerva, says that 20 international funds and investors follow the policies of the Norwegian Governmental Pension Fund and exclude the same businesses, among them the Italian

²⁵ Compare Christian Reiermann, Why Germany Needs Its Own Sovereign Wealth Funds, in Spiegel online from 30 April 2008, www.spiegel.de/wirtschaft/0,1518,550512,00.html.

²⁶ Arne Storn: We Are Guests in Their House, Interview with Yngve Slyngstad, head of the Norwegian Sovereign Wealth Fund, in Die Zeit from 13 March 2008, downloaded at www.zeit.de/2008/12/Staatsfonds-Interview-Deutsch?page=1.

²⁷ Susanne Bergius, Kein Komplize sein. Norwegens Pensionsfonds investiert nur in ethisch korrekte Firmen. Sünder fliegen in aller Öffentlichkeit aus dem Portfolio, zum Beispiel Wal-Mart. Das sorgt für Aufsehen, in: Die Zeit online from 25 May 2007, www.zeit.de/online/2007/22/gro-nystuen-konzept.

investment company Generali, which manages funds comparable in size to the Norwegian pension fund. On its web site Generali refers explicitly to the Norwegian ethical regulations.²⁸

It must be assumed that the number of imitators will increase. In interviews with the representatives of the Ministry of Finance, the Ethics Council, and the Norwegian State Bank, representatives report great interest in the Norwegian ethical regulations worldwide. This is reflected by the innumerable invitations to bank representatives to attend conferences²⁹ and visits from different companies' financial representatives to Oslo. International actors, such as the OECD and the World Bank, increasingly regard the Norwegian sovereign welfare fund as a model (not only because of the ethical regulations, but also primarily for its contributions to intergenerational justice), which is emphasized by its being referenced in consultations.

After the specifications from Eli Lund, the Ethics Council is currently working with the International Monetary Fund on a set of best practices guidelines for sovereign welfare funds based in large part on the Norwegian experience. The Norwegian State Bank uses the United Nations as a platform to transport its values and norms into the global arena, for instance, as part of the UN Principles for Responsible Investment (UN-PRI). Furthermore, the bank participates in networks such as the International Corporate Governance Network (ICGN).

With the "Oil for Development" program published in 2005 by the Norwegian Agency for Development (NORAD), Norway has been consulting 24 resource-rich developing and newly industrializing countries on how the income from the oil and gas sales can be invested toward long-term sustainability. The distribution of the ethical regulations does not yet appear to be central here, which is understandable because many countries first need to be convinced of the general concept of state funds.³⁰ To reach other states, NORAD aims at cooperation with the World Bank and UNDP.³¹

The revocation by India's highest court of Vedanta's operating license because of an exclusion from Norwegian state fund, among other reasons, shows what dynamics can develop from a company's exclusion from the Norwegian sovereign welfare fund (Interview with Føllesdal). This is further evidence as to how innovations by national states can have serious consequences on global political developments.³²

9 Outcomes and future prospects

In terms of global climate protection, the significance of the Norwegian sovereign welfare fund until now has been certainly limited but should not be underestimated. Businesses responsible for significant environmental damage would be banned from the portfolio, and companies in the United States are being convinced to take a proactive approach to proposed

²⁸ See www.norwatch.no, news from 31 January 2008, last accessed 15 May 2008, as well as <http://www.generali.com/generalicom/sezione.do>.

²⁹ "I can travel 265 days of the year," says the representative of the bank in this connection, in an interview (Interview Kvam).

³⁰ In other interviews NORAD says it wants not only a better world, but above all that the interests of the Norwegian oil and gas economy must be kept in mind.

³¹ Equipo Nizkor: Norway Breaking the Oil Curse, www.derechos.org/nizkor/econ/norway.html, last accessed 20 June 2008.

³² For a more detailed report, see Danyel Reiche, Zur zentralen Bedeutung des Nationalstaates im Mehrebenensystem. Ein Beitrag zur gegenwärtigen Governance-Diskussion, FFU-report 04-2005, downloaded at http://web.fu-berlin.de/ffu/ffu_e/index.html.

climate protection laws in Congress, such as the introduction of an emissions credits trading system.

Also, if fixed assets were to be introduced as a part of direct investments, for instance, in businesses in the area of renewable energies, the ethical regulations would be further optimized as an instrument of climate protection policies.

The right-populist Progressive Party (FP) has attempted to demand that less money be set aside in sovereign welfare funds and more used for domestic social purposes. In earlier polls (conducted in mid-2008) support for this party reached 30 percent.³³ The ethical regulations, however, are largely accepted in Norwegian politics and society. An indication of their general acceptance is also given in that the ethical regulations were introduced by a conservative government and, at the moment, continue to be developed by a middle-left government. Refinements are predominantly being made toward sharpening modifications. Critics, for instance, primarily target inconsistencies, such as when a business is excluded from the funds, such as Lockheed Martin, which is still used by the Norwegian Ministry of Defence to supply weapons. “We will never be able to act 100% consistent in all areas. But that should not lead us to the conclusion of doing nothing,” says the Ministry of Finance.³⁴

However, Norway should contribute to climate protection not only through managing the funds in connection with its global activities (carried out in up to 95 percent in foreign investments) but also through its domestic policies. During the international negotiations for a climate protection agreement, the kingdom has been trying to distinguish itself as a proactive state; however, it finds itself in a dilemma being an oil and natural gas producer, which contribute significantly to greenhouse gases. The ambitious goal of a “carbon-neutral Norway” by 2050 should also call for proactive policies in the areas of energy efficiency, energy savings, and the development of renewable energies and should include realistic short- and middle-term intermediate steps for a new working package of measures, instead of trusting in the uncertain future possibilities of carbon capture storage. The reality is that the energy usage in Norway since 1980 has been growing at an average rate of 1.4 percent per annum.³⁵ Electricity prices in particular are too low in comparison to those in Western European states to give savings and efficiency incentives: approaches such as the CO₂ taxes launched in the beginning of the 1990s are necessary for its further development.

Indeed, the usage of water power in the electricity market hovers at around 98 percent. It is not politically realistic to undertake commercial development of the country’s largest, still untouched rivers and to build more hydroelectric installations to guarantee a 100 percent supply from hydroelectricity in the energy market but from farther and farther distances. To satisfy recent electricity demand, coal energy from Denmark and nuclear power from Sweden have had to be imported repeatedly, along with the first natural gas-powered plant, which went online in Norway in 2007. Despite the country’s large wind power potential, only in 2008 has this surpassed the 1,000 megawatts mark, which is below average even in comparison with other European countries. The state has still not developed convincing subsidy policies with adequate compensation and long-term investment security in which renewable energies other than hydroelectricity form the basis for increased usage.³⁶

³³ Compare Bernd Parusel, Norway’s Right Temptation, in: *Blätter für deutsche und internationale Politik* Nr. 08/2006, pp. 912–915.

³⁴ Ministry of Finance, <http://www.regjeringen.no/en/>, last accessed 30 May 2008.

³⁵ BFAI: Norway–Energy Economics 2006, downloaded at www.bfai.de.

³⁶ A planned combined green certificate with Sweden failed. See www.realise-forum.net.

Claims that the Norwegian institutional environment is adequately served by the Agency for Renewable Energies and Energy Efficiency (ENOVA)³⁷ are doubted by many experts. Also, it is questionable if the situating of the renewable energy and energy efficiency goals within the Ministry's oil and energy goals makes sense. Norway, with its Atlantic coast line and its thin population density, would have the chance to develop wind power so that not only the electricity market but also the transport sector (electric cars) could be served from the electricity produced.³⁸ With an environmentally friendly electricity and transport sector in connection with the already lenient energy use standards for heating requirements in the building sector, Norway could be seen as a global pioneer, not only through its foreign economic activities but also in its serving as an exemplar for furthering climate protection through its policies.

References

- Bergius, Susanne*: Kein Komplize sein. Norwegens Pensionsfonds investiert nur in ethisch korrekte Firmen. Sünder fliegen in aller Öffentlichkeit aus dem Portfolio, zum Beispiel Wal-Mart. Das sorgt für Aufsehen, in: Zeit online, 25 May 2007, www.zeit.de/online/2007/22/gro-nystuen-konzept
- Bundesagentur für Außenwirtschaft (BFAI)*: Norwegen–Energiewirtschaft 2006, downloaded at www.bfai.de
- Chesterman, Simon/Albright Group*: Assessment of Implementation of Articles 3 and 4 of the Ethical Guidelines for the Government Pension Fund–Global, 21 May 2008, Oslo
- Council on Ethics for the Government Pension Fund–Global*: Annual Report 2007, Oslo
- Equipo Nizkor*: Norway Breaking the Oil Curse, downloaded at www.derechos.org/nizkor/econ/norway.html
- Garder, Pia*: Petroleum Fund: Developing Countries Up in Smoke, downloaded at www.norwatch.no
- Graver Committee*: Green Paper, Management for the Future, Oslo, 2003
- Johnsen, Thore/Gjølberg, Ole*: Ethical Management of the Government Pension Fund–Global: An Updated Analysis, 14 May 2008, Oslo
- Jonas, Hans*: Das Prinzip Verantwortung: Versuch einer Ethik für die technologische Zivilisation, Frankfurt/M., 1979
- Norwegian Ministry of Finance*: Report No. 24 (2006–2007) to the *Storting*, On the Management of the Government Pension Fund in 2006
- Norwegian Ministry of Finance*: Report No. 16 (2007–2008) to the *Storting*, On the Management of the Government Pension Fund in 2007
- Norwegian Ministry of Finance*: Consultation Paper: Evaluation of the Ethical Guidelines for the Government Pension Fund–Global, 20 June 2008, Oslo
- Parusel, Bernd*: Norwegens rechte Versuchung, in: Blätter für deutsche und internationale Politik Nr. 08/2006, pp. 912–915
- Piebalgs, Andris*: Energiedialog EU-Norwegen: beide Parteien bekräftigen starkes Engagement für CO₂-Abscheidung und -Speicherung, Press release from the EU Energy Commissioner, 25 July 2007

³⁷ ENOVA has 40 members.

³⁸ Norway is already an electric-auto production state. See www.think.no.

Reiche, Danyel: Vom Schmuttelkind zum Öko-Pionier? Zur Neuausrichtung der US-Energiepolitik, in: Blätter für Deutsche und Internationale Politik, March 2007, pp. 341–347

Reiche, Danyel: Zur zentralen Bedeutung des Nationalstaates im Mehrebenensystem. Ein Beitrag zur gegenwärtigen Governance-Diskussion, FFU-report 04-2005, downloaded at http://web.fu-berlin.de/ffu/ffu_e/index.html

Reiermann, Christian: Warum Deutschland einen eigenen Staatsfonds braucht, in Spiegel online, 30 April 2008, www.spiegel.de/wirtschaft/0,1518,550512,00.html

Storn, Arne: Wir sind Gast in ihrem Haus, interview with Yngve Slyngstad, head of the Norwegian Sovereign Wealth Fund, in: Die Zeit, 13 March 2008, downloaded at www.zeit.de/2008/12/Staatsfonds-Interview-Deutsch?page=1

Internet addresses

Bundesregierung der Bundesrepublik Deutschland, www.bundesregierung.de

Council on Ethics for the Government Pension Fund–Global, http://www.regjeringen.no/en/sub/Styret-rad-utvalg/ethics_council.html?id=434879

Deutsche Bank Research, <http://www.dbresearch.com>

Generali, <http://www.generali.com/generalicom/sezione.do>

Library of Congress, <http://thomas.loc.gov/cgi-bin/bdquery/z?d110:S.21>

Norwegian Ministry of Finance, <http://www.regjeringen.no/en/dep/fin>

Norwegian Ministry of Petroleum and Energy, <http://www.regjeringen.no/en/dep/oed>

Norwegian Water Resources and Energy Directorate, NVE, <http://www.nve.no>

Norwegian State Bank, <http://www.norges-bank.no>

Norwatch, www.norwatch.no

Realise Forum, www.realise-forum.net

Spiegel Wissen, <http://wissen.spiegel.de>

Thinkglobal, www.think.no

United Nations Development Programme, <http://hdr.undp.org>

United States Climate Action Partnership, USCAP, <http://www.wri.org/climate/us-climate-action-partnership>

Währungsrechner, <http://www.oanda.com/convert/classic>

Wikipedia, <http://de.wikipedia.org>

List of interview partners

Alm, Dr. Kristian: Professor at the Norwegian School of Management (BI) (02 May 2008)

Føllesdal, Dr. Andreas: Professor at the University of Oslo, member of Ethics Council (05 May 2008)

Graver, Hans Petter: Professor at the University of Oslo, leader of the Graver Commission (06 June 2008)

Kvam, Anne: Head of Corporate Governance, Norwegian Bank Investment Management (28 May 2008)

Lie, Valborg: Asset Management Department (Government Pension Fund), Ministry of Finance (14 May 2008)

Lund, Eli: Executive Head of Secretariat, Council on Ethics, Norwegian Governmental Pension Fund–Global (05 May 2008)

Ørstavik, Gunhild: Forum for Environment and Development (ForUM), (13 May 2008)