



Norwegian Ministry
of Finance

Summary

Meld. St. 20 (2018–2019) Report to the Storting (white paper)

The Government Pension Fund 2019

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*Recommendations of the Ministry of Finance of 5 April 2019,
approved by the Council of State on the same day.
(Government Solberg)*

1 Executive summary

The purpose of the Government Pension Fund is to support long-term considerations in the government's spending of petroleum revenues, as well as saving to finance pension expenditure under the National Insurance Scheme. Sound long-term management will help to ensure that Norway's petroleum wealth can benefit both current and future generations.

The Government Pension Fund comprises the Government Pension Fund Global (GPFG) and the Government Pension Fund Norway (GPFN). Operational management of the two funds is carried out by Norges Bank and Folketrygdfondet, respectively, within limits stipulated in designated management mandates laid down by the Ministry of Finance.

The Ministry of Finance presents in this report the performance of the two funds in 2018. The report also discusses further development of the investment strategy and addresses the responsible investment framework.

Investment strategy

The objective for the investments in the GPFG and the GPFN is to achieve the highest possible return

with an acceptable level of risk. There is broad political consensus that the Government Pension Fund should not be used as a foreign policy or climate policy instrument. The investment strategies for the two funds have been developed over time based on professional assessments, practical experience and thorough assessments. Material changes to the investment strategies have been endorsed by the Storting (Parliament) prior to implementation. Broad endorsement and a thorough understanding of the risk assumed in the management of the funds contribute to the sustainability of the chosen long-term investment strategy, also in periods of financial market turbulence.

The Ministry of Finance has defined investment strategies for the GPFG and the GPFN, which are reflected in, inter alia, the composition of the benchmark indices. The equity share of the GPFG benchmark is 70 percent, whilst the equity share stipulated for the GPFN is 60 percent. Fixed-income securities account for the remainder of the indices.

The investment strategies are based on the premise that risk can be reduced by diversifying the investments across different asset classes, countries, sectors and companies. It is also based

on the premise that financial markets are largely well-functioning, thus implying that it will be difficult to systematically outperform the general market. This approach suggests that investors should diversify their investments broadly and seek to minimise asset management costs.

The GPFG and the GPFN are managed close to the benchmark indices defined by the Ministry of Finance, which in general can be closely tracked at low costs. Norges Bank and Folketrygdfondet deviate somewhat from the benchmark indices in their operational management to ensure a cost-effective adoption of the benchmarks, as well as to exploit distinctive characteristics of the funds to achieve excess return. There is some scope for unlisted real estate investment in the operational management of the GPFG.

Volatile financial markets and weak performance in 2018

2018 brought volatility to financial markets and weak stock market performance, especially towards the end of the year. Last year was characterised by uncertainty concerning future economic growth and the effects of mounting trade barriers internationally. In 2018, the GPFG generated a return of -6.1 percent measured in the currency basket of the Fund, which is the second-weakest performance in the history of the Fund. The negative return was caused by weak stock markets. In contrast, the return on the fixed-income investments was moderately positive, whilst the unlisted real estate investments performed well in 2018. The market value of the GPFG at the end of 2018 was Norwegian kroner (NOK) 8,251 billion, net of management costs. Measured in NOK, the market value declined by NOK 232 billion. Depreciation of the Norwegian krone served, when taken in isolation, to reduce the decline in the value of the Fund as measured in NOK. Net capital inflows also made a positive contribution.

The Norwegian stock market performed somewhat better than global equity markets in 2018, although last year as a whole ended with a modest decline. The return on the GPFN was -0.4 percent measured in NOK, with equity returns being significantly lower than the returns on fixed-income securities. The market value of the Fund was NOK 239 billion at the end of 2018.

Norges Bank and Folketrygdfondet seek to generate the highest possible return, net of costs, within the limits stipulated in the management mandates from the Ministry of Finance. Last year, the GPFG underperformed the benchmark index

by 0.30 percentage points. The annual average return on the Fund over the last 20 years has been 0.25 percentage points higher than the return on the benchmark index. The GPFN outperformed the benchmark index by 0.76 percentage points, and the annual average excess return since 2007 has been 1.03 percentage points.

Measured as a proportion of assets under management, costs in 2018 were 0.05 percent in the GPFG and 0.06 percent in the GPFN. Management costs are low compared to other funds.

New framework and benchmark index for the GPFG fixed-income investments

In view of the decision in 2017 to increase the equity share of the GPFG to 70 percent, the Ministry initiated a review of the fixed-income investment framework for the Fund, including the benchmark composition. The Ministry has received advice and assessments from both Norges Bank and an expert group.

The decision to increase the equity share of the GPFG to 70 percent was based on an assessment that the risk-bearing capacity of the Fund had increased. Hence, a larger equity share does not in itself, call for material changes to the composition of the fixed-income benchmark.

The Ministry is in this report proposing that corporate bonds shall continue to account for 30 percent of the benchmark index and that the maturity of the fixed-income benchmark index shall reflect market developments – as at present.

However, certain operational challenges associated with the current fixed-income benchmark, as pointed out in a letter from Norges Bank, entail that some benchmark changes are needed to facilitate lower transaction costs and increased investability. The Ministry is in this report proposing to omit emerging market government bonds and emerging market corporate bonds from the fixed-income benchmark for the GPFG. At the same time, investment in such bonds is capped at 5 percent of the fixed-income portfolio, and also subject to expanded reporting requirements. The Ministry is proposing a continuation of the current government bond weighing principle for the benchmark index, although subject to certain technical modifications.

Environmental mandates and unlisted renewable energy infrastructure investments in the GPFG

In last year's report, the Ministry proposed an assessment of whether unlisted renewable energy

infrastructure investments can be effected within the scope of the environment-related mandates, subject to the same transparency, risk and return requirements as apply to the other investments in the GPF. It also proposed a review of the regulation of the environment-related mandates in general, including the size of the mandates. The Standing Committee on Finance and Economic Affairs requested, in its recommendation, the Ministry to revert to the Storting, no later than in the report to be submitted in the spring of 2019, with a specific mandate proposal for such investments under the environment-related mandates. The majority of the members of the Standing Committee also requested an assessment as to whether the scope of the environment-related mandates should be expanded.

Norges Bank noted, in a letter to the Ministry of Finance, that unlisted renewable energy infrastructure investments can be made within the framework for the environment-related mandates and that the Bank may have advantages relative to other investors with regard to such investments. The Bank observed, at the same time, that the upper limit of the mandates should be raised if allowing for unlisted renewable energy infrastructure investments. It is emphasised that Norges Bank will approach the investment opportunities and build expertise gradually, and would initially consider projects with relatively low market risk and operational risk in developed markets. The Bank would primarily be considering direct investments with partners.

The Ministry is of the view that it would be acceptable to allow for the GPF to be invested in unlisted renewable energy infrastructure under a suitable framework. Unlisted renewable energy infrastructure has several similarities with unlisted real estate investments, and it is therefore proposed that the mandate provisions of such investments should be fairly similar. An unlisted investment strategy cannot be defined via a benchmark index. Any unlisted renewable energy infrastructure investments will form part of the Bank's active management and draw on the scope for deviations from the benchmark index. Furthermore, the Ministry emphasises that any investments shall only be implemented under the environment-related mandates, and shall be subject to the same profitability and transparency requirements as the other investments of the Fund.

The Ministry is proposing that the limit on deviations from the benchmark index shall remain unchanged at 1.25 percentage points.

Hence, Norges Bank will need to prioritise any unlisted renewable energy infrastructure investments against other strategies that entail deviations from the benchmark index. The normal market value range of the environment-related mandates will be expanded from the current NOK 30–60 billion to NOK 30–120 billion. The range is intended to highlight that investment opportunities and the scale of such investments may vary over time. The lower cap entails an element of dedicated allocation of investment funds and is kept unchanged at NOK 30 billion. Moreover, the Ministry is proposing the introduction of a separate upper cap on unlisted renewable energy infrastructure, at 2 percent of the Fund.

The proposed regulation will enable Norges Bank to exploit any economies of scale, including cost-effective implementation of the investments, whilst at the same time facilitating a gradual approach to a sub-segment which is small relative to other markets in which the Fund is invested. The regulation is not intended as an instruction to Norges Bank, under which the Fund shall be invested in unlisted renewable energy infrastructure.

The Ministry will prepare a proposal for specific mandate provisions after the Storting's deliberation of the report, and present these to Norges Bank. It is intended for the mandate provisions to enter into effect no later than 1 January 2020.

New provisions on rebalancing of the equity share of the GPF

The management mandate to Norges Bank defines a fixed strategic allocation between equities and fixed-income securities. It has been decided to increase the equity share of the strategic allocation to 70 percent. Diverging developments in stock and bond markets mean that the equity share of the actual benchmark index may vary. In order to prevent the equity share of the benchmark index deviating materially from the strategic weight over time, provisions have been introduced on *when* and *how* rebalancing shall be effected. It has, since the adoption of the current provisions in 2012, become more challenging to carry out rebalancing at low cost. The Ministry is therefore proposing certain modifications to the provisions. The adjustments imply that rebalancing shall be triggered when the equity share deviates by more than 2 percentage points from the strategic weight. Rebalancing shall also be carried out more gradually than before.

Review of Folketrygdfondet's management of the GPFN

Folketrygdfondet may deviate somewhat from the Fund benchmark in its management of the GPFN, within limits stipulated by the Ministry of Finance. The purpose is to ensure a cost-effective adoption of the benchmark index and to achieve excess return over time. The Ministry reviews Folketrygdfondet's management of the GPFN on a regular basis, as is the case for Norges Bank's management of the GPFG; see last year's report¹. A key issue in these periodical reviews is whether the limit on deviations from the benchmark index should be changed.

The Ministry of Finance is of the view that the performance achieved by Folketrygdfondet in its management of the GPFN over time is favourable. The Ministry is not proposing a change to the current limit on deviations from the Fund benchmark, nor has Folketrygdfondet given any advice to such effect.

Responsible management

The GPFG and the GPFN both have a clear financial objective. The Funds shall be managed responsibly within the scope of their overarching financial objective. The mandates laid down by the Ministry of Finance for the GPFG and the GPFN refer to responsible management standards and principles, and Norges Bank and Folketrygdfondet apply such standards and principles in their responsible management activities.

Norges Bank and Folketrygdfondet make investment decisions and exercise the ownership rights of the funds independently of the Ministry, in line with established mandates and guidelines. Important responsible management tools are standard-based advocacy of principles and expectations, company dialogue on relevant topics and issues, as well as the submission of proposals and the casting of votes in general meetings of the companies in which the funds are invested. Norges Bank and Folketrygdfondet also participate in the ongoing development of standards. Risk management is also an important aspect of the responsible management of fund assets.

The Ministry of Finance has adopted ethically motivated guidelines for the observation and exclusion of companies from the GPFG. Certain criteria in the guidelines are based on specific

products, such as tobacco, weapons and coal. Other criteria are conduct-based, such as serious human rights violations and severe environmental damage.

The Council on Ethics provides recommendations to Norges Bank on the exclusion and observation of companies. The decision-making authority on such matters rests with the Executive Board of Norges Bank. The Bank may opt for a different tool than that recommended by the Council on Ethics. The overarching objective is to apply the most appropriate tool for each individual case. For the coal criterion, Norges Bank may make decisions without any recommendation from the Council on Ethics.

The coal criterion

The Storting adopted, in connection with the deliberation of last year's fund report, a petition resolution calling for an assessment of whether the current criteria for exclusion of coal companies are adequate for purposes of excluding companies with considerable coal-related operations. Norges Bank was requested, as part of the basis for the Ministry's assessment, to provide an account of its operationalisation of the coal criterion, as well as to estimate the extent of coal-related operations to which the Fund is still exposed.

Norges Bank's account indicates that processes have been established which ensure a sound, structured and satisfactory operationalisation of the coal criterion. The Bank notes, at the same time, that the wording of the criterion, with an emphasis on thresholds and forward-looking assessments, involves resource-intensive efforts. If the relative thresholds (30 percent of revenues or operations) under the criterion are lowered, the information gathering and transaction cost challenges will increase owing to a larger number of companies in need of assessment for potential exclusion from or inclusion in the Fund. It is estimated that about 75 percent of overall coal operations have thus far been excluded or placed under observation. The majority of remaining coal operations are confined to a small number of companies that can be said to have extensive coal-related operations in absolute terms. The Ministry is of the view that the relative 30-percent thresholds under the criterion should not be changed, but should be supplemented by absolute thresholds for coal mining and coal power capacity. The Ministry is proposing to put the said thresholds at 20 million tonnes and 10,000 MW, respectively,

¹ Meld. St. 13 (2017–2018); *The Government Pension Fund 2018*.

which will result in the criterion also capturing companies with considerable coal-related operations in absolute terms. The Ministry will be monitoring the implementation of the absolute thresholds and assess potential threshold reductions in view thereof.

The conduct-based climate criterion

The conduct-based climate criterion was incorporated into the ethically motivated guidelines for the GPFG in 2016. Norges Bank has in a letter of 7 November 2018 requested more detailed clarification from the Ministry as to the application of the criterion. The Council on Ethics has submitted a number of recommendations to Norges Bank. The Executive Board of the Bank has thus far not reached any decision on these cases.

The Ministry is of the view that application of the criterion should be based on the following general premises:

- The established high exclusion threshold.
- The intention of applying a chain of measures.
- The climate criterion shall be dynamic over time.
- The criterion as a conduct-based criterion.

The premise last-mentioned implies that the criterion does not define the production of specific products as grossly unethical in itself. Instead, the emission intensity of individual companies is considered a consequence of their conduct (actions or omissions). Factors influencing emission intensity may, for example, involve the choice of production method, including inputs and technology.

Furthermore, the assessment of companies against the criterion should be based on an integrated approach informed by the following considerations:

- *Emissions, emission intensity and basis for comparison:* In order to be assessed under the criterion, a company needs to have large emissions in absolute terms, both in aggregate and based on the type of industry under assessment. The company must also have significantly higher emission intensity than companies with which it is appropriate to draw such comparisons.
- *Forward-looking assessments:* A key issue is whether there are specific and credible plans for how emission intensity shall be reduced to an acceptable level within a reasonable period of time. The assessment shall be in line with the *premise* of a high exclusion threshold. It may for purposes of such assessment be rele-

vant to consider, inter alia, the company's own plans, expected developments in the peer group, as well as anticipated developments in relevant technologies, standards and practices.

- *Climate Scheme:* As discussed in the fund report submitted in the spring of 2015², it is appropriate for an overall assessment to pay heed to whether companies' greenhouse gas emissions are subject to taxes, emission allowances or other regulation mechanisms. In the absence of international guidelines or standards, it would be appropriate to consider the EU emission trading system (EU ETS), which may be classified as a strict climate scheme on the basis of its rules, compliance mechanisms, linear reduction factor and emission allowance prices, as a norm or basis for comparison when assessing the framework faced by companies.
- *Basis for assessment and other factors:* Companies' emission intensity and forward-looking plans may constitute the primary basis for assessment. However, when companies act in conformity with applicable statutes and regulations and are subject to strict climate regulation such as the EU ETS, their emissions cannot in themselves be said to imply unacceptable conduct. Hence, additional factors would need to come into play in order for the conduct of such companies to be considered unacceptable. It will also for other companies be relevant to consider any other factors as part of an overall assessment, although emission intensity and forward-looking plans may constitute a sufficient basis for assessment. Other factors of potential relevance to an overall assessment of companies are relocation of high emission intensity production from countries with a strict climate scheme to countries with no such framework, opposition to or circumvention of climate schemes, positive conduct under a climate scheme, how climate considerations are integrated in corporate governance, or inadequate reporting of, or on, greenhouse gas emissions.

Gambling companies in the GPFG

The Standing Committee on Finance and Economic Affairs referred, in connection with the deliberation of last year's fund report, to the Storting's petition resolution of 7 May 2018, which called for an examination of the basis for exclud-

² Meld. St. 21 (2014–2015); *The Management of the Government Pension Fund in 2014*.

ing gambling companies from the GPFG. The Ministry of Finance notes that there shall be a high threshold for ethically motivated exclusions from the Fund. The Fund shall not be a policy instrument for attaining other political objectives. Gaming operations are, within defined limits, lawful in many countries, including Norway. Exclusion of non-Norwegian gambling companies on the grounds that such companies undermine Norwegian legislation and the monopoly model under Norwegian gaming policy, would be in conflict with both the objective for the Fund and the premise that the exclusion of companies shall be based on ethical criteria reflecting broad national values and international norms. Ethical criteria for the observation and exclusion of gambling companies from the GPFG are, against this background, not being established.

Separate council on ethics function for the GPFN

The Standing Committee on Finance and Economic Affairs requested, in connection with the Storting's deliberation of the fund report submitted in the spring of 2018, an assessment from the Government as to whether it is appropriate to establish an ethics council for the GPFN based on the GPFG model. A key consideration in the Ministry of Finance's assessment is the major difference between the GPFG and the GPFN, both with regard to the number of companies in which the funds are invested and the size of the ownership stakes held therein. The Ministry accords particular weight to Folketrygdfondet's close monitoring of the companies in which the Fund is invested, and its active corporate dialogue with a large portion of its portfolio companies. This means that Folketrygdfondet is well placed for actively engaging in responsible investment practices. Folketrygdfondet exercises considerable influence by communicating its environmental, social and governance expectations. Furthermore, the Ministry finds that a separate council on ethics function for the GPFN would entail a risk of diverging interpretations of the ethically motivated guidelines, as noted by both the Council on Ethics and Folketrygdfondet.

Observation and exclusion are based on clear risk assessments and prioritisations, and a high exclusion threshold. Nordic companies that are excluded from the GPFG are also excluded from the GPFN. The Ministry is of the view that it would be inappropriate to establish comprehensive mechanisms and devote resources to analysing Norwegian companies, which are headquar-

tered in a transparent and well-regulated market and are subject to strict legislation. The Ministry finds, against this background, that the proposal for the establishment of a separate council on ethics function for the GPFN should not be adopted. This assessment is in accordance with recommendations in letters from both the Council on Ethics and Folketrygdfondet.

Other relevant topics

The Ministry of Finance has initiated a review of the equity framework and benchmark for the GPFG, including the geographical distribution of the equity benchmark. The Ministry of Finance has in a letter to Norges Bank requested advice and assessments as to the composition of the equity benchmark for the Fund. The Bank has, *inter alia*, been asked to provide an account of special characteristics of emerging markets, along with risk and return properties of such markets, as well as experience from investing the Fund therein. The Ministry has also commissioned a report from the consultancy firm and index provider MSCI as part of this review. The Ministry aims to present assessments of the equity framework and benchmark in the fund report to be submitted in the spring of 2020.

In November 2017, Norges Bank proposed to omit the energy sector from the benchmark index for the GPFG, in order to reduce the oil price risk associated with the state's wealth. The Ministry appointed, in February 2018, an expert group to assess whether the Fund should continue to be invested in energy stocks. The group recommended, based on an overall assessment, that the GPFG should remain invested in such companies. The Ministry submitted a separate report on the matter on 8 March this year; see Meld. St. 14 (2018–2019); *Energy Stocks in the Government Pension Fund Global*. An executive summary of the aforementioned report is available in English on the Ministry website.

The Central Bank Act Commission submitted its report on a new Central Bank Act and the organisation of Norges Bank and the management of the GPFG to the Ministry of Finance on 23 June 2017. The Government presented its assessments in a separate report to the Storting in October 2018.³ The Storting's deliberation of the report demonstrated that there is broad support for the management of the GPFG to remain in

³ Meld. St. 7 (2018–2019); *New Central Bank Act*. Available in Norwegian only.

Norges Bank, and that a designated monetary policy and financial stability committee should be appointed. The Government will revert to the

Storting in the spring of 2019 with a proposition on a new Central Bank Act.

2 The Government Pension Fund Global: Strategy

2.1 The current investment strategy

2.1.1 Background

The government is saving the revenues from petroleum activities in the Government Pension Fund Global (GPFG) on an ongoing basis. Such savings are fully integrated into the fiscal budget; see Box 2.1. Annual withdrawals from the Fund; the non-oil deficit, are determined in the fiscal budget. The deficit shall, over time, follow the expected real rate of return on the GPFG (the fiscal policy guidelines).

The GPFG is a financial investor. The management objective is the highest possible return, net

of costs and measured in foreign currencies, given an acceptable level of risk. The investment strategy is expressed in the management mandate for the GPFG, which is laid down by the Ministry of Finance. Operational implementation of the management assignment falls within the remit of Norges Bank.

The investment strategy is derived from the purpose of the Fund and its distinctive characteristics, as well as the investment beliefs of the asset owner. It has been developed over time on the basis of public domain knowledge, research, practical experience and thorough assessments. Key features of the investment strategy for the GPFG are summarised in Figure 2.1.

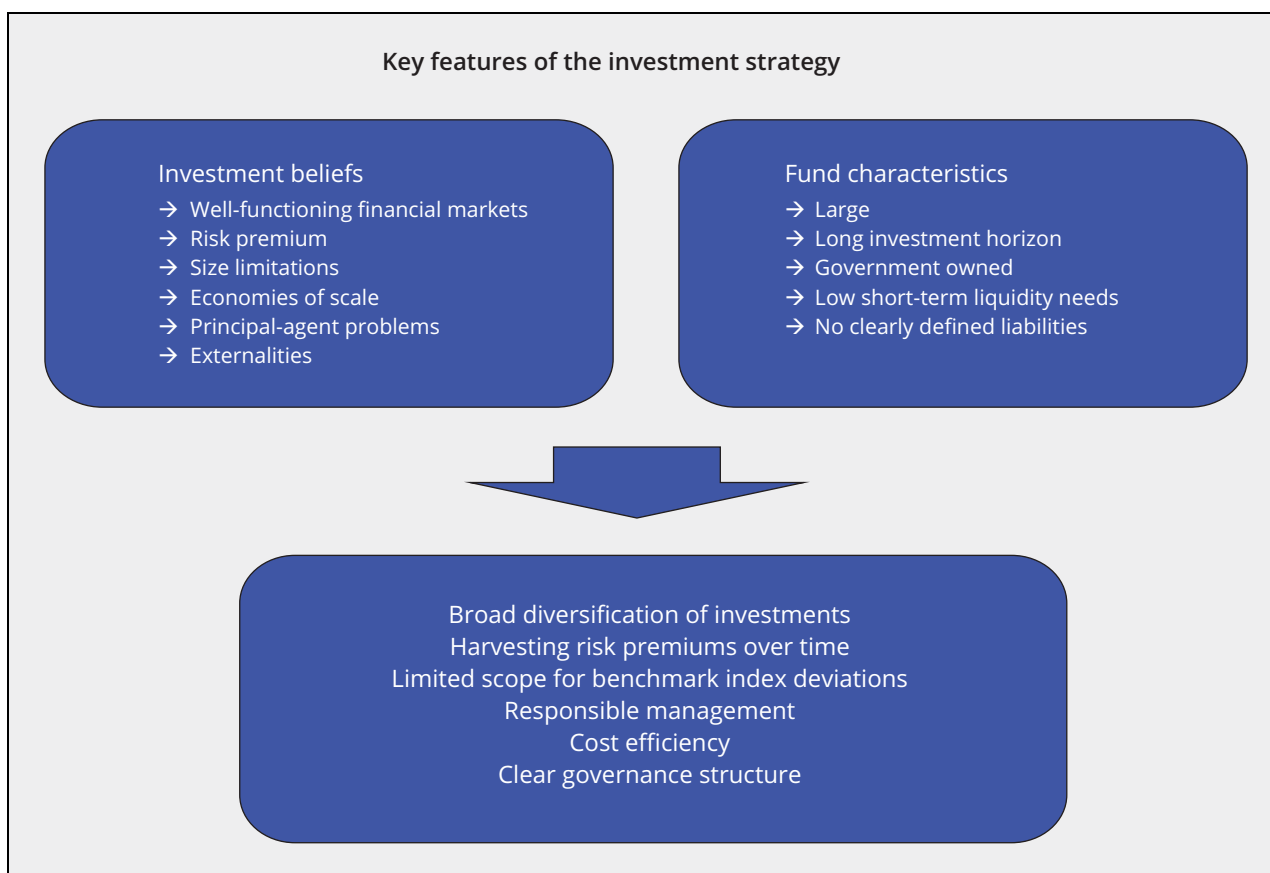


Figure 2.1 Key features of the investment strategy for the Government Pension Fund Global

Source: Ministry of Finance.

Box 2.1 The fund structure and the fiscal policy framework

The ongoing inflow of petroleum revenues to the GPFG predominantly represents a conversion of the petroleum wealth on the Norwegian continental shelf into financial wealth abroad. The petroleum revenues differ from other central government revenues in that these represent a conversion of wealth. Moreover, the petroleum revenues are highly volatile and will eventually come to an end.

A key objective of the GPFG and the fiscal policy guidelines is to facilitate permanently high value creation and stable development in the mainland economy. To this end, the central government's net cash flow from petroleum activities is transferred to the Fund in full. An amount is withdrawn from the Fund annually pursuant to a resolution passed by the Storting to cover the non-oil budget deficit in the fiscal budget.

Since 2001, the following guidelines have applied to withdrawals from Fund (the fiscal policy guidelines):

- The spending of fund revenues shall, over time, follow the expected real rate of return on the GPFG.¹
- Considerable weight shall be attached to the smoothing of fluctuations in the economy to

ensure good capacity utilisation and low unemployment.

The Fund and the fiscal policy guidelines serve to shelter the fiscal budget from short-term petroleum revenue fluctuations and provide fiscal policy latitude, thus enabling economic setbacks to be countered. At the same time, petroleum revenue spending via the fiscal budget becomes an integral part of a comprehensive budget process. As long as the central government does not accumulate debt by funding expenditure through borrowing, the capital in the GPFG will reflect real financial savings on the part of central government. The fiscal policy framework facilitates preservation of the real value of the Fund for the benefit of future generations. Whilst the capital of the Fund can only be spent once, the real return may fund a permanently higher level of central government expenditure. The fiscal policy guidelines support the long time horizon of the Fund.

¹ In 2017, the Storting endorsed a reduction in the expected real rate of return on the GPFG from four to three percent.

The benchmark index defined by the Ministry of Finance is closely tracked in the management of the GPFG. More than 99 percent of the volatility in the return on the Fund can be explained by volatility in the return on the benchmark index. There is limited scope for deviations from this benchmark. Norges Bank has over time achieved excess return in its management of the Fund (i.e. outperformed the benchmark).

Transparency is a prerequisite for broad support for, and confidence in, the management of the GPFG. Furthermore, broad support for the key aspects of the management of the Fund is a prerequisite for consistent adherence to the long-term investment strategy, also during periods of financial market turbulence.

2.1.2 Broad diversification of the investments

A key premise underpinning the investment strategy for the GPFG is that risk can be reduced by broad diversification of investments. This is

achieved by diversifying investments across asset classes, countries, sectors, companies and issuers, and makes the Fund less vulnerable to events that impinge on individual investments or individual markets. Diversification enables major parts of the risk specific to individual investments, also called unsystematic risk, to be eliminated and contributes to improving the ratio between expected return and risk in the Fund.

The principle of broad diversification of the investments is reflected in the Ministry's choice of equity and fixed-income benchmarks. The benchmark indices are based on broad market indices from leading index providers internationally, and comprise several thousand equities and fixed-income instruments. Such market indices are intended to reflect the investment opportunities in international financial markets and may generally be replicated closely and at a low cost. The equity and fixed-income benchmarks for the GPFG specify an investment allocation across countries, currencies, sectors, companies and bonds; see Figure 2.2. The benchmark indices are

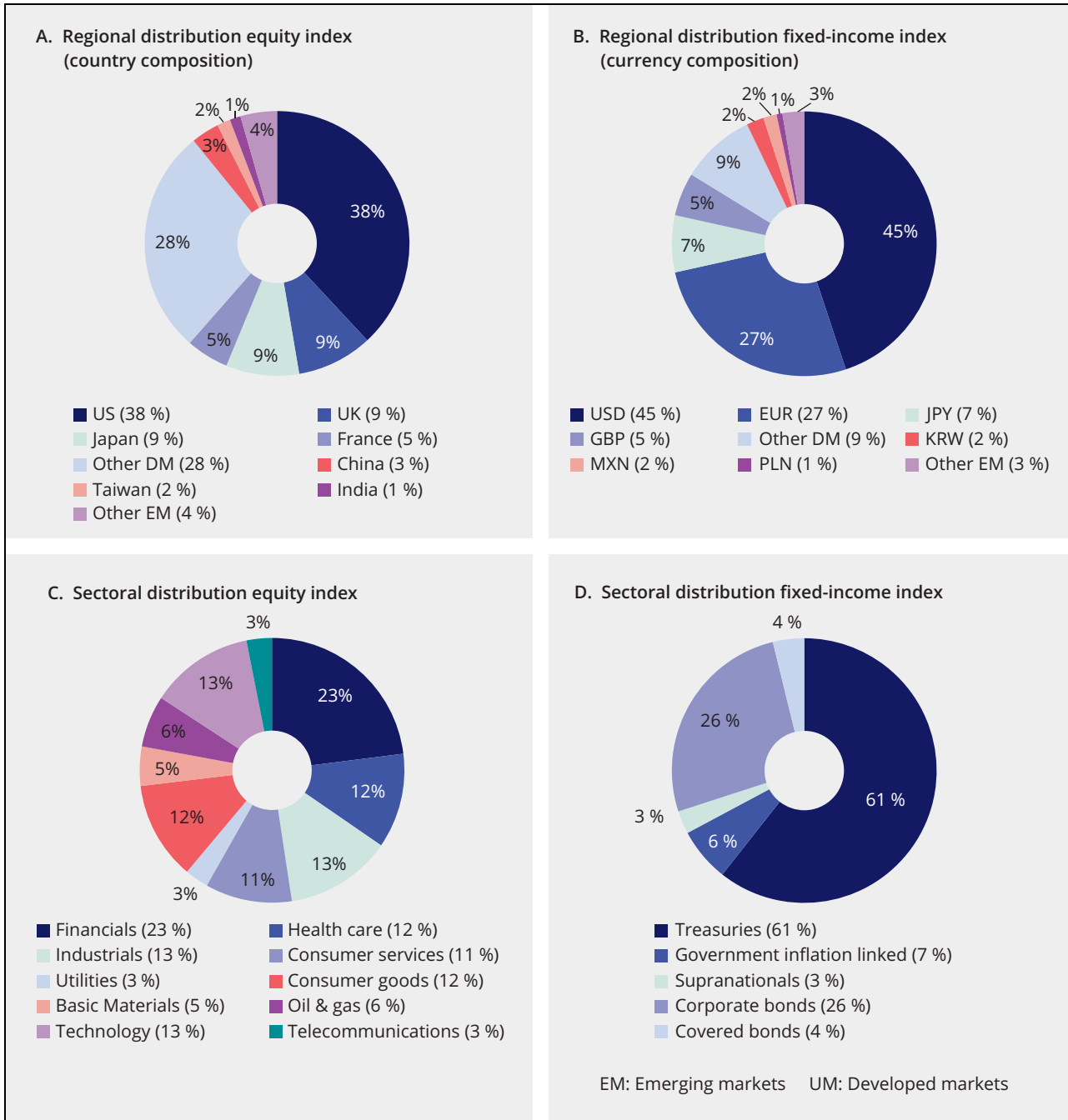


Figure 2.2 Distribution of the equity and fixed-income benchmarks across geographical regions and sectors as at 31 December 2018

Sources: Bloomberg, FTSE Russell, Norges Bank and the Ministry of Finance.

also a relevant basis for evaluating the performance of Norges Bank’s management of the GPF. The chosen index providers establish criteria for which markets, companies and issuers to include in the indices.

The equity benchmark is based on an index provided by FTSE Russell and includes all countries, with the exception of Norway, classified by the index provider as a developed, advanced emerging or secondary emerging market. The

allocation of investments within each region is based on the size of the listed equity markets in the countries included in the index, adjusted for free float. The equity benchmark is supplemented by adjustment factors established by the Ministry of Finance for the various countries and markets. The adjustment factors imply that the allocation between regions deviates somewhat from market capitalisation weights in that a larger portion is invested in Europe and a smaller portion in the US

and Canada. The Ministry is in this report announcing the commencement of a review of the equity framework and equity benchmark for the GPFG, including the geographical allocation of the index; see the discussion in section 3.4.

The fixed-income benchmark is based on indices provided by Bloomberg, and is comprised of a government bond portion and a corporate bond portion. The government bond portion is 70 percent and comprises nominal government bonds, inflation-linked government bonds and supranational bonds. The corporate bond portion accounts for the remaining 30 percent and comprises corporate and covered bonds. The allocation between the two sub-indices is fixed, with full monthly rebalancing to the chosen weights. Bonds issued in Norwegian kroner or by Norwegian issuers are not included in the benchmark.

Whilst the allocation of investments within the sub-index for corporate bonds is based on market weights, the country allocation within the government bond portion is based on the relative size of the economies as measured by gross domestic product (GDP). Some countries have high GDP relative to the size of their government bond market. Some country weights in the government bond portion are therefore supplemented by adjustment factors established by the Ministry of Finance out of benchmark index investability considerations. The investability requirement is of particular importance in view of the size of the Fund. See section 3.1 for discussion of the new fixed-income framework and benchmark for the GPFG.

2.1.3 Reaping of risk premiums

Broad fluctuations in the market prices of equities, currencies, commodities and interest rates are generally referred to as market risk or systematic risk. According to financial theory, investors can expect to be compensated for accepting this type of risk. The expected return in excess of what can be achieved through a risk-free capital investment is termed a risk premium. Higher systematic risk implies a higher expected return, but also more volatility in the value of the investments and a higher probability of loss.

A key risk premium is the equity premium, i.e. the expected excess return from investing in equities rather than fixed-income securities. Correspondingly, investors will expect a compensation; a so-called credit premium, for the risk that the borrower will default on its obligations. The magnitude of these premiums is uncertain and may vary over time.

Investors differ in their time horizons for investments and in their capacity to absorb risk. The central government, as owner of the GPFG, aims for the petroleum revenues to also benefit future generations of Norwegians. The probability of large and unexpected withdrawals from the Fund is considered to be relatively low. Its long investment horizon makes the GPFG well placed to carry risk that requires a long time horizon. This advantage is exploited in order to, inter alia, harvest the expected excess return from investing in equities rather than fixed-income securities.

The benchmark composition reflects the owner's trade-off between expected risk and return. For the GPFG, the share of equities in the benchmark is the choice with the greatest impact on total risk and return in the Fund. It has been decided to increase the equity share of the overall *strategic benchmark index* for the Fund to 70 percent;¹ see the discussion in section 3.5. Fixed-income securities represent the remainder of the strategic benchmark index. Fixed-income securities are expected to generate lower return than equities, but also lower risk.

The market prices of equities and fixed-income securities fluctuate considerably, and will often diverge over time. Given these constant price changes, maintaining a fixed allocation between equities and fixed-income securities is considered inexpedient, not least because this may entail unnecessarily high transaction costs for the Fund. An *actual benchmark index* has therefore been stipulated, in which the equity and fixed-income shares may deviate from their long-term weights, subject to a specified limit. Figure 2.3 shows the composition of the strategic and actual benchmark indices for the GPFG as at the end of 2018.

If the equity share in the actual benchmark index is materially higher or lower than the strategic allocation, this may result in different risk and expected return characteristics than originally endorsed through the choice of equity share. The Ministry of Finance has therefore adopted provisions on the rebalancing of the equity share when the deviation exceeds the stipulated limits. Rebalancing also gives the investment strategy a certain counter-cyclical element, in that over time the Fund purchases the asset class which in relative terms has depreciated substantially in value and

¹ In 2017, the Storting endorsed an increase in the equity share of the strategic benchmark index for the GPFG from 62.5 percent to 70 percent. The phase-in is to be carried out over time in accordance with a plan established in consultation with Norges Bank.

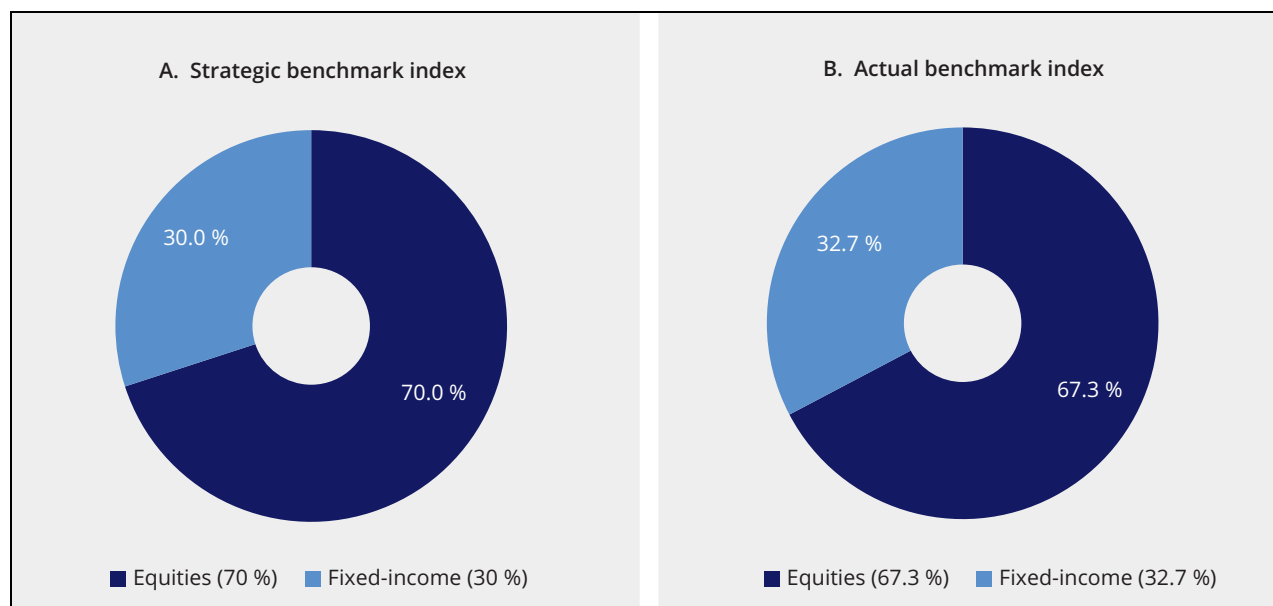


Figure 2.3 Composition of the strategic and actual benchmark indices for the GPFG as at the end of 2018

Sources: Norges Bank and the Ministry of Finance.

sells the asset class which has appreciated strongly in relative terms. Special rebalancing provisions have been adopted for the period when the equity share is being increased from 62.5 percent to 70 percent. The Ministry has in this report assessed the need for modifying the rebalancing provisions in view of the increase in the equity share to 70 percent; see the discussion in section 3.3.

2.1.4 Limited scope for deviations from the benchmark index

The investment strategy for the GPFG is premised on financial markets largely being well-functioning. Competition between market participants is generally high, and new publicly available information is thus assumed to be rapidly reflected in securities prices. Hence, systematically outperforming the general market, as measured by the performance of the average investor, in well-functioning markets will be difficult. This suggests that investors should diversify their investments broadly and seek to minimise asset management costs.

Some investors may nonetheless have distinctive characteristics or advantages which allow them to achieve an excess return over time. Size is a distinctive characteristic of the GPFG, which the Fund may exploit to reap economies of scale. Size may, at the same time, be a disadvantage, since some management strategies are difficult to scale up. It may also prove challenging to make

large portfolio adjustments within a short period of time without incurring high transaction costs.

The mandate laid down by the Ministry of Finance for the GPFG allows Norges Bank to deviate somewhat from the benchmark index. The purpose of such deviations is to utilise the distinctive characteristics and advantages of the Fund to achieve excess return and ensure cost-effective management. Continuous modifications to the composition of the actual portfolio require market knowledge and proximity, and the implementation of such adjustments has therefore been delegated to Norges Bank. The scope for deviations is also utilised to meet environment-related investment requirements in the mandate, as well as requirements to take account of fiscal strength in government bond management.

The scope for deviations from the benchmark index is specified in terms of expected tracking error in the mandate for the GPFG, and is stipulated at 1.25 percentage points. Expected tracking error expresses how much the return on the actual portfolio is expected to deviate from the benchmark index in a normal year.

The mandate also defines the financial instruments in which the fund capital may be invested (the investment universe) and stipulates other requirements to curtail the risk associated with deviations from the benchmark. The Fund may, inter alia, only be invested outside Norway, only in tradable debt instruments and only in equities which are listed or planned listed on recognised market places. Furthermore, the Fund may only

own up to 10 percent of the voting shares of any one company.² There are, moreover, mandate provisions intended to ensure a high degree of overlap between the actual investments and the benchmark index.

The benchmark index specifies the desired allocation of capital across the asset classes equities and fixed-income instruments, as well as geographical regions, markets and currencies, and provides a detailed description of how the Fund should, as a general rule, be invested. This distinguishes the GPFG from some other large funds, for which the role of the benchmark index is to define overall risk limits, whilst the detailed investment composition is delegated to the manager. The strategy for the GPFG implies that Fund risk and return are predominantly determined by the benchmark index.

The mandate from the Ministry allows for Norges Bank to invest a minor portion of the GPFG in unlisted real estate. It is more difficult to measure return and manage risk in the unlisted market than in the listed market, and there are no suitable benchmark indices that can be replicated closely and at a low cost. The investments cannot be diversified broadly via small ownership stakes in a large number of properties in a simple and cost-effective manner. Achieved performance will depend on the manager's strengths and specific investment choices. Unlisted real estate has therefore been made subject to the limit on expected tracking error, alongside other deviations from the benchmark index. The scale and scope of the real estate investments are determined by the operational management choices made by Norges Bank.

The mandate for the GPFG imposes extensive reporting requirements on Norges Bank with regard to risk, return and cost, also for individual strategies used in its management of the Fund. The performance of the equity and fixed-income portfolios is measured against the respective benchmark indices. The performance of these portfolios may be affected by the equities and fixed-income securities divested in order to fund the purchase of unlisted real estate. The contribution from such funding shall therefore be specified separately. The overall benchmark index is a performance measure for the investments of the GPFG as a whole.

The Ministry is in this report proposing to allow for unlisted renewable energy infrastructure

within the scope of the environment-related mandates; see the discussion in section 3.2.

2.1.5 Responsible management

The GPFG shall be managed responsibly within the overarching financial objective. The mandate laid down by the Ministry is, at the same time, based on the premise that good financial returns over time will depend on well-functioning markets and sustainable development.

Responsible investment efforts, including principle and standard setting, exercise of ownership and risk management, are integral parts of the management of the Fund. The Executive Board of Norges Bank also makes decisions on observation and exclusion of companies based on recommendations from the Council on Ethics in accordance with the ethically motivated guidelines laid down by the Ministry. However, the GPFG is not a suited vehicle for attending to all forms of commitments incumbent on Norway. There is a broad consensus that the Fund shall not be used as a foreign policy or climate policy tool.

The responsible investment framework is discussed in further detail in chapter 4.

2.1.6 Cost effectiveness

The Ministry of Finance emphasises cost-effective management of the GPFG. A number of conditions facilitate low costs in the management of the Fund. The investment strategy involves the GPFG being predominantly invested in listed equities and fixed-income securities, whilst the scope for deviations from the benchmark index is limited. Management costs will generally increase with the degree of active management, the scope of unlisted investments and the portion of the capital managed externally. Moreover, the size of the Fund enables economies of scale to be exploited and internal expertise to be developed. Management costs, measured as a portion of fund capital, will typically be lower for a large fund than for a small fund. Comparisons with other large funds show that the management costs of the GPFG are low, measured as a portion of assets under management.

Norges Bank shall seek to generate the highest possible return, net of costs. Assessments of Norges Bank's performance in its execution of the management assignment therefore require both costs and excess return achieved to be examined over time. Passive (index) management will normally entail lower management costs than that of

² An exception has been made in respect of real estate companies.

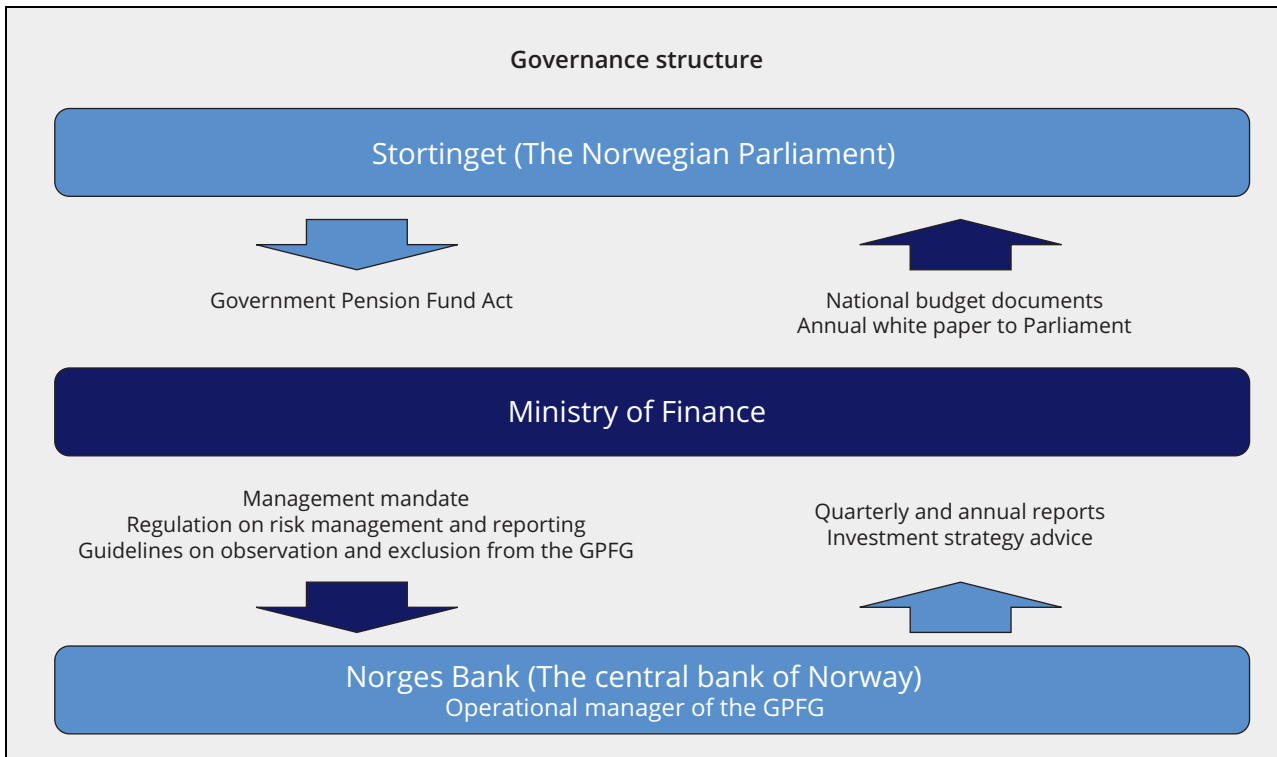


Figure 2.4 Governance structure of the GPFG

Source: Ministry of Finance.

active management, but will also offer less scope for seeking excess return. A comparison of passive and active management must also take into account that the return on the benchmark index cannot be achieved at zero cost. This is, inter alia, because securities trading involves transaction costs.

The actual management costs of Norges Bank are covered up to a maximum limit stipulated annually by the Ministry of Finance. Such limit is specified as a portion of the assets of the GPFG. The Supervisory Council of Norges Bank adopts, within such limit, a budget for Norges Bank's management of the GPFG, as it does for the other activities of the Bank, based on a proposal from the Executive Board of Norges Bank.

2.1.7 Clear governance structure

The Storting, the Ministry of Finance and Norges Bank have different roles in the management of the GPFG. The Storting has, under the Government Pension Fund Act, made the Ministry of Finance responsible for the management of the GPFG. Norges Bank is responsible for operational implementation. A clear division of roles between the various governance levels, from the Storting down to the individual portfolio manager, clarifies

responsibilities. Tasks and authorisations are delegated downwards in the system, whereas performance and risk are reported upwards; see Figure 2.4. Regulations and delegations necessarily become more detailed further down in the hierarchy. Each level has its own supervisory unit which receives reports from, and supervises, its subordinate unit. The exception to this principle is that the Executive Board of Norges Bank is subject to the supervision of the Supervisory Council, a governing body appointed by the Storting, which also appoints Norges Bank's auditor. The Supervisory Council of Norges Bank reports to the Storting.

There is a broad consensus that major strategic choices, such as key decisions on the level of risk to be assumed in the management of the Fund, shall be endorsed by the Storting prior to implementation. The deliberation of the annual white paper on the Government Pension Fund is an important aspect of such endorsement process. Broad endorsement and proper appreciation of the risk profile of the Fund furthers consistent adherence to the investment strategy over time, also during periods of financial market turbulence. The governance structure facilitates endorsement of the investment strategy and the risk profile by the owner, represented by the Storting.

The governance structure must at the same time be sufficiently flexible, through the delegation of authority, to enable ongoing operational investment decisions to be made close to the markets in which the Fund is invested. It is neither desirable, nor feasible, for the operational management of the GPFG to be regulated and managed in detail by the Ministry of Finance. The mandate expresses the overarching investment strategy and limits. Norges Bank is required under the mandate to make investment decisions independently of the Ministry. Such independence also pertains to the exercise of the ownership rights conferred by the investments. This division of responsibilities is broadly endorsed by the Storting.

A sound governance structure should also facilitate the highest possible alignment of interests of the person issuing an assignment (the principal) and the decision-maker (the agent). In practice, the delegation of authority may nonetheless give rise to conflicts of interest because the principal and the agent may have conflicting interests or different information; so-called principal-agent problems. Such conflicts of interest may arise at different levels, for example between the owners and the board of directors of an enterprise, or between the board of directors and the senior executives. In asset management there may be conflicts of interest between the capital owner and the asset manager.

3 The Government Pension Fund Global: Evolvement of strategy and management

3.1 New fixed-income framework and benchmark index

3.1.1 Introduction

The Ministry of Finance announced, in the fund report in the spring of 2017,¹ that one would upon the equity share of the Government Pension Fund Global (GPF) being increased to 70 percent assess the implications for other key choices in the investment strategy, including the composition of the fixed-income benchmark for the Fund. The current fixed-income benchmark was set in 2012 on the basis of, inter alia, a trade-off between meeting the liquidity need of the Fund, reducing the volatility of total returns and reaping bond market risk premiums. Said trade-off was based on a 60-percent equity share.

Norges Bank was requested to contribute analyses and evaluations as part of the assessment of the composition of the fixed-income benchmark for the GPF. The Ministry of Finance received the advice of the Bank in letters of 1 September and 14 December 2017. The Bank proposes, inter alia, a narrowing of the fixed-income benchmark to only include local currency nominal government bonds issued by the US, the UK and Eurozone countries – a reduction in the number of currencies from 22 to three – as well as capping the maturity of individual bonds at about ten years. It was proposed to omit the remainder of the bond market, including corporate bonds and inflation-linked bonds. Furthermore, the Bank recommended that the investment universe remain unchanged, and assumed that the GPF would continue to be invested in some of the currencies and segments proposed for omission from the benchmark index.

In March 2018, the Ministry of Finance appointed, against the background of the advice

from Norges Bank, an expert group to assess the fixed-income investment framework for the GPF, comprising Professors Ralph Koijen of the Booth School of Business, University of Chicago, and Jules van Binsbergen of the Wharton School, University of Pennsylvania. The Ministry received the group's report in November 2018. The group recommends a fixed-income benchmark index comprising the most important parts of the bond market as at present, without any cap on maturity. This will, according to the group, ensure an investable benchmark with a broad diversification of risk, and also contribute to the GPF achieving exposure to important bond market risk premiums.

The expert group's report and the letters from Norges Bank are available on the Ministry of Finance website.

It was announced in the fund report in the spring of 2018² that the Ministry of Finance was aiming to present its assessments of the fixed-income investment framework for the GPF in the fund report in the spring of 2019. In view of this process, and against the background of Norges Bank's advice to retain fewer currencies in the benchmark, it was decided in May 2018 to suspend the inclusion of new currencies in the benchmark index until a new benchmark index has been decided on. This implies that any new markets which the index provider, Bloomberg, may decide to include in underlying market indices would not be included in the benchmark index for the Fund until further notice.

The discussion of a new fixed-income framework and benchmark for the GPF is organised as follows: The current benchmark index is discussed in section 3.1.2, advice and assessments from the expert group and Norges Bank are discussed in section 3.1.3, whilst the Ministry's assessments are presented in section 3.1.4.

¹ Meld. St. 26 (2016–2017); *The management of the Government Pension Fund in 2016*.

² Meld. St. 13 (2017–2018); *The Government Pension Fund 2018*.

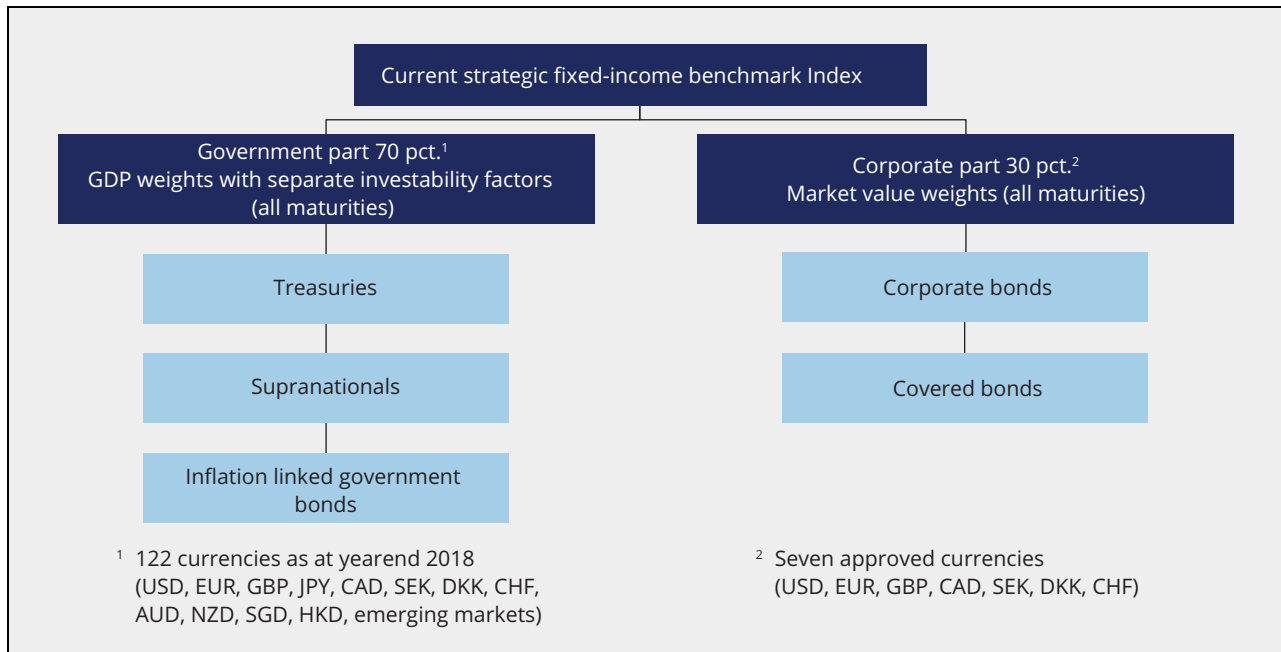


Figure 3.1 Composition of the current strategic fixed-income benchmark for the GPF

Sources: Bloomberg and the Ministry of Finance.

3.1.2 The current fixed-income benchmark index

The fixed-income benchmark for the GPF is based on market indices from the index provider Bloomberg. The benchmark index is exclusively comprised of investment-grade bonds, and consists of a government bond portion and a corporate bond portion; see Figure 3.1. The government bond portion constitutes 70 percent and includes local currency nominal and inflation-linked government bonds, as well as supranational bonds.³ The corporate bond portion constitutes the remaining 30 percent and comprises corporate bonds and covered bonds.⁴ The allocation between the two sub-indices is fixed, with full monthly rebalancing to the chosen weights.

As at the end of 2018, the government bond portion of the benchmark index included bonds

³ The government bond portion of the benchmark comprises all securities included in the market indices Bloomberg Barclays Global Treasury GDP Weighted by Country Bond Index, Bloomberg Barclays Global Inflation-Linked (Series L) Bond Index and the supranational sub-market of Bloomberg Barclays Global Aggregate Bond Index.

⁴ The corporate bond portion of the benchmark index comprises all securities included in the corporate bond segment and the covered bond sub-market (within the securitised segment) of Bloomberg Barclays Global Aggregate Bond Index, which are issued in US and Canadian dollars, euros, pound sterling, Swedish and Danish kroner, as well as Swiss francs.

issued in 22 currencies, ten of which are emerging market currencies. Which markets and individual bonds are included in the benchmark index at any given time is the result of the index provider's decisions for the underlying market indices. Bonds issued in Norwegian kroner or by Norwegian issuers are not included in the benchmark index.

Local currency emerging market government bonds have been included in the benchmark index since 2012. It was noted in the fund report in the spring of 2012⁵ that including emerging markets might contribute to a somewhat more diversified composition of the benchmark index and an improved ratio between return and risk in the long run, although the measurable effect seemed limited. It was noted, at the same time, that both credit risk in the government bond portion of the fixed-income benchmark and the correlation between the fixed-income benchmark and the equity benchmark would increase as a result of the inclusion of emerging markets.

The currencies included in the *government bond portion* of the benchmark index are weighted by the relative size of the countries' economies, as measured by gross domestic product (GDP). The weights are determined annually, based on GDP for the last three years. There is

⁵ Meld. St. 17 (2011–2012); *The management of the Government Pension Fund in 2011*.

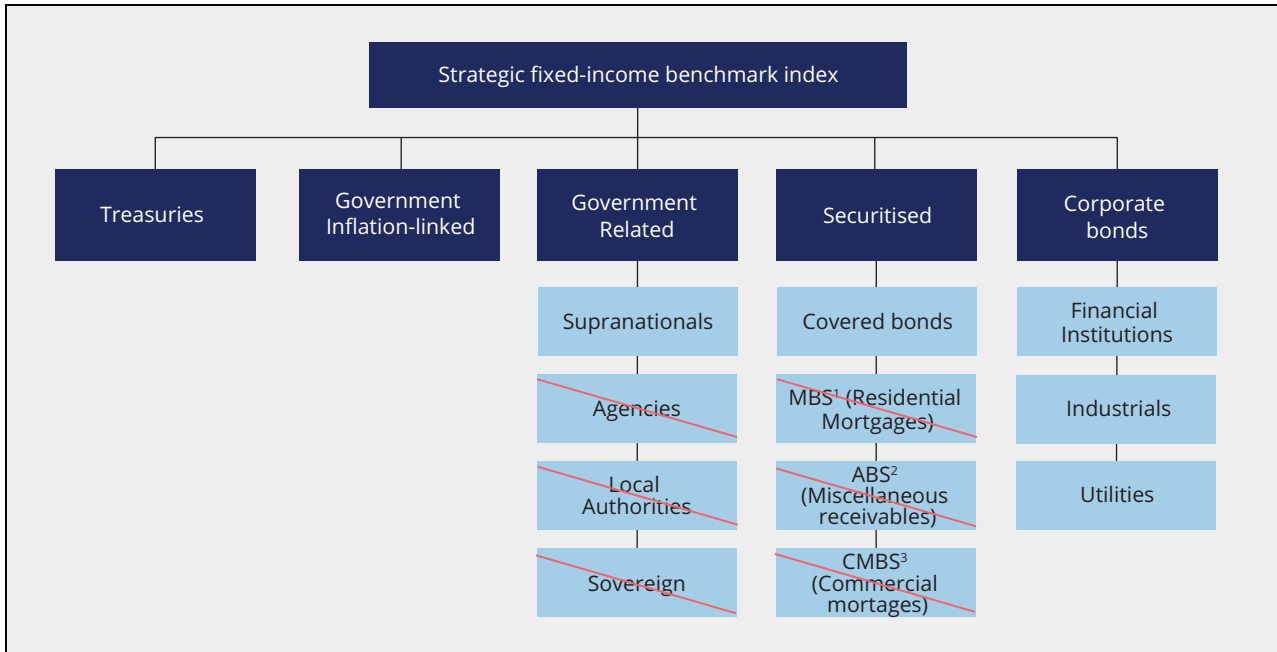


Figure 3.2 Comparison of the strategic fixed-income benchmark for the GPFG and the composition of the market indices Bloomberg Barclays Global Aggregate and Inflation Linked Global

¹ MBS, or Mortgage-Backed Securities, are fixed-income securities backed by residential mortgage portfolios. Such securities are predominantly arranged and guaranteed by US federal institutions.

² ABS, or Asset-Backed Securities, are fixed-income securities backed by portfolios of miscellaneous receivables, such as car loans and credit card debt.

³ CMBS, or Commercial Mortgage-Backed Securities, are fixed-income securities backed by commercial mortgage portfolios.

Sources: Bloomberg and the Ministry of Finance.

full monthly rebalancing to the fixed GDP weights throughout the year. Individual bonds are weighted by market weights within each country.⁶

GDP weights for government bonds were introduced in 2012. The Ministry of Finance noted in the fund report in the spring of 2012 that the purpose is broader diversification of the investments whilst also seeking to accord more weight to the ability of states to repay loans, compared to market weights. For government bonds, market weights imply that states with large and growing debt will, as a general rule, be accorded high and increasing weight in the benchmark index.

However, the size of a country's economy is not a precise measure of the ability or willingness of states to repay bond loans. It was, simultaneously with the introduction of GDP weights, stipulated a management mandate requirement that Norges Bank shall seek to take account of differences in fiscal strength in the composition of the GPFG government bond investments. It was

⁶ Bonds issued by international organisations are allocated to countries based on the currencies in which the securities are issued.

noted that this requirement is meant to highlight that one of the purposes of the government bond investments in the GPFG is to reduce the volatility of overall returns on the Fund.

Some countries have high GDP relative to the value of outstanding government debt. Owing to the size of the GPFG, the GDP weights for such countries must be supplemented by adjustment factors to avoid the Fund holding large percentage ownership stakes in the local sovereign debt markets. Such specific adjustment factors had been established for three countries as at the end of 2018.⁷

The composition of the *corporate bond portion* of the benchmark index is based on market weights and includes bonds issued in seven currencies; see Figure 3.1. Bonds issued in these seven currencies encompass about 98 percent of the securities the index provider includes in underlying market indices, as measured by mar-

⁷ The Ministry has established adjustment factors of 0.25 for Chile, Hong Kong and Russia, thus implying that these countries have a weight in the benchmark index of about 25 percent of what would be their full GDP weights.

ket value as at the end of 2018. It is common practice for private companies to issue bonds in the most used and most liquid currencies, and not necessarily in the currency of the country in which the company is domiciled. As at the end of 2018, the corporate bond portion comprised bonds issued by companies domiciled in more than 50 countries.

Norges Bank may invest the fund capital in securities that do not form part of the benchmark index, including in sub-markets not included in the fixed-income benchmark, within limits stipulated in the mandate from the Ministry of Finance. Such investments will be subject to the 1.25 percentage-point limit on expected tracking error; see section 2.1. Other limits and requirements are also stipulated for the fixed-income investments, including a requirement for the Bank to approve all sovereign bond issuer countries and a specific limit on high-yield bond investments. High-yield bonds involve a higher probability that borrowers will default on debts than do investment-grade bonds. In order to avoid the Bank having to immediately divest bonds that are omitted from the benchmark index for the GPFG because of their credit rating being downgraded, up to 5 percent of the fixed-income portfolio of the Fund may be invested in high-yield bonds.

The investment-grade bond market, as represented in broad market indices from the index provider Bloomberg, comprises many segments and sub-markets with different characteristics; see Box 3.1. The current fixed-income benchmark for the GPFG encompasses about 80 percent of the bond market, as measured by market value as at the end of 2018. Some sub-markets are not included in the benchmark index for the GPFG, on the basis of, inter alia, assessments relating to market structure, concentration risk and whether the bonds are suited for passive portfolio management; see Figure 3.2. These assessments were presented in the fund report in the spring of 2012.

3.1.3 Advice and assessments from Norges Bank and the expert group

Currencies, emerging markets and other segments in the government bond portion

Norges Bank refers to internal analyses which indicate, according to the Bank, that there is little risk reduction to be gained by diversifying the fixed-income investments across a large number of currencies for an investor with 70 percent of its investments in an internationally diversified

equity portfolio. The Bank proposes, against this background, to reduce the number of currencies in the fixed-income benchmark. The Bank states that a benchmark index comprised of bonds issued in US dollars, euros and pound sterling will be sufficiently liquid and investable for the Fund. However, the Bank sees no operational challenges in including nominal bonds in all the developed market currencies currently included in the fixed-income benchmark.

The Bank proposes that inflation-linked and supranational bonds be omitted from the benchmark index, since these reduce the proportion of nominal government bonds, which are more liquid and play a greater role in reducing overall volatility in the Fund.

Norges Bank notes that the fixed-income benchmark for the GPFG currently includes a range of emerging market currencies. The Bank has found that it can be operationally challenging to invest in line with the benchmark index in these markets, since markets drop in and out of the government bond portion of the benchmark index as a result of the creditworthiness of the issuer countries being upgraded or downgraded. The Bank also highlights that high GDP relative to the size of the local sovereign debt market has resulted in large percentage ownership stakes in some markets.

Investors have, according to the Bank, historically been compensated for the risk of investing in high-yielding currencies, most of which are emerging market currencies. The Bank notes that the current benchmark index is not suited as a basis for systematic strategies for high-yielding currency investments.

Norges Bank is of the view, against this background, that emerging bond markets should now be omitted from the fixed-income benchmark, and states that the Ministry of Finance should delegate the establishment of systematic strategies for high-yielding currency investments to the Bank. The Bank also states that the mandate may, if the Ministry wishes to impose further management restrictions, for example specify what portion of the Fund may be invested in high-yielding currencies not included in the benchmark index.

The expert group's assessment is that the benchmark index should comprise a broad set of countries and currencies, which the group highlights as providing diversification both during normal times and across changes in market regimes. Bond market volatility and correlations may, according to the group, change quickly and in ways that are difficult to predict based exclusively

Box 3.1 The global investable investment-grade bond market

A bond is a tradable security (loan) with a maturity exceeding one year. The bond issuer (borrower) may for example be government bodies, banks or other major private enterprises. The bond principal is repaid by the issuer upon maturity, and the issuer will typically pay interest (coupon) to the bondholder during the period from issuance to maturity. A bond loan is traded in the primary market by a borrower issuing bonds that are purchased by investors. Bonds are freely tradeable, i.e. investors may purchase and sell bonds between themselves in the secondary market. Most bonds are issued at a fixed nominal interest rate, i.e. the coupon is a predetermined amount. However, bonds are available in several varieties, inter alia, with floating interest rate, with zero coupon or with continuous repayment. Furthermore, some bonds involve various forms of collateral and/or options, such as for example the right to repay the loan before the maturity date.

Treasuries

Local currency nominal government bonds («Treasuries») constitute the largest bond sub-segment and accounted for more than half of the investable investment-grade bond market, as measured by broad market indices from the index provider Bloomberg as at the end of 2018; see Figure 3.3. The government bond market is dominated by a small number of currencies. Nominal government bonds issued in US dollars, Japanese yen, euros and pound sterling accounted for about 90 percent of the nominal government bond market. Emerging market government bonds issued in local currency accounted for just over five percent of the market.¹

Government-related bonds

Government-related bonds include, inter alia, government bonds issued in the currency of another country, bonds issued by municipalities and other government entities, bonds issued by enterprises that are partially owned by or receive grants from the public sector and bonds issued by supranationals, such as the World

Bank. Government-related bonds accounted for 11 percent of the bond market as at the end of 2018.

Inflation-linked bonds

Some states issue bonds that provide investors with protection against changes in the purchasing power of invested capital, so-called inflation-linked bonds. Such bonds provide an investor with a real rate of return in addition to a compensation for developments in a pre-agreed price index. Inflation-linked government bonds accounted for just over five percent of the bond market as at the end of 2018.

Securitised bonds

Various types of securitised bonds accounted for close to 15 percent of the investment-grade bond market as at the end of 2018. Such bonds are backed by a portfolio of underlying loans, of which residential mortgages are most commonly used.

The securitised bond market is large in the US, and accounted for close to a third of the US nominal bond market. The US securitised bond market is primarily comprised of bonds backed by residential mortgages that are arranged and guaranteed by federal credit institutions («MBS Passthrough»). The maturity of such bonds is uncertain, because US residential mortgage borrowers are entitled to repay and refinance their fixed-rate mortgages when the interest rate level declines.

The covered bonds sub-segment is primarily comprised of bonds issued by European banks and that are backed by residential mortgages or loans to the public sector. There is no uncertainty as to the maturity of such bonds, as these bonds do not carry the same right to refinancing in the event of a lower interest rate level as US secured bonds.

¹ The index provider Bloomberg has announced that Chinese government bonds and policy banks issued in local currency from April 2019 will be phased into the broad nominal bond market index on which the fixed-income benchmark for the GPF is based. This may over time serve to increase the emerging market portion of the broad market index.

Box 3.1 (cont.)

Investment-grade corporate bonds

The investment-grade corporate bond market is the second-largest bond segment after treasuries, and accounted for just under a fifth of the overall bond market as at the end of 2018.

The US is the largest and most liquid market for bonds issued by private enterprises, and accounted for more than half of the corporate bond market. It is common practice for companies to issue bonds in the most used and most liquid currencies, and not necessarily in the currency of the country in which the company is domiciled. Corporate bonds issued in US dollars, euros and pound sterling accounted for about 94 percent of the overall market for such bonds. Bonds issued in US dollars accounted for close to two thirds of the corporate bond market.

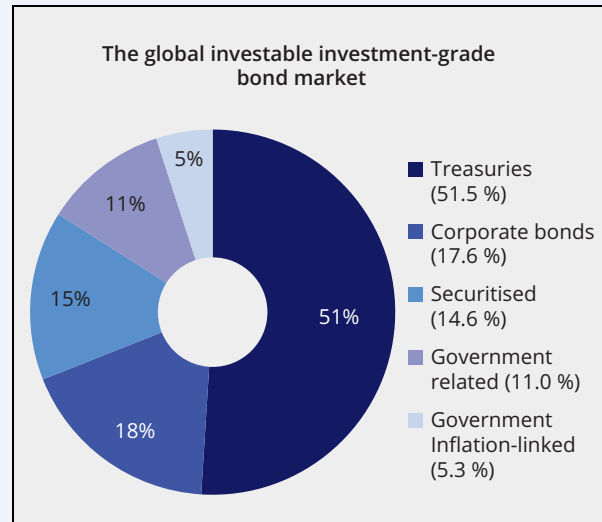


Figure 3.3 The global investable investment-grade bond market, as measured by broad market indices¹ from the index provider Bloomberg. Figures as at the end of 2018. Percent

¹ Bloomberg Barclays Global Aggregate Index and Bloomberg Barclays Global Inflation Linked Index.
Source: Bloomberg.

on historical data analyses. Although a small number of currencies and segments may appear to reflect the risk and return characteristics of the entire bond market, this may change under other market regimes.

The expert group notes that a composition of the fixed-income benchmark for the GPFG with included segments as at present, ensures broad diversification of risk and bond market investability, as well as exposure to the most important fixed-income risk premiums. The group notes that there is a relatively high degree of concentration on various countries in different segments of the bond market. A benchmark index comprising only nominal government bonds issued in three currencies and with specific maturities, as proposed by Norges Bank, will omit more than half of the investment opportunities included in the current benchmark index. The group is of the view that this would reduce the investability of the benchmark index and increase the concentration risk.

The expert group has, furthermore, analysed historical risk and return characteristics of fixed-

income portfolios both with and without emerging market government bonds. The analyses indicate that a fixed-income portfolio with emerging markets would over the period 2001–2018 have delivered about 0.04 percentage points higher return per year, and marginally lower volatility, than a portfolio without such bonds. Given an allocation with 70 percent equities, this represents a return difference of about 0.01 percentage points per year. The group emphasises, at the same time, that the findings from such analyses depend on the period of available data.

Corporate bonds

Norges Bank refers to internal analyses indicating, according to the Bank, that corporate bonds contribute to diversification of risk in the fixed-income benchmark, although a fixed corporate bond allocation will nonetheless have little impact on overall risk and return in a benchmark index with an allocation of 70 percent to equities. The Bank proposes, against this background, to omit corporate bonds from the benchmark index. The

recommendation is, as with emerging market bond investments, to delegate the establishment of systematic strategies seeking to reap a risk premium in the corporate bond market to the Bank. The Bank also states that the Ministry of Finance might consider stipulating a specific limit on what proportion of the Fund may be invested in corporate bonds. If corporate bonds are nonetheless retained in the benchmark index, the Bank observes that the Ministry of Finance should, *inter alia*, consider the proportion of such bonds, the number of currencies, the maturity and the weighting principle, as well as whether the current rule for the rebalancing of corporate bonds remains appropriate.

Norges Bank notes, *inter alia*, that the market and currency risk associated with corporate bond investments in the GPFG will be managed in accordance with the same principles as under the current internal reference portfolio, if the Ministry of Finance omits such bonds from the benchmark index for the Fund. The Bank underscores that it has favourable experience with such risk management. It is noted, as an example, that an investment in US corporate bonds may be funded with a combination of US equities and US government bonds with similar maturity. Such funding solution would, according to the Bank, ensure that the internal reference portfolio has similar risk characteristics to the benchmark index over time along three of the most important risk dimensions: market, interest rate risk and currency risk.

The expert group has, as part of its assessment of corporate bonds in the GPFG, analysed whether corresponding risk and return characteristics can be achieved by replacing corporate bonds with an appropriate combination of equities and government bonds. The group highlights research describing how a portfolio of risk-free bonds and stocks may under certain assumptions be composed to span the risk and return characteristics of corporate bonds. The group emphasises, at the same time, that such strategies are challenging to implement in practice. The strategies require, *inter alia*, continuous adjustment of the relative portfolio weights of equities and government bonds, which may entail considerable transaction costs. It is also noted that pricing deviations, for example during periods of high demand for government bonds, may result in diverging risk and return characteristics under such strategies. Moreover, the group is of the view that omitting corporate bonds from the benchmark index will, for a large fund such as the

GPFG, serve to reduce the investability of the benchmark.

The expert group concludes, on the basis of US data for the period 2001–2018, and in line with earlier research published in financial literature, that a significant proportion of corporate bond return variation is unspanned by equities and government bonds. Furthermore, the proportion thus explained fluctuates considerably over time, and is especially low during periods of financial market turbulence. This implies, according to the group, that the return difference between corporate bonds and a portfolio comprising equities and government bonds – composed for the purpose of providing corresponding risk characteristics – will vary over time, and may become large during periods of financial market turbulence.

Maturity

Norges Bank notes that in a portfolio comprising equities and fixed-income instruments, the contribution made by bonds to overall portfolio volatility will depend on the correlation between the two asset classes. The shorter the maturity of the fixed-income investments, the more robust will, according to the Bank, overall portfolio volatility be to changes in the correlation between equities and fixed-income instruments. Future correlation between equities and fixed-income instruments is uncertain and cannot be controlled. Future maturity in the fixed-income benchmark is also uncertain, but can be managed. The Bank states that the choice of maturity may potentially have major implications for overall Fund volatility, and should therefore be reflected in the benchmark index. The Bank proposes, against this background, that bonds in the benchmark index be subject to an upper limit of about ten years. The Bank is of the view that shorter maturity will serve to reduce uncertainty concerning the overall volatility in the Fund. The effect of shorter maturity on expected return in the fixed-income benchmark depends on the expected term premium. In its equity share advice on 1 December 2016, the Bank assumed an expected term premium of about zero. The Bank states that this remains the Bank's assumption.

The expert group recommends that no adjustment be made for maturity in the benchmark index. The group emphasises that deviations from market maturity are active investment decisions, and should thus fall within the scope of active management. Reference is made, at the same time, to recent research indicating that investors

have historically been compensated with a positive term premium for holding bonds with a longer time to maturity. A potential reason for this may, according to the group, be inflation risk. Although the term premium may be low because inflation is stable at present, this will not necessarily remain the case in coming years. The group notes, moreover, that the GPFG is in any event invested in markets with higher inflation risk than for example the US, which is often used in analyses. There is, according to the group, no conclusive evidence in the research literature to suggest that such term premium has disappeared in global fixed-income markets.

Weighting principle for the government bond portion of the benchmark index

Norges Bank is of the view that the currencies in the government bond portion should be accorded weight relative to the size of the countries' GDP, as at present, for the reason that GDP weights will ensure that the currency distribution in the benchmark is fairly stable, whilst at the same time preventing the GPFG from lending disproportionately to countries in the euro area with high levels of debt. The currencies in the government bond portion should be rebalanced to GDP weights annually, not monthly as at present, in order to avoid unnecessarily frequent transactions.

The expert group is of the view that the composition of government bonds should be based on market weights. The group notes that the current GDP weights will not necessarily be effective in addressing concentration risk going forward. A more appropriate way of adjusting for such risk may, according to the group, be to adjust each country's market weight for that country's impact on the overall portfolio in the case of large yield changes, i.e. idiosyncratic tail risk exposure.

Risk management framework

As a general premise, the current management framework defined in the mandate from the Ministry of Finance imposes, according to *Norges Bank*, adequate restrictions on how the GPFG may be invested. It is noted, however, that the Ministry may consider introducing specific limits on the proportion of the GPFG which may be invested in the segments proposed by the Bank for omission from the benchmark index. The Bank notes that the Fund will continue to be invested in some currencies and segments that are omitted. It is proposed to abolish the current

requirement to take account of fiscal strength in fixed-income management, because, inter alia, the new benchmark index proposed by the Bank implies an improvement in average benchmark credit quality.

The expert group notes that it is challenging to measure and manage bond market risk on the basis of short-term historical correlations alone. Scenario analyses and stress tests of the GPFG fixed-income portfolio may, according to the group, serve to improve the understanding of risk in the Fund. The group notes that the Ministry of Finance may consider requiring Norges Bank to publish such analyses, and believes that this would strengthen communication concerning risk taking in the Fund.

3.1.4 The Ministry's assessments

Introduction

The current benchmark index for the GPFG and the management restrictions reflect the key aspects of the investment strategy adopted for the Fund, including broad diversification of the investments, harvesting of risk premiums and limited scope for active management. This facilitates, inter alia, broad communication of risk taking in the Fund and endorsement of such risk taking by the Storting. The Mork Commission,⁸ which in 2016 recommended an increase in the equity share of the GPFG, identified, inter alia, this as being of importance to the capacity of the Fund to absorb risk.

The composition of the fixed-income benchmark must pay heed to the liquidity requirements of the Fund owing to, inter alia, Norges Bank needing to effect equity share rebalancing. The Bank observes, in its advice, that the current fixed-income benchmark is sufficiently liquid, and is of the view that this will not be changed by a higher equity share. The Ministry notes, at the same time, that modifications to the rebalancing provisions, discussed in section 3.3, do not significantly impact the liquidity need of the Fund, compared to the current provisions.

The Ministry notes that the decision in the spring of 2017 to increase the equity share to 70 percent was based on, inter alia, the Mork Commission's assessment of increased capacity to absorb risk in the Fund. A significant reduction in the risk level of the fixed-income benchmark

⁸ NOU 2016:20; *The Equity Share of the Government Pension Fund Global*.

would result in the expected real rate of return on the GPFG, currently estimated at about three percent, having to be reassessed.

The Ministry is of the view, against this background, that the decision to increase the equity share does not in itself necessitate any significant change in the risk level of the fixed-income benchmark, and is consistent with similar considerations as to meeting the liquidity needs of the Fund, reducing the volatility of total returns and reaping bond market risk premiums as under the current benchmark index. Furthermore, the Ministry has attached weight to a reasonable degree of overlap between the benchmark index and the bond market investment opportunities making the benchmark better suited for measuring Norges Bank's management performance.

The Ministry is in this report proposing, inter alia, that corporate bonds shall continue to account for 30 percent of the benchmark index and that benchmark bond maturity shall reflect market developments – as at present. However, certain operational challenges associated with the current fixed-income benchmark, as pointed out by Norges Bank, entail a need for facilitating lower transaction costs and increased investability of the benchmark. The Ministry of Finance is, based on an overall assessment, proposing to omit emerging market government and corporate bonds from the fixed-income benchmark for the GPFG. At the same time, investment in such bonds is capped at 5 percent of the fixed-income portfolio, and also subjected to expanded reporting requirements. Furthermore, the Ministry is proposing minor technical modifications to the current GDP weighting of the government bond portion of the benchmark index.

Corporate bonds in the benchmark index

Corporate bonds represent a significant portion of the bond market and have been included in the benchmark index since 2002. The securities included in the benchmark are investment-grade bonds and provide the Fund with some credit risk exposure. The expert group highlights recent research indicating that investors have historically been compensated by excess return for assuming such risk; the so-called credit premium. Moreover, the Ministry of Finance has noted that the group is of the view that there is no conclusive evidence in the research literature to suggest that such credit premium has now been eliminated.

The return difference between corporate bonds and a benchmark index comprising equi-

ties and government bonds has according to the expert group varied significantly in the past. If corporate bond investments are exclusively made as part of active management, as proposed by Norges Bank, the analyses of the expert group therefore suggest that one must expect larger deviations between the return on the benchmark index and the actual portfolio – especially during periods of market turbulence. Deviations may deliver both positive and negative excess return. The Ministry notes that one experience from the financial crisis is that negative excess return in active management may prove especially challenging during periods of market turbulence.

The Ministry is proposing that corporate bonds issued in the current seven currencies be retained in the fixed-income benchmark, and that the 30-percent weight be maintained. This facilitates a risk level that approximate that of the current fixed-income benchmark index, as well as maintaining the role of the benchmark as a point of reference for risk taking in the Fund and a relevant basis for measuring Norges Bank's management performance.

The corporate bond portion of the fixed-income benchmark for the GPFG is currently rebalanced to the fixed 30-percent weight on a monthly basis. The Ministry will in consultation with Norges Bank assess whether there is a need for certain minor modifications to the rebalancing provision for corporate bonds, with a view to reducing transaction costs in asset management.

Currencies, emerging markets and other segments in the government bond portion

Norges Bank is of the view that emerging market government bonds should be omitted from the fixed-income benchmark. It is, according to the Bank, challenging for a large fund like the GPFG to cost-effectively adjust the portfolio to upgrades or downgrades of the issuer countries' credit ratings. The Bank emphasises, furthermore, that the current benchmark index is not suited as a basis for systematic strategies for investing in high-yielding currencies, of which most are emerging market currencies.

Index providers' minimum credit rating requirements will generally result in individual countries entering and exiting the fixed-income benchmark over time. The Ministry is of the view that it is reasonable to assume that emerging markets, with, inter alia, less developed capi-

tal markets and a relatively lower income level than developed markets, will on average be more vulnerable to political or economic events which may entail changes in credit rating. Furthermore, historical data indicate that the average credit rating is significantly lower for emerging markets than for developed markets, thus implying that emerging markets are generally closer to the threshold defined by the index provider. Upgrades or downgrades to the credit rating of the issuer countries may therefore seem to be more of a challenge for emerging markets than for developed markets.

The Ministry has, at the same time, noted that the expert group's analyses of fixed-income portfolios with and without emerging market government bonds indicate a very high degree of correlation and small risk and return differences. The analyses disregard any transaction costs as the result of changes to the credit rating of the issuer countries over time. The Ministry emphasises that such analyses are highly sensitive to the choice of time period, and thus should not be accorded too much weight.

The Ministry is of the view that the above discussion suggests that local currency emerging market bonds should be omitted from the benchmark index, in line with the advice from Norges Bank. The Bank observes that there, in principle, are no operational challenges in including all developed market currencies currently covered by the fixed-income benchmark, but proposes the omission of inflation-linked bonds and supranational bonds.

The expert group notes that there is a relatively high degree of concentration on various countries in different segments of the bond market, and observes that a benchmark index comprising only nominal government bonds issued in three currencies and with capped maturities, as proposed by Norges Bank, will omit more than half of the investment opportunities included in the current benchmark index. This would, according to the group, reduce the investability of the benchmark index and increase concentration risk.

The Ministry is proposing that other bond segments included in the government bond portion of the benchmark index for the GPFG be retained as at present. The government bond portion will thus comprise local currency nominal and inflation-linked government bonds issued by all countries classified by the index provider Bloomberg as developed markets in underlying market indices, as well as supranational bonds issued in the same currencies.

Maturity in the benchmark index

Long-maturity bonds are, all else being equal, more sensitive to interest rate changes than shorter-maturity bonds. Norges Bank's proposal to cap the maturity of bonds in the benchmark index at about ten years will thus, when taken in isolation, serve to reduce *volatility in the fixed-income benchmark for the GPFG*. This is because the value of the bonds in the benchmark may be less affected by interest rate changes.

The impact of a maturity reduction on *overall volatility risk* in the GPFG will, on the other hand, depend on the correlation between equities and fixed-income instruments. Overall volatility risk will increase with the maturity of the fixed-income investments if such correlation is positive, and be reduced if such correlation is negative.

Maturity in the fixed-income benchmark is currently determined by market developments. The Ministry emphasises that capping the maturity of bonds included in the benchmark index may have significant implications for volatility in the overall return on the GPFG, as also noted by Norges Bank. Volatility in the Fund may be both higher and lower than without such a modification. In a hypothetical financial market scenario in which bonds increase in value upon an equity market slump, capping maturity in the fixed-income benchmark may, when taken in isolation, result in a larger decline in the market value of the GPFG than in the absence of such cap.

The Ministry notes, at the same time, that the expert group is of the view that there is no conclusive evidence in the research literature to suggest that the term premium has now been permanently eliminated. This implies that a potential modification of maturity in the fixed-income benchmark will not reduce the risk level without simultaneously having an impact on expected return.

The Ministry agrees with the assessment of the expert group that maturity in the fixed-income benchmark should continue to follow market developments. Any decisions to deviate from market maturity are, as at present, to be delegated to Norges Bank within the scope of active management.

Weighting principle for the government bond portion of the benchmark index

Norges Bank is of the view that the current weighting principle with GDP weights should be maintained, although rebalancing should be effected annually to reduce transaction costs.

The Ministry notes that GDP weights limit exposure to countries with high and increasing debt ratio and make it practicable to pay heed to the debt service capacity of states in a simple and readily understandable manner, without the Ministry having to establish a specific loss tolerance on lending to each individual countries, as would be required under the expert group's proposal. The group's proposed application of market weights would, at the same time, have resulted in significant changes to the country composition of the fixed-income benchmark.

The Ministry is proposing that the composition of the government bond portion of the benchmark index for the GPFG be determined on the basis of countries' relative GDP, as at present, but capped at two times market weight for each country. Such a weighting principle is estimated to significantly curtail holdings in small markets, whilst the modifications have lesser impact on other aspects of the government bond composition of the benchmark index. This modified weighting principle will thereby result in the government bond portion of the fixed-income benchmark being sufficiently investable for the Fund, without notable impact on other characteristics. The current framework with specific adjustment factors for individual countries is made superfluous, and can be abolished. Furthermore, the Ministry agrees with Norges Bank's assessment that the GDP weights internally in the government bond portion should be rebalanced annually, rather than monthly as at present. This will reduce unnecessary transactions resulting from exchange rate fluctuations, and thereby the transaction costs incurred by investing in line with the benchmark index.

Risk management framework

Omitting local currency emerging market government bonds from the fixed-income benchmark for the GPFG, entails that the risk associated with such investments will not be embedded in the benchmark index for the Fund. Norges Bank notes in its advice that the Ministry may consider, if emerging markets are omitted from the benchmark index, to stipulate what proportion of the Fund may be invested in emerging market currencies.

The Ministry notes that emerging market debt is also included in other segments of the bond market and at times issued in other currencies than that of the country in question. Norges Bank currently has scope for investing the fund capital

in such bonds, although some sub-segments are not included in the benchmark index for the Fund. In addition, the corporate bond portion of the fixed-income benchmark currently includes emerging market corporate bonds, if such bonds are issued in one of the seven approved currencies of the corporate sub-index.

The Ministry is proposing to stipulate an overall limit on the proportion of the GPFG fixed-income portfolio that may be invested in fixed-income instruments not issued by states or companies domiciled in developed markets. This will limit the total scope of emerging market fixed-income investment and, if applicable, frontier and unclassified markets, including both issuer risk and the proportion of the Fund invested in such currency. Such a framework takes into account the fact that several segments of the bond market are currently not included in the benchmark index, and facilitates a more integrated framework for and management of risk in relation to emerging market fixed-income investments than at present.

As at the end of 2018, the value of local currency emerging market government bonds (GDP weighted) represented about seven percent of the fixed-income benchmark for the GPFG, whilst the same markets would have accounted for about three percent under market weighting. Emerging market corporate bonds represented, at the same time, about one percent of the fixed-income benchmark. The changes proposed to the fixed-income framework imply that such corporate bonds are omitted from the benchmark for the GPFG.

The Ministry is proposing to stipulate the limit on emerging market investments at five percent of the fixed-income portfolio. This corresponds, more or less, to the proportion of such markets in the investable investment-grade bond market as at the end of 2018, as defined by the index provider Bloomberg, but is somewhat lower than the approximately 8 percent under the current benchmark index. Norges Bank notes, inter alia, that one may establish systematic strategies for investing in high-yielding currencies if emerging markets are omitted from the benchmark. Such strategies entail higher risk than broad emerging market investments, which in the view of the Ministry suggests, when taken in isolation, that the limit should be lower than the current emerging market proportion of the benchmark index.

Furthermore, the management mandate for the GPFG stipulates specific reporting requirements for emerging market investments. When fixed-income emerging market investments are

Table 3.1 Composition of new and current fixed-income benchmark for the GPFG based on GDP weights for 2019 and market weights as at the end of October 2018. Percent

Country	Currency	Currency weights		
		New government bond portion	Current government bond portion	New fixed-income benchmark ¹
Developed markets:		70.0	62.9	100.0
<i>North America</i>		33.5	29.7	51.7
Canada	CAD	2.1	2.3	3.2
United States	USD	31.4	27.4	48.5
<i>Europe</i>		25.7	23.4	37.5
Denmark	DKK	0.5	0.5	0.6
Eurozone	EUR	19.8	17.4	29.2
United Kingdom	GBP	4.4	3.9	5.9
Switzerland	CHF	0.4	1.0	0.9
Sweden	SEK	0.5	0.8	0.8
<i>Asia and Oceania</i>		10.8	9.7	10.8
Australia	AUD	2.1	1.9	2.1
Hong Kong	HKD	0.0	0.1	0.0
Japan	JPY	8.0	7.0	8.0
New Zealand	NZD	0.3	0.3	0.3
Singapore	SGD	0.4	0.5	0.4
Emerging markets:			7.1	
<i>Latin America</i>			1.7	
Chile	CLP		0.1	
Mexico	MXN		1.6	
<i>Europe/Middle East/Africa</i>			2.2	
Israel	ILS		0.5	
Poland	PLN		0.7	
Russia	RUB		0.5	
Czech Republic	CZK		0.3	
Hungary	HUF		0.2	
<i>Asia</i>			3.2	
Malaysia	MYR		0.4	
South Korea	KRW		2.1	
Thailand	THB		0.6	
Total		70.0	70.0	100.0

¹ The currency weights include corporate bonds.
Sources: Bloomberg and the Ministry of Finance.

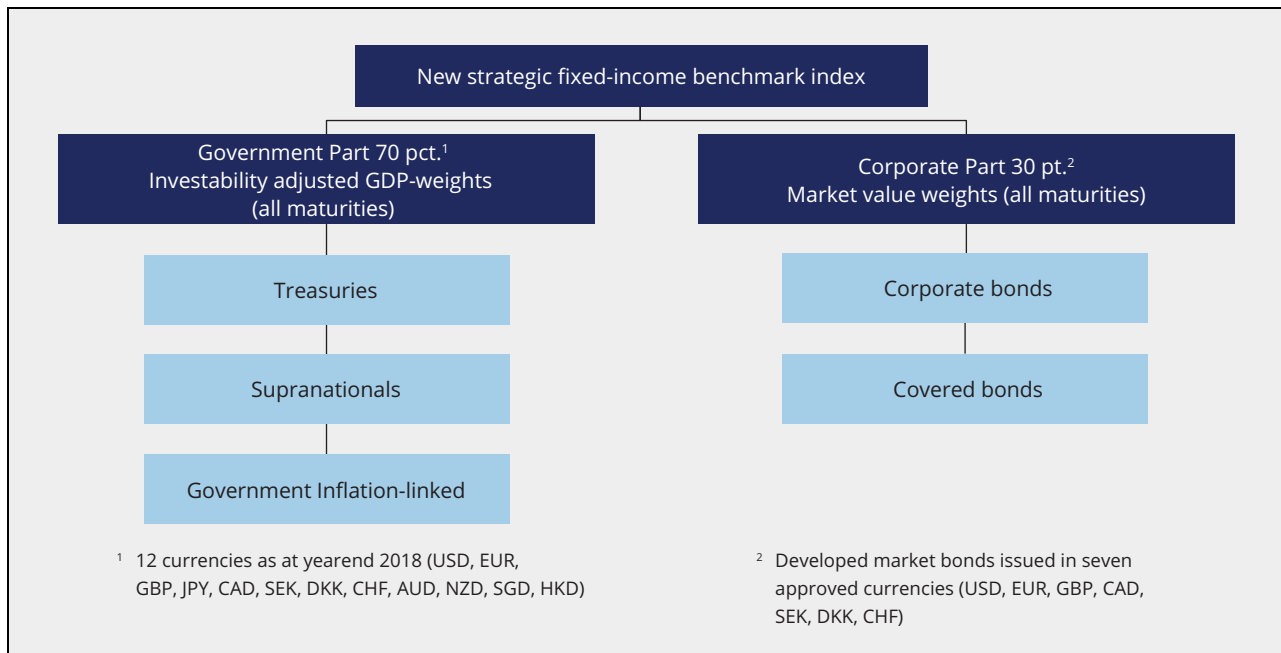


Figure 3.4 New strategic fixed-income benchmark

Source: Ministry of Finance.

now omitted from the benchmark index for the GPF, the Ministry will subject such investments to additional public reporting requirements, including on scope, investment focus and contribution to relative risk and return in the Fund.

The management mandate for the GPF also requires Norges Bank to carry out stress tests as part of its measurement and management of risk in the management of the Fund, and requires extreme event risk analyses to form an integral part of risk management. The Ministry agrees with the assessment of the expert group that public reporting of such stress tests may strengthen communication of bond market risk taking in the Fund. The Ministry will stipulate such reporting requirements in the management mandate for the GPF.

The Ministry notes that there is considerable variation in sustainable debt level also across developed markets. It is therefore proposed to maintain the mandate requirements for Norges Bank to take account of differences in fiscal strength between countries in the composition of government bond investments.

Composition and currency distribution of new fixed-income benchmark for the GPF

The composition of the new strategic fixed-income benchmark for the GPF is shown in Figure 3.4. It is proposed to retain all segments cur-

rently included in the benchmark index, but limited to developed market government and corporate bonds. A comparison of the currency and country composition of the current and new fixed-income benchmark for the GPF, based on market data as at the end of October 2018, is provided in Table 3.1.

3.2 The environment-related mandates and unlisted renewable energy infrastructure

3.2.1 Introduction

In the fund report in the spring of 2018,⁹ the Ministry of Finance proposed an assessment of whether unlisted renewable energy infrastructure investments can be effected within the scope of the dedicated environment-related investment mandates, with the same transparency, risk and return requirements as apply to the other investments in the GPF. It also proposed a review of the regulation of the environment-related mandates in general, including the size of the mandates.

The following is stated in the recommendation of the Standing Committee on Finance and Economic Affairs relating to the report; see Recommendation No. 370 (2017–2018) to the Storting:

⁹ Meld. St. 13 (2017–2018); *The Government Pension Fund 2018*.

«The Standing Committee notes that unlisted infrastructure investment opportunities have been discussed and considered several times, including, *inter alia*, investment opportunities in renewable energy source development. The Standing Committee requests, against this background, the Ministry to revert to the Storting no later than in next year's report with a specific mandate proposal for unlisted renewable energy infrastructure investments under the environment-related mandates, with the same transparency, risk and return requirements as apply to the other investments.» The majority of the members of the Standing Committee requested, in connection therewith, the Ministry to assess whether the scope of the environment-related mandates should be expanded.

In a letter of 22 June 2018, the Ministry requested Norges Bank's assessment of the regulation of the environment-related mandates and how the investment universe of the mandates might be expanded to include unlisted renewable energy infrastructure. The Bank forwarded its assessments in letters of 29 and 30 October 2018. Norges Bank takes the view that unlisted renewable energy infrastructure investments can be implemented within the scope of the environment-related mandates. The Bank believes that the upper limit for the environment-related mandates should be raised in order to enable Norges Bank to exploit the distinctive characteristics of the Fund and implement unlisted renewable energy infrastructure investments in a cost-effective manner.

Furthermore, the Ministry received a report from the consultancy firm McKinsey on 19 December 2018, which describes the global unlisted renewable energy infrastructure market. The Bank's letters and McKinsey's report are available on the Ministry website.

McKinsey estimates that the total market value of installations and means of production in renewable energy infrastructure was USD 2,900 billion in 2017 and will increase to USD 4,200 billion in 2030. A major part of the growth is expected, according to both Norges Bank and McKinsey, in emerging markets. Only parts of the total renewable energy infrastructure market will be available to institutional investors. McKinsey estimates the part of the market available to investors in the unlisted market in 2030 at about USD 1,100 billion. In addition, the listed renewable energy infrastructure market is estimated at about USD 500 billion.

Section 3.2.2 presents the background to the environment-related mandates and the Bank's

account of the management of such mandates. The unlisted renewable energy infrastructure market is discussed in section 3.2.3, whilst Norges Bank's regulation and implementation assessments are discussed in 3.2.4. The Ministry's assessments are presented in section 3.2.5.

3.2.2 The environment-related mandates

Background

Following a comprehensive public evaluation of the ethically motivated guidelines, the Ministry of Finance proposed the establishment of a specific investment programme focused on environmentally-friendly activity or technology in 2009; see the fund report in the spring of 2009.¹⁰ At the time, the Ministry considered specifying a separate investment universe for such investments, which included both private equity and unlisted infrastructure. However, it was proposed in the National Budget for 2010, in accordance with advice from Norges Bank, that the Bank should establish environment-related mandates within the same investment universe and framework as applied to the rest of the Fund. The Ministry noted that the Bank considered environment-related investments to be especially well-suited for active management. It was proposed that the environment-related investments would over time amount to NOK 20 billion.¹¹ In 2012, the mandate scope was quantified at NOK 20–30 billion. This has subsequently been increased twice; first to NOK 30–50 billion with effect from 1 January 2015 and then to NOK 30–60 billion with effect from 1 September 2015.

The current regulation

The current regulation of the environment-related mandates was established in 2015, and takes the form of general wording in the management mandate for Norges Bank on the establishment of such mandates and the *normal* scope of these. The establishment of a normal range for the investments was intended to highlight that investment opportunities, and thereby the amount of such investment, might vary over time. The Min-

¹⁰ Meld. St. 20 (2008–2009); *On the Management of the Government Pension Fund in 2008*.

¹¹ A separate investment programme for sustainable emerging market growth was also considered upon the establishment of the environment-related mandates. The NOK 20 billion scope was then intended to include both programmes.

istry observed, at the same time, that a higher range for such investments would entail restrictions on the Bank's management that could hardly be justified financially.

The management of the dedicated mandates forms part of the Bank's active management. This implies that the investments are measured against the benchmark index defined by the Ministry and draw on the scope for deviations therefrom, as measured by expected tracking error.

The Ministry has stipulated specific reporting requirements for the environment-related mandates, which include scope, strategy and asset type. Norges Bank shall, according to the reporting requirement, explain how the intention of the investments is fulfilled. The intention is not specified any further in the management mandate, but was, *inter alia*, described in the fund report in the spring of 2009:

«The investments must be aimed at eco-friendly assets or eco-friendly technology that is expected to yield clear environmental benefits, such as climate-friendly energy, improving energy efficiency, carbon capture and storage, water technology and management of waste and pollution.»

The detailed specification of criteria for what is considered an environment-related company, thus qualifying for inclusion in the investment universe for the environment-related mandates is delegated to Norges Bank. In order to include a company in the investment universe for the environment-related mandates, Norges Bank requires a minimum of 20 percent of the activities of the company to fall within one or more of the main segments defined as environment-related by the Bank. Environment-related investments are categorised by the Bank as investments in low-emission energy and alternative fuels, clean energy and energy efficiency technology and natural resource management technologies.

Norges Bank has since 2015 reported on responsible investment of the Fund in a separate publication, including the management of the environment-related mandates. The reporting includes, *inter alia*, the amount invested as at the end of the year, specified into equities and fixed-income instruments, as well as the return on the environment-related equity mandates. In addition, the Bank has in its most recent reports published the ten largest exposures under the environment-related mandates within the abovementioned categories.

Norges Bank's account

In its letter, Norges Bank observes that the Ministry requires, through the mandate provision on the environment-related mandates, that the Bank's management shall be active and that the composition of the portfolio shall deviate from the benchmark index. The Bank notes the premise that these investments shall be subject to the same profitability requirements as the other investments in the Fund. It is noted in the letter that both the Bank and the Ministry have previously emphasised that the requirement for environment-related mandates represents a management restriction that will, generally speaking, restrict the scope of the Bank for generating excess return.

The environment-related mandates have been managed both internally and externally since start-up in 2009. The mandates are currently managed internally in their entirety, after the Bank discontinued the externally managed mandates in May 2018 in order to reduce asset management costs.

The Bank notes that what constitutes an environment-related company is, to some extent, subject to discretionary judgement. Such investments may range from large conglomerates with a minor portion of environment-related activities to more pure-play environmental companies in various sectors. Norges Bank has, in line with the stipulations of the Ministry in the fund report in the spring of 2009, focused its environment-related equity mandates on companies in the three main segments defined by the Bank as environment-related; see the discussion in the section on *current regulation*. Moreover, the Bank has decided that the mandates shall not be invested in oil and gas producers, coal companies and mining companies.

The investments within the scope of the environment-related mandates are currently made in listed equities and so-called green bonds. The market value of the investments was NOK 56.7 billion as at the end of 2018, split into NOK 43.3 billion in equities and NOK 13.4 billion in green bonds. Norges Bank notes that a major part of the Fund will be invested in companies with environment-related activities irrespective of any requirement for the Bank to establish special environment-related investment mandates. About six percent of the companies in the equity benchmark for the Fund are classified as environment-related as at the end of July 2018.¹² The bonds included in MSCI Bloomberg Green Bond Index represented,

Table 3.2 Return on environment-related equity mandates and various equity indices over the last 5 years and since commencement in December 2009, measured in the currency basket of the Fund. Figures as at the end of 2018. Annual geometric mean. Percent

Nominal return	Since commencement	Last 5 years
Environment-related equity investments	4.5	5.9
Environment-related equity indices		
<i>FTSE EO AS</i> ¹	9.3	6.9
<i>FTSE ET 50</i> ²	3.0	4.0
<i>MSCI Global Environment</i> ³	7.3	4.5
The equity benchmark for the Fund	8.0	5.6

¹ Broad environmental index that includes companies for which at least 20 percent of their business can be attributed to environment-related activities.

² Narrower technology-focused environmental index that includes the 50 largest companies with at least 50 percent of their business in environment-related activities.

³ Environmental index that includes companies for which at least 50 percent of their business can be attributed to environment-related activities.

Source: Norges Bank.

at the same date, 0.3 percent of the fixed-income benchmark for the Fund. In total, this corresponded to about NOK 340 billion.

The environment-related equity mandates are managed in accordance with the same key principles as the other equity investment mandates of the Fund. The asset management objective is to generate excess return, in relation to relevant return measures. The relative return on the environment-related equity mandates has varied over time and with different return metrics. The annual return on the equity mandates has since commencement in December 2009 been 4.5 percent measured in the currency basket of the Fund. This is lower than the annual return on the equity benchmark for the Fund, which was 8.0 percent over the same period. However, the return on the mandates has been slightly higher than that on the equity benchmark over the last five years; see Table 3.2. The return on the environment-related equity mandates has been more volatile than the return on the equity benchmark over the same period. Norges Bank notes in the report on responsible investment for 2018 that the investment universe of the environment-related mandates has been expanded in recent years to

include larger companies and that greater emphasis has been placed on developed markets in order to reduce volatility.

The return on the environment-related equity mandates may be compared to the return on various environmental indices. The Bank observes, in its letter to the Ministry, that index providers exercise considerable discretion in their construction of the indices. There are major differences between the indices,¹³ and there have also, according to the Bank, been considerable changes in their composition over time. Performance in the Bank's management of the environment-related investments has varied over time and depending on what environmental index such management is measured against; see Figure 3.5. Norges Bank states that the risk and return characteristics of the Bank's investments in green bonds do not differ significantly from the other bond investments with comparable credit and interest rate risk.

The Bank also states that since the environment-related mandates constitute a minor portion of the Fund, the requirement for the Bank to

¹² Based on the companies included in FTSE's broad environmental index (FTSE EO).

¹³ The Bank noted, in a letter of 21 November 2014, that only 19 percent of the equities included in FTSE's pure-play environmental index are also featured in MSCI's corresponding products.

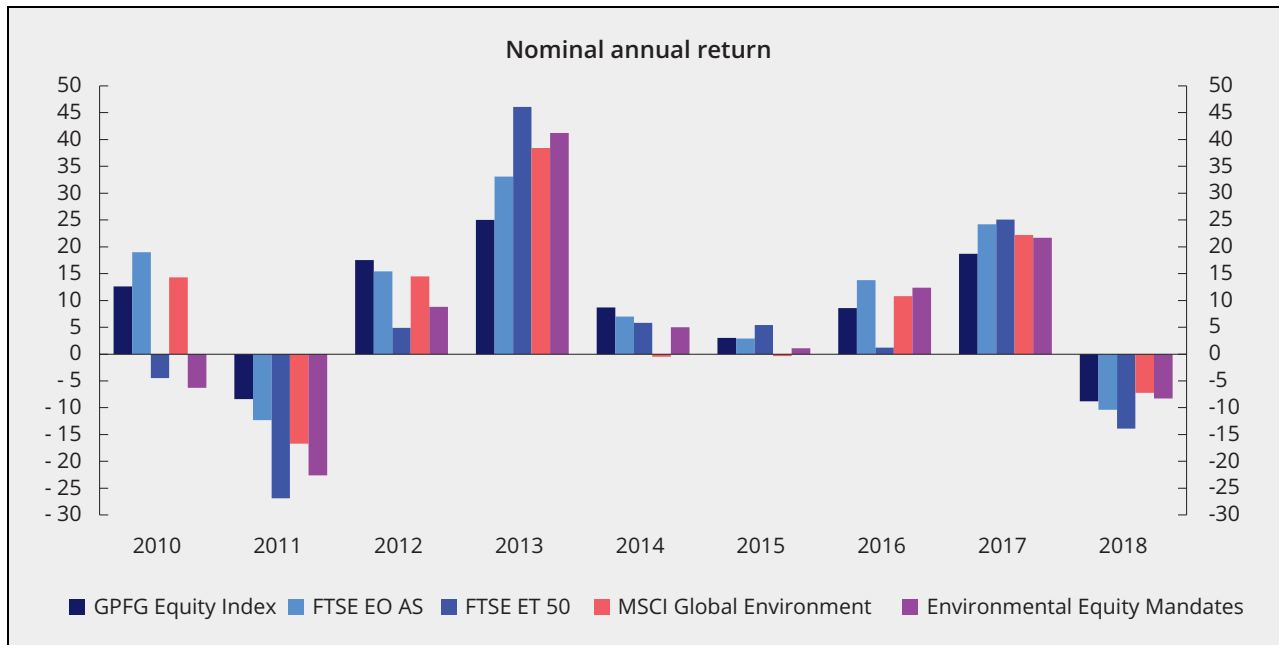


Figure 3.5 Annual return on environment-related equity mandates and various equity indices for the period 2010–2018, measured in the currency basket of the Fund. Percent

Source: Norges Bank.

make such investments has had little impact on overall risk and return in the Fund.

3.2.3 The unlisted renewable energy infrastructure market

Production capacity

Renewable energy accounts for an ever-increasing share of total global power generation. McKinsey notes that renewable energy development, measured as installed capacity, has increased significantly over the last decade. In 2017, renewable energy accounted for 25 percent of total global power generation. About 75 percent of this was in the form of hydropower, whilst solar energy and onshore wind power accounted for 17 percent and 7 percent, respectively. The remainder was represented by offshore wind power. Installation and operating costs have declined significantly, and production capacity per dollar invested has thus increased considerably. More than half of new capacity growth has been in emerging markets.

Renewable energy growth is expected to remain high in coming years as well. McKinsey estimates that installed renewable energy capacity will increase by 150 percent towards 2030,¹⁴ and explains the expected growth by both supply and demand side factors. A major part of the new capacity growth in coming years can, according to

McKinsey, be explained by a further decline in costs for solar and wind power. McKinsey points to a general increase in energy demand, as well as a larger share of electricity in the energy mix to meet global and national emissions targets, as key demand side factors that may explain new renewable energy capacity growth in coming years.

The market available to institutional investors

McKinsey estimates that the total market value of installations and means of production in renewable energy infrastructure in 2017 was USD 2,900 billion and that total market value will increase to USD 4,200 billion in 2030.¹⁵ A major part of the growth is expected, according to both Norges Bank and McKinsey, to be concentrated in emerging markets. A significant portion of the renewable energy infrastructure market is government-owned and illiquid. This implies that part of the market is not available to investors. McKinsey has estimated the size of the investable

¹⁴ McKinsey has used the McKinsey Global Energy Perspective (GEP) Reference Case 2019 for installed capacity, electricity generation and investment projections. The scenario is assumed to roughly represent a midpoint between different scenarios.

¹⁵ McKinsey has included both equity and debt in the calculation of project values. This may result in higher market values than indicated by other sources.

unlisted renewable energy infrastructure market, from which government ownership and illiquid investments are omitted, in 2030 at about USD 1,100 billion.¹⁶ In addition, it is estimated that listed renewable energy infrastructure assets will represent USD 500 billion.

McKinsey estimates that 86 percent of the investable unlisted renewable energy infrastructure market will be in solar and wind power in 2030, whilst only 14 percent will be in hydropower. Hydropower will account for a relatively minor share because it is predominantly government-owned, and is expected to remain so. It is furthermore estimated that about 45 percent, or USD 500 billion, of the investable market will be within OECD countries. About 80 percent of the market in 2030 is estimated to be investments in capacity installed after 2017.

Norges Bank notes that reports from various sources indicate that the value of annual new renewable energy production investments has remained stable at around USD 300 billion since 2012. It is emphasised, at the same time, that future investment forecasts are uncertain and vary between different sources. Political decisions, new technology and economic growth may have a major impact on developments in the renewable power generation infrastructure investment market. The Bank also observes that increased activity has been registered in the refinancing of existing projects over the last few years. Such activity has been concentrated in developed markets and several of the transactions have been large.

Norges Bank notes that the risk and return characteristics of renewable energy infrastructure investments will generally vary with the type of asset, whether it is a greenfield or brownfield project, the country or region in which the investment is made, the design of the contract and the choice of financial instrument.

The Bank also states that the renewable energy market is changing and that historical risk and return data will not necessarily provide a good indication of what to expect in coming years. Renewable energy sources are currently competitive in many markets, and a number of new renewable energy infrastructure projects are launched without government subsidies. Project profitability and risk will more than before depend on movements in power prices and the extent to

which the developer hedges future revenues through long-term end user contracts. Several countries have established regimes facilitating such contracts.

McKinsey notes that unlisted renewable energy infrastructure investments have several characteristics that appear attractive to institutional investors, although such investments may also entail exposure to political, regulatory and reputational risk for investors; see Box 3.2.

Institutional investors' approach to unlisted renewable energy infrastructure

McKinsey has surveyed and described unlisted renewable energy infrastructure investments in a sample of 13 institutional investors, including three North American funds, six European funds (four of which are Scandinavian) and three Asian funds. The afore-mentioned funds have expanded their unlisted renewable energy infrastructure investments over the last decade. McKinsey observes that this may be because of the attractive properties of unlisted infrastructure, as well as the increased maturity of renewable energy technologies. Furthermore, technological developments in solar and wind power have resulted in the technical risk associated with such investments now being lower. McKinsey also observes that some investors have faced requirements from their owners to invest in a more environmentally-friendly manner.

The consultancy firm has examined a selection of transactions from the abovementioned investors. It is noted from the study that the investments are spread across several technologies, although most of the investments have been in solar and wind power (both offshore and onshore). Moreover, it is noted that most of the projects have been in OECD countries, primarily in Western Europe and North America. McKinsey observes that the investments are made in both operating assets and in greenfield projects.

An investor considering unlisted renewable energy infrastructure may choose to implement such investments in various ways. The main distinction is between direct and indirect investments, and between debt and equity. Norges Bank notes that direct unlisted infrastructure investments are large in size and that the assets normally have a long lifespan. Institutional investors often choose to implement such investments in collaboration with market participants that have operational and technical expertise in the relevant segment. Indirect unlisted infrastructure invest-

¹⁶ McKinsey emphasises that this estimate pertains to investments which are feasible in practice, and not whether such investments are profitable for an investor.

Box 3.2 Political, regulatory and reputational risk

Political, regulatory and reputational risk were key to the Ministry's assessment, in the fund reports in the spring of 2016 and 2017,¹ as to whether unlisted infrastructure investments should be allowed, on a general basis, in the GPFG. It was noted that unlisted infrastructure investments involve considerable risk relating to regulatory and political matters. The Ministry stated that it is common for infrastructure investments to involve long-term contracts whose profitability is directly affected by the authorities of other countries, through tariffs and other regulatory provisions. It was also noted that infrastructure projects are often important to local authorities and that political engagement may be high. Most projects are natural monopolies, or quasi-monopolies, such as power grids, bridges and airports. Local communities cannot opt for a different supplier in such markets. Nor can the supplier opt for a different group of customers. The Ministry emphasised that conflicts with the authorities of other countries on the regulation of transport, energy supply and other public services will be challenging, and entail reputational risk for the Fund.

Furthermore, the Ministry emphasised that unlisted infrastructure investments involve large ownership stakes, which makes any investments more visible and more susceptible to criticism. It was the assessment of the Ministry that a transparent and politically endorsed sovereign fund like the GPFG is less suited than other investors for absorbing the particular risk associated with unlisted infrastructure investments.

McKinsey was, in connection with the Ministry's assessment of potentially allowing for unlisted renewable energy infrastructure under the environment-related mandates, asked for an updated description of these risk factors, compared to the report prepared by the consultancy firm at the behest of the Ministry in 2016.

McKinsey notes that unlisted renewable energy infrastructure investments will generally be exposed to the same types of risk as other unlisted infrastructure investments, but emphasises that regulatory risk is of special importance to unlisted renewable energy infrastruc-

ture. The reason for this is, according to the consultancy firm, that the global electricity market is subject to extensive regulation.

McKinsey also emphasises that political, regulatory and reputational risk is largely dependent on each specific project. It is nonetheless possible to generalise some differences between projects along geographical and technological dimensions, and based on whether these are new or existing projects.

Generally, investments in developed markets with more robust political and regulatory frameworks will involve lower risk than emerging market investments. Furthermore, investments in operative assets will typically involve lower political, regulatory and reputational risk than investments in assets in the pre-operating stage, which are, according to McKinsey, especially exposed to reputational risk relating to safety and the environment.

Hydropower, solar and wind power projects are all exposed to political, regulatory and reputational risk, but McKinsey notes that hydropower is more exposed to these types of risk than the other technologies. Hydropower is identified by McKinsey as the technology involving the highest reputational risk because of environmental impact and safety risk during the construction phase. However, solar and wind power projects are more exposed to regulatory risk, and especially the risk of retroactive changes to government support regimes.

McKinsey expects both the technological and the geographical composition of the renewable energy market to change over the period towards 2030. This will involve a change in risk exposure for investors. Solar and wind power are expected to account for a larger share of the renewable energy market, which will entail lower political, regulatory and reputational risk. However, renewable energy growth will be highest in emerging markets, including China, where such risk is assumed to be highest.

¹ Meld. St. 23 (2015–2016); *The management of the Government Pension Fund in 2015* and Meld. St. 26 (2016–2017); *The management of the Government Pension Fund in 2016*.

ments are primarily made through private equity funds. The Bank states that there are several such private equity funds investing in unlisted infrastructure, although only a small number of these are currently specialising in renewable energy.

Most investors in the unlisted renewable energy infrastructure market invest in companies that develop, acquire, own and/or divest a portfolio of renewable energy infrastructure assets, according to the McKinsey study. The investments are often made in collaboration with other investors.

An investor may also invest in bonds and other fixed-income instruments, including green bonds, that are issued to raise capital for renewable energy infrastructure projects.

3.2.4 Norges Bank's regulation and implementation assessments

Regulation in the management mandate

Norges Bank is of the view that the operational management of investments in unlisted infrastructure has a number of similarities with unlisted real estate, including the inability to define the unlisted investment strategy via a benchmark index. This is reflected in the regulation of the unlisted real estate investments in the Fund. In order to facilitate the Bank investing in unlisted renewable energy infrastructure in a manner improving the overall risk and return characteristics of the Fund, it is the view of the Bank that such investments should be regulated in the same manner as the unlisted real estate investments in the Fund. It is also noted that the investments might need to be assigned a separate portfolio.

The Ministry has in the management mandate allowed for the unlisted real estate portfolio of the Fund to be invested via subsidiaries of Norges Bank, with a larger ownership stake and in different types of financial instruments. The Bank emphasises that this should also apply to the unlisted renewable energy infrastructure investments in the Fund. As with real estate, the Bank is of the view that it may be appropriate, and ensure the necessary flexibility, to permit holdings in excess of 10 percent of the voting shares of listed renewable energy infrastructure companies.

Norges Bank believes that the scope of the environment-related mandates should be expanded to enable the Bank to exploit the distinctive characteristics of the Fund and implement unlisted infrastructure investments in a cost-effective manner. The Bank notes that the scope for

environment-related mandates will encompass both listed and unlisted investments, although in the longer run the Bank may allocate a major part of such scope to unlisted renewable energy infrastructure investments.

Norges Bank states that a possible definition of renewable energy infrastructure in the management mandate may be as follows: «Renewable energy infrastructure is defined as land, real estate and physical assets, onshore or offshore, that are primarily used, or planned used, for the production, storage, transmission and distribution of energy based on renewable energy sources.»

The Ministry is proposing that the unlisted renewable energy infrastructure investments in the Fund be implemented within the current scope for deviations from the benchmark index, i.e. 1.25 percentage points.¹⁷ The Bank notes that expected tracking error for the unlisted real estate investments in the Fund is calculated on the basis of a representative time series from an external service provider, but notes that there is not currently any corresponding time series for unlisted renewable energy infrastructure. The Bank will at a later date define a method for calculating tracking error for unlisted renewable energy infrastructure. The mandate requires such method to be approved by the Ministry.

The mandate for the GPFG requires the Executive Board of Norges Bank to set supplementary limits for risk that is not normally captured in the calculation of tracking error. As far as the unlisted renewable energy infrastructure investments in the Fund are concerned, the Bank states that it may at first be appropriate for the Executive Board to set limits with regard to how much may be invested in individual countries, in emerging markets and in greenfield projects. Moreover, the Executive Board may, as at present, stipulate limits on total debt ratio and maximum debt ratio for individual investments, maximum ownership stake and how large a portion of the Fund may be managed by a single external manager. The Executive Board may impose additional requirements in connection with the strategy plan and in the investment mandate for the CEO of Norges Bank Investment Management (NBIM).

Norges Bank is of the view that it would be appropriate for the reporting requirements currently applicable to the unlisted real estate investments in the Fund to also apply to unlisted renewable energy infrastructure investments. The Bank

¹⁷ See letter of 22 June 2018 from the Ministry of Finance to Norges Bank.

assumes that the current specific reporting requirement for renewable energy in the mandate will be removed.

Implementation

The Bank states that it will at the outset consider direct investments made together with partners. Potential partners may be listed companies in which the Fund is already invested and which are seeking to raise private capital to fund specific projects, other investors, financial institutions and multilateral/regional development banks.

Besides, the Bank notes that the unlisted investments in the Fund will generally involve a larger ownership stake than the listed investments in the Fund. Larger ownership stakes entail increased visibility, but also more control and improved scope for imposing requirements. For investments made together with partners, the voting rights and other ownership rights of the Fund will be regulated through shareholder agreements. The Bank emphasises that it will seek to further the ownership interests of the Fund in the best possible manner through direct board representation and the concluded contracts.

Responsible investment is an integral part of the management of the Fund. The Bank's principles for responsible investment are, inter alia, based on the UN Global Compact, the G20/OECD Principles of Corporate Governance and the OECD Guidelines for Multinational Enterprises. The guidelines are of relevance to both listed and unlisted investments.

The Bank states that it will attempt to identify all relevant risk ahead of each investment through thorough due diligence. Such reviews will, inter alia, address regulatory risk, environmental risk, labour, health and safety standards, tax, corruption risk and IT security, as well as project sustainability in the broader sense. The Bank is highlighting the Global Real Estate Sustainability Benchmark (GRESB) framework for assessment of the sustainability for individual unlisted real estate investments. This framework was in 2016 expanded to include unlisted infrastructure, and may over time be used by the Bank in its company dialogue and for assessing the sustainability of all unlisted investments.

Norges Bank is of the view that it can reasonably be assumed that the internal asset management costs for unlisted infrastructure will be on a par with the asset management costs for the unlisted real estate investments in the Fund.

There will be a need for hiring some additional personnel, but the investments can, according to the Bank, be implemented with significantly fewer employees than are required for managing the unlisted real estate investments. The Bank will give priority to the establishment of cost-effective solutions and draw on existing management expertise. Operational implementation will benefit from experience with the unlisted real estate investments in the Fund. The Bank states that it will be appropriate to use external experts for assessments of the technical and operational risk of individual investments.

Norges Bank observes that it is important for the investments to be implemented in a manner that protects the other investments in the Fund. The Bank proposes, in accordance with this and in line with practice for the unlisted real estate investments, to implement unlisted renewable energy infrastructure investments via subsidiaries of Norges Bank. It may in many situations be appropriate to establish subsidiaries in Norway. However, it is emphasised that it may vary from investment to investment what constitutes an appropriate structure. The issue of localisation of subsidiaries needs to be considered in each case.

The tax implications of unlisted renewable energy infrastructure investments will, according to the Bank, depend on each investment and needs to be assessed in each case. The Bank states that such assessment will be based on Norges Bank's general policy for managing tax risk, and also ensure compliance with all applicable tax rules and conformity with generally accepted international tax standards.

The Bank assumes that the Ministry will maintain the mandate requirement that the fund capital may only be invested in unlisted companies and fund structures in countries with which Norway has a tax treaty. It is observed that unlisted infrastructure investments will not, as far as the Bank has been able to ascertain, give rise to any significant new tax challenges beyond those identified for unlisted real estate. It is also emphasised that unlisted renewable energy infrastructure investments can be implemented in a manner that has no tax implications for other investments.

Norges Bank emphasises that it will aim to provide the same detailed information for the unlisted renewable energy infrastructure investments as for the unlisted real estate investments. It is observed that the scope for disclosing information on developments in any investments must be regulated in private agreements. The Bank emphasises that it will, as for unlisted real estate,

specify reporting requirements in the agreements with partners and managers to ensure disclosure of information in accordance with the requirements laid down in the management mandate. The return on the unlisted renewable energy infrastructure investments will in the public reporting be compared to relevant return measures, including the return on the securities sold to fund the purchases. The Bank states that it will use a number of metrics and methods to analyse and describe the risk associated with the investments.

According to Norges Bank, the size of the Fund and its limited liquidity need may give rise to advantages when it comes to investing in projects with substantial capital requirements. The Bank states that solar and wind farms currently seem to be the most relevant investment candidates, and that most large projects of this type are found in Europe and the US. An increasing number of renewable energy projects are profitable without subsidies in these regions. It is noted, furthermore, that frameworks have also been established to facilitate long-term power supply agreements at predetermined prices. These developments involve, according to Norges Bank, somewhat lower regulatory and political risk. Market developments imply, at the same time, that the risk associated with unlisted renewable energy infrastructure investments has shifted towards the risk of movements in power prices and the risk in relation to end users that have concluded power purchase agreements. In comparison with regulatory and political risk, the Bank is of the view that these are examples of types of risk which the Fund is better suited to absorb and which the Bank has experience with assessing.

In summary, Norges Bank states that it will approach the investment opportunities and build expertise gradually. The strategy for the unlisted renewable energy infrastructure investments in the Fund will be developed over time and adjusted on the basis of experience. The Bank emphasises that it will to begin with consider projects with relatively low market and operational risk in developed markets.

3.2.5 The Ministry's assessments

Introduction

The Standing Committee on Finance and Economic Affairs asked, in connection with the deliberation of last year's fund report, the Ministry to revert to the Storting with a specific mandate pro-

posal for unlisted renewable energy infrastructure investments under the environment-related mandates, with the same transparency, risk and return requirements as apply to the other investments.¹⁸ The majority of the members of the Standing Committee requested the Ministry to assess whether the scope of the environment-related mandates should be expanded.

The Ministry has received updated data and assessments of the unlisted renewable energy infrastructure market from Norges Bank and McKinsey. The assessments show that the market for such infrastructure is changing. Government subsidies are of less importance to profitability, and an increasing number of projects are profitable without such subsidies. This development involves somewhat lower regulatory and political risk. Moreover, it is expected that substantial investments will be made in coming years, which may make the market interesting for institutional investors like the GPFG.

The unlisted infrastructure market accounts for a minor portion of the global capital market.¹⁹ However, institutional investors such as pension funds and sovereign wealth funds, and especially the large funds, have invested a larger portion in unlisted infrastructure than other investors. As at the end of 2017, the largest funds in the CEM Benchmarking survey²⁰ had on average about three percent of their investments in unlisted infrastructure. Renewable energy is one of the unlisted infrastructure sub-markets. There exists little information on the allocation of institutional investors, on average, to this sub-market. McKinsey estimates the total market value of unlisted renewable energy infrastructure available to institutional investors as at the end of 2030 at USD 1,100 billion.

The Ministry has taken note of Norges Bank's assessment that unlisted renewable energy infrastructure investments may be implemented within the scope of the environment-related mandates and that the Bank may have advantages relative to other investors. The Ministry has also taken note of the Bank's intention to adopt a cau-

¹⁸ See Recommendation No. 370 (2017–2018) to the Storting.

¹⁹ MSCI estimated, in a report prepared for the Ministry in 2015, that unlisted infrastructure equity investments accounted for 0.5 percent of the global capital market available to institutional investors. The largest unlisted market – real estate – accounted, in comparison, for 5.6 percent

²⁰ CEM Benchmarking Inc. (2018); *Investment cost effectiveness analysis, Norwegian Government Pension Fund Global, 2017*. The report is available on the Ministry of Finance website.

tious approach and at the outset to consider investing together with partners in developed markets, as well as in projects with relatively low market and operational risk. The Ministry is of the view that the approach adopted by the Bank, along with the Bank's accumulated unlisted real estate investment expertise and experience, suggests that it would be acceptable to allow for unlisted renewable energy infrastructure under a suitable framework.

General regulation: Not part of the benchmark index, but a separate portfolio

Unlisted renewable energy infrastructure has a number of similarities with unlisted real estate investments and may thus be regulated more or less correspondingly in the mandate from the Ministry.²¹ There exist no good benchmark indices for unlisted investments, unlike for listed investments, thus limiting the scope of the Ministry for assessing the risk and return characteristics of such investments and for specifying an investment strategy via a benchmark.

The Ministry therefore proposes, in line with the regulation of unlisted real estate, not to establish any designated benchmark index or target for the allocation of the Fund to unlisted renewable energy infrastructure. It will be up to Norges Bank to determine the scope and composition of the unlisted infrastructure investments, within the limits laid down by the Ministry in the management mandate. The Ministry is further proposing that any unlisted renewable energy infrastructure investments will be measured against a broad set of relevant return metrics, including the Bank's funding of such investments.

Regulation corresponding to that for unlisted real estate implies, moreover, that unlisted renewable energy infrastructure is included in the investment universe (limited to the environment-related mandates) and assigned a separate portfolio, but not included in the benchmark index. The Ministry agrees with Norges Bank's assessment that key concepts should be defined in the mandate, such as to avoid ambiguity about which investments may be included in the portfolio. The Ministry is proposing that renewable energy infrastructure be defined as follows in the mandate:

«land, real estate and physical assets, onshore and offshore, that are primarily used, or planned used, for the production, transmission, distribution and storage of energy based on renewable energy sources».

Such a definition is in line with the Bank's proposal and will enable the Bank to exercise an element of discretion when interpreting what may be included in the portfolio. Some projects may, for example, depend on other energy sources to deliver electricity during periods of peak demand or limited production capacity due to local weather conditions. Renewable energy sources may therefore be balanced with non-renewable energy sources.

The unlisted infrastructure investment framework

Norges Bank's deviations from the benchmark index are primarily managed through the 1.25 percentage point limit on expected tracking error. Unlisted renewable energy infrastructure investments will draw on such limit. The Ministry is proposing that the said limit on deviations remain unchanged. This implies that the Bank must prioritise unlisted renewable energy infrastructure investments against other strategies that give rise to deviations from the benchmark index. The Ministry notes that the Bank will prepare a method for calculating expected tracking error for unlisted renewable energy infrastructure investments. Such method shall be approved by the Ministry.

The Ministry is proposing, corresponding to the regulation of unlisted real estate, the stipulation of an upper limit on unlisted renewable energy infrastructure investments. It is proposed that such limit be put at 2 percent of the investment portfolio. In assessing the upper limit on unlisted renewable energy infrastructure, weight has been attached to the risk of diverging return on such investments from that on listed equities and fixed-income instruments. Norges Bank must thus aim for a smaller portion than 2 percent in its portfolio management in order to avoid breaching the limit, and thereby the divestment of assets, in scenarios of steep and sudden decline in the value of the listed investments. The limit will at the same time, in the view of the Ministry, enable Norges Bank to aim for an unlisted renewable energy infrastructure portion which is sufficiently large to benefit from any economies of scale in this market.

The market value of the environment-related mandates shall currently fall, in normal conditions, within the NOK 30–60 billion range. The

²¹ On 20 December 2016, the Ministry of Finance adopted new regulation of the unlisted real estate investments in the GPFG, with effect from 1 January 2017. Such regulation is discussed in Meld. St. 26 (2016–2017); *The management of the Government Pension Fund in 2016*.

Ministry refers to the Bank's position that the upper limit for the environment-related mandates should be raised to enable Norges Bank to exploit the distinctive characteristics of the Fund and implement unlisted renewable energy infrastructure investments in a cost-effective manner. Norges Bank may invest fund capital in both listed and unlisted assets within the scope of dedicated environment-related mandates. The Ministry emphasises that unlisted renewable energy infrastructure investments shall exclusively be made within the scope of the environment-related mandates. Consequently, the upper limit on environment-related mandates will limit the scope of such investments.

The Ministry is proposing, based on an overall assessment, to increase the upper limit on the *normal* scope of the environment-related mandates from NOK 60 billion to NOK 120 billion. This corresponds to about 1.5 percent of the market value of the Fund as at the end of 2018. The lower cap, which entails an element of special investment fund allocation, is kept unchanged at NOK 30 billion. The Ministry has taken note of the Bank's indication that it may in the longer run use a major part of the scope for environment-related mandates for unlisted renewable energy infrastructure investments.

The Ministry emphasises that the scope for environment-related mandates, in aggregate, and unlisted renewable energy infrastructure, in particular, is not established for the purpose of instructing the Bank that the Fund *shall* be invested in unlisted renewable energy infrastructure, but to provide the Bank with sufficient flexibility to make such investments if deemed profitable. A stipulated range for the environment-related mandates is intended to highlight that investment opportunities, and thereby the scope of such investments, may vary over time. The Ministry notes, at the same time, that dedicated mandates impose, as a general rule, a restriction on Norges Bank's active management, thus limiting the Bank's opportunities for generating excess return.

The mandate for the GPFG will, as with unlisted real estate investments, enable the Bank to invest in unlisted renewable energy infrastructure globally, with the exception of Norway. Thorough due diligence will be required and the Executive Board shall set supplementary risk limits for unlisted renewable energy infrastructure, including limits on investments in individual countries, emerging markets and in projects under development.

Permitted instruments and ownership stake limitations

The management mandate for Norges Bank allows for the unlisted real estate portfolio to be invested in real estate via subsidiaries of Norges Bank and in various types of financial instruments, such as fund structures and equity and debt instruments issued by non-listed companies. This offers the Bank flexibility in the implementation of the investments. The Ministry agrees with the Bank's assessment that a corresponding mandate provision should apply to the unlisted renewable energy infrastructure portfolio.

The GPFG shall be a financial investor. The mandate therefore does not permit the Bank to hold more than ten percent of the voting shares of any one company. An exemption has been granted for ownership interests in listed and unlisted real estate companies. The Ministry proposes a corresponding exemption for investments in unlisted renewable energy infrastructure companies. For listed renewable energy infrastructure investments, it is not proposed to permit ownership stakes in excess of ten percent. The Ministry notes that the GPFG shall be a financial investor in listed markets, whilst there is currently a limited number of listed infrastructure companies that are exclusively or principally engaged in renewable energy activities.

Description of intention, transparency and reporting

What constitutes environment-related investments is not currently defined in the management mandate from the Ministry, but the reporting provisions in the mandate require Norges Bank to describe and assess the manner in which the intention behind these investments is observed. However, such intention is not specified any further in the mandate, but was described in the fund report in the spring of 2009; see the discussion in section 3.2.2.

Both Norges Bank and the Ministry of Finance have previously noted that it is challenging to quantify environmental effects of the environment-related mandates; see, inter alia, the discussion in the fund reports in the spring of 2011 and 2014.²² It is observed, at the same time, that the companies and projects in which the Fund is invested may have various positive environmental

²² Meld. St. 15 (2010–2011); *The management of the Government Pension Fund in 2010* and Meld. St. 19 (2013–2014); *The management of the Government Pension Fund in 2013*.

effects, whether directly in the form of reduced CO₂ emissions or more indirectly through the development of new technology.²³ In its recommendation on the fund report in the spring of 2011,²⁴ the Standing Committee on Finance and Economic Affairs stated that «the majority appreciates the difficulties of precise reporting of the environmental effects of these investments. Open communication on the criteria for investments within the programme, in addition to reporting on the return on such investments, would contribute to this.»

The Ministry proposes, based on an overall assessment, that the intention behind the dedicated environment-related mandates shall in future be safeguarded by stipulating specific requirements applicable to such investments in the management mandate. It is proposed to introduce a definition in line with the discussion in the fund report in the spring of 2009:

«The investments shall be aimed at eco-friendly assets or eco-friendly technology, such as climate-friendly energy, improving energy efficiency, carbon capture and storage, water technology and management of waste and pollution.»

The Ministry is of the view that the requirement in the management mandate for Norges Bank to describe and assess the manner in which the intention of the investments is observed consequently is superfluous, and can be omitted.

The mandate from the Ministry of Finance stipulates a general requirement for the greatest possible transparency about the management of the Fund within the limits defined by a sound execution of the management assignment. Furthermore, a number of reporting requirements have been imposed, including specific reporting requirements for the unlisted real estate portfolio. The Ministry is of the view that it would be appropriate for the reporting requirements currently applicable to the unlisted real estate investments in the Fund to also apply to unlisted renewable energy infrastructure investments. The Ministry has taken note of Norges Bank's intention to provide the same detailed information for any unlisted infrastructure investments as for the unlisted real estate investments.

In addition, the Ministry proposes an expansion of the reporting requirements for the environment-related mandates, including a requirement for the Bank to describe which investments are included under the mandates and criteria for the selection of such investments. It is also proposed that the Bank shall report the risk and return for the environment-related mandates as a whole, as well as specified by equities, fixed-income instruments and any unlisted renewable energy infrastructure investments. The special reporting requirement on renewable energy in the management mandate for the Bank, will in the view of the Ministry be accommodated through the expanded requirements for reporting on the environment-related mandates in general and unlisted renewable energy infrastructure in particular, and may thus be omitted.

Future process

The Ministry will after the Storting's deliberation of the fund report prepare a proposal for specific provisions in the mandate for the GPFG, and present these to Norges Bank. It is intended for the changes to enter into effect no later than 1 January 2020.

3.3 New provisions on rebalancing of the equity share

3.3.1 Introduction

The investment strategy for the GPFG is laid down in the management mandate provided for Norges Bank, which defines, inter alia, a fixed strategic allocation between equities and fixed-income securities. In June 2017, the Storting endorsed an increase in the strategic equity share of the GPFG to 70 percent; see Recommendation No. 357 (2016–2017) to the Storting. The strategic equity share expresses a risk level that is acceptable to the owner, and reflects a target for the allocation between the two asset classes. However, the equity share of the actual benchmark index will vary as the result of diverging price developments between equities and fixed-income instruments. Such differences may change the risk and return characteristics of the benchmark index relative to those underpinning the strategic asset allocation. Provisions have therefore been laid down on *when* and *how* the equity share shall be rebalanced to the strategic allocation. The equity share is rebalanced through securities trading, and the manner in

²³ See letter of 21 November 2014 from Norges Bank to the Ministry of Finance.

²⁴ Recommendation No. 436 (2010–2011) to the Storting.

which this is effected has both return and cost implications.

Rebalancing of the equity share forms part of the long-term investment strategy for the Fund. This strategy is endorsed by the Storting; see the fund report in the spring of 2012²⁵, Recommendation No. 361 (2011–2012) to the Storting and the National Budget for 2013. The purpose of rebalancing is to ensure that the benchmark index does not over time deviate significantly from the strategic allocation between equities and fixed-income instruments. Rebalancing may also serve to increase return on the Fund through exploitation of possible time variations in the equity market risk premium. These considerations need to be balanced against transaction cost considerations.

In 2012, it was decided that rebalancing shall be initiated when the equity share deviates by more than four percentage points from the strategic allocation, cf. Section 1-6, Sub-section 4, of the management mandate for the GPF. The rebalancing has been completed when the equity share of the benchmark index has been reverted to the strategic allocation. Detailed provisions have been laid down on *how* the rebalancing shall be effected, but these are exempt from public disclosure to prevent the Fund from incurring costs as the result of other financial market participants exploiting information concerning Norges Bank's trading patterns.

In a letter of 9 June 2017, the Ministry of Finance asked Norges Bank to analyse and assess the need for amending the rebalancing provisions when the new strategic equity share of 70 percent has been established in the benchmark index. Several factors suggested that a new assessment of these provisions would be appropriate. The value of the Fund has increased significantly since 2012 and trading volumes upon rebalancing have thus increased. This may result in higher costs, as the securities trading may influence market prices unfavourably. Furthermore, rebalancing costs may now be higher as the result of the Fund having less scope for utilising current inflows, which are considerably smaller than before, measured as a portion of the Fund. When inflows (and outflows) are used to modify the equity share upon rebalancing, the trading volumes resulting from actual rebalancing are reduced. The decision to increase the equity share from 62.5 percent to 70 percent is

also of significance, and will result in fewer expected rebalancings, since return differences between equities and fixed-income instruments need to be larger to trigger a rebalancing.

The Ministry added further details to its request in a letter of 5 March 2018 to Norges Bank. Norges Bank has outlined its analyses and assessments in a letter of 28 August 2018.

3.3.2 Norges Bank's advice

Norges Bank has assessed how various rebalancing provisions affect transaction costs and the magnitude of deviations between the equity share of the benchmark index and the strategic allocation. The Bank notes in its letter that the equity share will be close to the strategic allocation if rebalancing is triggered by smaller deviations than at present. However, this will entail more frequent rebalancing and higher transaction costs. One way of reducing transaction costs is to rebalance more gradually, such as to effectuate rebalancing over a longer time period.

The Bank recommends that rebalancing be initiated when the equity share deviates by more than two percentage points from the strategic allocation, as compared to four percentage points at present. Moreover, the Bank proposes that rebalancing implementation take place more gradually than under the current provisions. The Bank notes that this combination may reduce both transaction costs and deviations from the strategic equity share. When rebalancing takes place more frequently and over a longer time period, it also becomes more integrated into ordinary portfolio management, thus increasing the scope for using transfers to or from the Fund in rebalancing implementation. This may further reduce transaction costs. The Bank also notes that it has over the years since the financial crisis experienced that it has become more challenging to execute large transactions without affecting market prices.

The Bank states, in its assessment of how rebalancing may affect expected return, that rebalancing adds a certain countercyclical element to the investment strategy in that the Bank purchases the asset class whose return has been relatively low, and sells the asset class whose return has been relatively high, since the last rebalancing. However, past return differences between equities and fixed-income instruments are not necessarily a good indicator of future returns. The Bank's proposed rebalancing rules are therefore based on a trade-off between low

²⁵ Meld. St. 17 (2011–2012); *The management of the Government Pension Fund in 2011*.

transaction costs and a preference for keeping benchmark weights close to the strategic allocation.

3.3.3 The Ministry's assessments

The Ministry notes that rebalancing of the equity share in the GPFG forms part of the investment strategy for the Fund. It has, since the current provisions were adopted in 2012, become more challenging to perform rebalancing at low cost. Norges Bank notes that it is more challenging to trade large amounts without unfavourably affecting market prices, and rebalancing amounts have increased in line with the steep growth in fund capital. The scope for reducing costs by using transfers to or from the Fund to adjust the equity share has also been reduced. This suggests, in the assessment of the Ministry, that there is a need for modifying the provisions.

Costs may be reduced by rebalancing more gradually. Daily trading volumes and the risk of unfavourably affecting market prices are reduced when transactions are executed over a longer period of time. This also offers more scope for adjusting the equity share by using current inflows to the Fund. It implies, at the same time, that it may take longer time to adjust the equity share, and thus the deviation between the benchmark index and the strategic allocation will increase. The Ministry therefore agrees with Norges Bank that rebalancing should start earlier than at present, and proposes that rebalancing shall be initiated when the deviation exceeds two percentage points, as compared to four percentage points at present. This involves more frequent rebalancing and increases costs somewhat, but the Bank's calculations show that total transaction costs will, all in all, be reduced.

The Ministry proposes, against this background, to amend Section 1-6, Sub-section 4, of the mandate on rebalancing of the equity share. The amendment implies that rebalancing shall be triggered when the equity share deviates by more than two percentage points from the strategic allocation of 70 percent. Rebalancing shall also be carried out more gradually than before. The detailed provisions on rebalancing of the equity share are exempt from public disclosure, cf. above. The Ministry has, in its overall assessment, attached more weight to costs and deviations from strategic allocations, than to assessments of expected returns owing to such estimates being more uncertain.

3.4 Equity framework and benchmark index

The Ministry has initiated a review of the equity framework and benchmark, including the geographical distribution of the benchmark index. The equity benchmark serves a key role in furthering the investment strategy, including broad diversification of risk and the reaping of risk premiums. Regular reviews of the benchmark index ensure that its composition is tailored to the objective and distinctive characteristics of the Fund, and also reflect new knowledge and equity market development characteristics.

The Ministry of Finance has, in a letter of 6 November 2018, asked Norges Bank for advice on, and assessments of, the composition of the equity benchmark for the Fund. The Bank was, *inter alia*, asked to assess the regional distribution of the benchmark index, and to address distinctive characteristics and risk and return properties of emerging markets, as well as experience with investing the Fund in such markets. The Bank was also invited to assess the choice of index provider.

As part of the review, the Ministry has also asked the consultancy firm and index provider MSCI to prepare a report analysing equity market development trends, as well as risk and return implications of various geographical compositions.

No new markets will, against the background of the ongoing review, be added to the equity benchmark for the Fund before a decision has been made on the index composition.

The Ministry intends to present assessments of the equity framework and the composition of the equity benchmark in the report on the Government Pension Fund in the spring of 2020.

3.5 Phase-in of new equity share in the benchmark index

In the report on the Government Pension Fund submitted in the spring of 2017,²⁶ the Government proposed to increase the equity share of the strategic benchmark index for the GPFG from 62.5 percent to 70 percent. This was endorsed by the Storting; see Recommendation No. 357 (2016–2017) to the Storting. In the National Budget for 2018, the Ministry of Finance stated that it had, in

²⁶ Meld. St. 26 (2016–2017); *The management of the Government Pension Fund in 2016*.

consultation with Norges Bank, adopted a plan for the effectuation of the increase to a higher equity share. The Ministry has attached weight to the verifiability of the phase-in provisions, and to the plan being implementable at low cost. The transition plan takes into consideration the uncertainty

of future financial market developments. The plan is exempt from public disclosure since it includes market-sensitive information. The Ministry will provide the Storting with further information about the phase-in when it has been completed.

4 Responsible management

4.1 Current framework

The Government Pension Fund Global (GPFG) and the Government Pension Fund Norway (GPFN) are financial investors. The objective is the highest possible return, given an acceptable level of risk. The funds shall be responsible investors, within the overarching financial objective. This is reflected in, inter alia, guidelines and frameworks for Norges Bank's and Folketrygdfondet's responsible management of the GPFG and the GPFN, respectively.

The Ministry of Finance has in the mandates for both the GPFG and the GPFN adopted the premise that good long-term returns are assumed to depend on sustainable development and well-functioning markets. Such an interrelationship is assumed to be of particular importance to large, broadly diversified long-term funds, whose return will over time be closely linked to global value creation developments.

The mandates for the two funds refer to international principles and standards, such as the UN Global Compact, the OECD/G20 Principles of Corporate Governance and the OECD Guidelines

for Multinational Enterprises; see Box 4.1. The mandate for the GPFN also refers to the Code of Practice issued by the Norwegian Corporate Governance Board (NUES). Norges Bank and Folketrygdfondet apply these standards in their responsible management activities.

Norges Bank and Folketrygdfondet make investment decisions and exercise ownership rights independently of the Ministry, in line with established mandates and guidelines. It is neither desirable, nor feasible, for the Ministry of Finance to engage in detailed regulation of, or intervention in, the operational management of the two funds. This division of responsibilities is broadly endorsed by the Storting.

Environmental, social and corporate governance considerations form an integral part of the management of the GPFG and the GPFN. Important responsible investment tools are advocacy of principles and expectations based on international and recognised standards. The asset managers also participate in the further improvement of standards. Moreover, Norges Bank and Folketrygdfondet engage in company dialogue on relevant themes and issues, and cast votes in general meetings of the

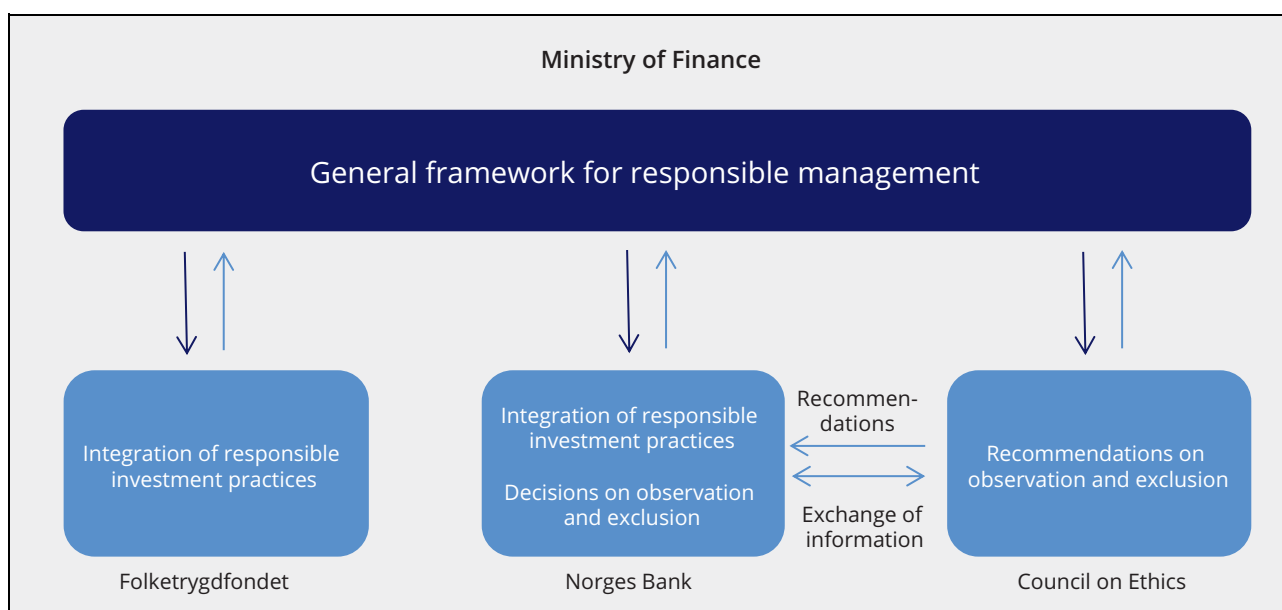


Figure 4.1 Responsible investment roles and responsibilities

Source: Ministry of Finance.

Box 4.1 Standards and principles

The mandates for the GPFG and the GPFN refer to OECD and UN standards and principles in relation to responsible investment. The mandate for the GPFN also refers to the Code of Practice issued by the Norwegian Corporate Governance Board (NUES). The standards are voluntary, and not legally binding, recommendations. They express expectations with regard to environmental, social and corporate governance issues.

OECD Guidelines for Multinational Enterprises

The OECD Guidelines for Multinational Enterprises provide recommendations on responsible business conduct for companies with an international presence, and aim to promote sustainable development through responsible operations, trades and investments.

The guidelines were launched in 1976, and most recently updated in 2011. The guidelines are binding on signatory governments. The voluntary nature of the guidelines implies that there is no legal requirement for company compliance. There is nonetheless an expectation that companies will adhere to the guidelines, but each company must itself assess how the guidelines can best be implemented.

The guidelines cover all aspects of corporate social responsibility and are based on recognised UN standards. The guidelines encourage companies to avoid causing or contributing to negative social, human or environmental effects through their own operations, and to address cases in which such effects do occur. Guidance is also provided on how companies should follow up on their business partners and supply chains. The guidelines also ask companies to conduct due diligence assessments to identify any risk of negative impact and ensure that they meet the expectations in the guidelines. OECD has prepared guidance notes on how such due diligence assessments may be conducted in practice, as well as specific guidance notes for certain selected sectors, including institutional investors.

Countries that have adopted the OECD guidelines are obliged to establish national contact points for responsible business conduct. The contact points are mandated to spread knowledge about the guidelines and offer dialogue and mediation in individual cases. The Norwegian contact point is an independent specialist body subject to the administrative oversight of the Ministry of Foreign Affairs.

UN Global Compact

The UN Global Compact was launched in 2000 and is a broad collaboration between the UN and businesses, and aims to promote corporate social responsibility. It currently has more than 12,000 participants in about 160 countries. Companies are encouraged to integrate ten universal principles relating to human

rights, labour rights, the environment and anti-corruption in their operations. The principles are derived from the Universal Declaration of Human Rights, the ILO Declaration on Fundamental Principles and Rights at Work, the Rio Declaration on Environment and Development, and the UN Convention against Corruption. Besides, the Global Compact encourages companies to support the UN Sustainable Development Goals. Participants are expected to report on their implementation of the principles in their operations, either through their annual reporting or in a designated sustainability report.

G20/OECD Principles of Corporate Governance

The G20/OECD Principles of Corporate Governance were launched in 1999 and seek to clarify the distribution of roles and responsibilities between the owners, the board of directors and the senior executives of a company. The principles are designed to promote best practice on transparency and disclosure, treatment of shareholders, and the responsibilities and liabilities of the board of directors. The principles also provide guidance on the conduct of institutional investors and the establishment of well-functioning equity markets.

The principles are based on the view that good governance over time promotes growth in company value, access to financing and well-functioning capital markets. Effective corporate governance and capital allocation will in turn promote welfare and general economic growth. The revised principles were launched in 2015 and were endorsed by the G20.

Norwegian Code of Practice for Corporate Governance

The Norwegian Corporate Governance Board (NUES) issues the Norwegian Code of Practice for Corporate Governance. The objective is that companies listed on regulated markets in Norway will practice corporate governance that regulates the division of roles between shareholders, the board of directors and executive management more comprehensively than is required by legislation. This is based on the premise that good corporate governance will strengthen confidence in companies and help to ensure the greatest possible value creation over time in the best interests of shareholders, employees and other stakeholders. The Norwegian Accounting Act requires companies listed on regulated markets in Norway to annually provide a report on their corporate governance policies and practices. Furthermore, the provisions of Oslo Stock Exchange and Oslo Axess require companies listed on these market places to report in relation to the Norwegian Code of Practice for Corporate Governance. A revised Code of Practice for Corporate Governance was issued in 2018.

Box 4.2 Guidelines for Observation and Exclusion from the GPFG

The Ministry of Finance has adopted ethically motivated guidelines for the observation and exclusion of companies from the GPFG. The guidelines include exclusion criteria that are based on what the companies produce (products) or on their conduct. Companies may be placed under observation if there is uncertainty as to whether the exclusion conditions are met.

The product criteria

The Fund *shall not* be invested in companies which themselves or through entities they control:

- produce weapons that violate fundamental humanitarian principles through their normal use;
- produce tobacco; or
- sell weapons or military materiel to sovereign states in whose government bonds the Fund is barred from investing (the government bond exemption clause).

The weapons criterion encompasses chemical weapons, biological weapons, anti-personnel mines, undetectable fragmentation weapons, incendiary weapons, blinding laser weapons, cluster munitions and nuclear arms.¹ Moreover, the Fund shall not be invested in companies that develop or produce key components for these types of weapons.

The tobacco criterion is limited to the actual tobacco product, and does not include associated products such as filters and flavour additives or the sale of tobacco products. All companies that grow tobacco plants or process tobacco into end products, whether directly or through entities they control, shall be excluded. Tobacco is a product distinguished by its normal use entailing a risk of severe illness and death. This is reflected in strict regulations, both nationally and internationally. In 2009, when it was decided to exclude tobacco producers from the GPFG,

an international tobacco control convention had been adopted, and legislation had been tightened considerably in both Norway and other countries.

In addition, the product-based coal criterion implies that observation or exclusion *may* be decided for mining companies and power producers which themselves or through entities they control derive 30 percent or more of their revenue from thermal coal or base 30 percent or more of their operations on thermal coal. The coal criterion is discussed in further detail in section 4.3.

There is a broad political consensus that there should be a high threshold for excluding an entire sector from the Fund.

Conduct criteria

Observation or exclusion *may* be decided for companies where there is an unacceptable risk that the company contributes to or is responsible for:

- serious or systematic human rights violations, such as murder, torture, deprivation of liberty, forced labour or the worst forms of child labour;
- serious violations of the rights of individuals in situations of war or conflict;
- severe environmental damage;
- acts or omissions that on an aggregate company level lead to unacceptable greenhouse gas emissions;
- gross corruption; or
- other particularly serious violations of fundamental ethical norms.

The climate criterion and the human rights criterion are discussed in further detail in 4.4 and 4.5, respectively.

¹ See the Revised National Budget 2004.

companies in which the funds are invested. Risk management is also an important aspect of the responsible management of the fund capital.

The Ministry of Finance introduced ethically motivated guidelines for the management of the

GPFG in 2004. These have subsequently been updated and revised. Certain criteria in the guidelines are based on the products of individual companies, such as tobacco, weapons and coal. Other criteria are based on the conduct of companies,

such as serious human rights violations and severe environmental damage. The ethically motivated Guidelines for Observation and Exclusion from the GPFG are discussed in Box 4.2.

Figure 4.1 presents responsible investment roles and responsibilities in the GPFG and the GPFN. Norges Bank and Folketrygdfondet manage the GPFG and the GPFN, respectively, based on the mandates laid down by the Ministry. The Council on Ethics performs assessments on the basis of the Guidelines for Observation and Exclusion from the GPFG. Decisions on observation and exclusion of companies from the Fund are made by Norges Bank, based on recommendations from the Council on Ethics. An exemption is made for the product-based coal criterion, for which Norges Bank may take decisions without any recommendation from the Council on Ethics. The division of responsibilities between the Council on Ethics and Norges Bank facilitates an appropriate relationship between the responsible investment measures.

The mandate from the Ministry of Finance implies that the GPFG cannot be invested in interest-bearing instruments issued by states that are subject to large-scale UN sanctions or other international initiatives of a particularly large scale and where Norway supports the initiatives. The Ministry of Finance decides which countries fall within the scope of this provision, based on input from the Ministry of Foreign Affairs. The list of countries is evaluated on a regular basis, since international sanctions and initiatives change over time.¹

The responsible investment efforts of Norges Bank are discussed in further detail in section 4.2.

4.2 Responsible investment efforts

This section outlines the responsible investment efforts of Norges Bank and the Council on Ethics.

4.2.1 Norges Bank's responsible investment efforts

Norges Bank's responsible investment efforts are based on the mandate from the Ministry of Finance and the ethically motivated Guidelines for Observation and Exclusion. The Bank annually publishes a report on the three main components of its responsible investment activities: establish-

ing principles, exercising ownership and investing sustainably.

Establishing principles

Norges Bank aims to contribute to the development of standards that further the long-term interests of the Fund. The Bank considers standard setting as an effective way of promoting well-functioning markets and good corporate governance, by contributing to more equal business conditions and sustainable practices across markets. Standard setting may also serve to influence company practices over time. Broad international standards and principles are emphasised, including the UN Global Compact, the G20/OECD Principles of Corporate Governance and the OECD Guidelines for Multinational Enterprises. The mandate from the Ministry of Finance refers to these standards; see Box 4.1. The Executive Board of Norges Bank has established principles for responsible investment, which refer to additional international standards, including the United Nations Guiding Principles on Business and Human Rights (UNGPs) and the United Nations Conference on Trade and Development (UNCTAD) principles on promoting responsible sovereign lending and borrowing. In addition, the Bank pursues standards addressing specific industries or issues.

Norges Bank responded to 13 public consultations on various issues last year, including differentiated voting rights, national corporate governance codes, sound voting systems and standards for corporate disclosure. Furthermore, Norges Bank held meetings with regulators in several markets over the course of the year and participated in both international fora and discussions on standard setting. The Bank has, inter alia, participated in an initiative under the auspices of the UN Global Compact, which aims to develop a framework for international business leadership on the sustainable use of marine resources.

Norges Bank sets its own priorities within the scope of internationally recognised standards, based on the mandate laid down by the Ministry of Finance and the characteristics of the Fund. The Bank expresses its expectations of companies in which the Fund is invested through public documents and direct contact with the companies.

The expectation documents express the expectations of Norges Bank as a financial investor towards the companies in which the Fund is invested in addressing various challenges in their activities. The expectations expressed by the Bank are based on, inter alia, the recognised inter-

¹ North Korea and Syria are currently excluded from the investment universe under this provision.

national principles referred to in the mandate from the Ministry of Finance. The expectation documents are primarily addressed to company boards, and may serve as a basis for company dialogue. The documents form part of a broader set of strategies and activities used by Norges Bank in its responsible investment efforts.

Norges Bank has issued expectation documents on the following seven issues: climate change, water management, human rights, children's rights, tax and transparency, anti-corruption and ocean sustainability. The document on ocean sustainability was issued in September 2018. The Bank updated the expectation documents on climate change and water management last year.

Norges Bank also publishes so-called position papers which communicate the Bank's stance on selected corporate governance issues. In 2018, the Bank published three position papers on the effectiveness and composition of the board. The Bank also published an asset manager perspective on the UN Sustainable Development Goals. As a long-term and global investor, the Fund has an inherent interest in sustainable development.

Furthermore, Norges Bank promotes research that may support responsible investment efforts. It aims to further knowledge on good corporate governance and sustainability, and how these are linked to financial risk and return. Last year, Norges Bank initiated and supported various research projects, and also contributed to seminars and conferences. Topics addressed were, inter alia, effective ownership, financial implications of climate change, as well as expansion and improvement of sustainability data in the mining sector.

Exercising ownership

The GPFG held ownership stakes in more than 9,000 companies as at the end of 2018. Ownership is exercised by voting in general meetings and through company dialogue. Active ownership aims to promote long-term value creation in companies, and contribute to good corporate governance and responsible business conduct.

Norges Bank has established voting guidelines. These are based on the G20/OECD Principles of Corporate Governance and provide a principled basis for the voting decisions. The guidelines outline the overarching rationale behind the voting decisions of Norges Bank. The voting guidelines are augmented with knowledge and assessments of the specific companies and mat-

ters. The Bank seeks to vote in a manner that further the long-term interests of the Fund and emphasises long-term value creation, responsible business practices, board accountability, equal treatment of shareholders, well-functioning markets and corporate transparency.

Norges Bank votes in all general meetings unless there are significant practical impediments to doing so. In 2018, the Bank voted in 97.7 per cent of all general meetings. Voting decisions are published on the day after each general meeting. Norges Bank voted on 113,546 resolutions in 11,287 general meetings in 2018. About 50 per cent of the resolutions voted on by the Bank concerned the appointment of directors. In certain cases, the voting intentions are published ahead of general meetings to communicate the Bank's principled position to the market. Norges Bank has also been represented on the nomination committees of six Swedish companies.

Norges Bank aims to promote good corporate governance and responsible business practices through company dialogue. Dialogue is an important active ownership tool, and improves the understanding of companies, whilst enabling the Bank to communicate its expectations with regard to good business practices, corporate governance and adequate disclosure. Company dialogue focuses on selected topics, and in 2018 Norges Bank emphasised sustainability, board accountability and effectiveness, executive remuneration and shareholder rights. In addition, the Bank will follow up on companies in connection with corporate actions and any risk incidents. Last year, it held 3,256 meetings with 1,420 companies. In aggregate, these companies represented about 66 per cent of the value of the equity portfolio. 199 of the meetings were at board level. Environmental, social and corporate governance issues were raised in 1,493 of the meetings. Norges Bank has, for example, discussed climate reporting and deforestation financing with banks, deforestation and marine pollution with food production companies, human rights in the supply chain with automotive companies, as well as tax, transparency and corruption risk with companies in various sectors.

Norges Bank has over time collaborated with companies, investors and other stakeholders in various initiatives to improve information to the market and promote responsible business practices. This is of particular relevance when companies in the same industry or value chain face a joint challenge. The Bank has conducted annual corporate disclosure assessments for the three

selected sustainability themes of climate change, water management and children's rights. In 2018, Norges Bank expanded the assessments to also include deforestation, anticorruption, human rights, tax and ocean sustainability for selected companies. 2,256 companies were analysed in 2018, in aggregate representing about 62 percent of the value of the equity portfolio. Norges Bank also sent letters to 100 companies on the said themes, encouraging companies to improve their disclosures.

Investing sustainably

Norges Bank seeks to develop its understanding of potential links between sustainability and portfolio risk and return, and considers sustainability issues in its risk management and investment decisions. The Bank has established comprehensive databases of sustainability data that span a number of factors at country, industry and company levels, which are used for the continuous monitoring and analysis of portfolio companies. Issues and themes assessed in 2018 include, inter alia, greenhouse gas emissions, deforestation, corruption risk and social issues. The risk assessments have caused Norges Bank to divest its holdings in some companies, within the scope of the management framework for the Fund. In 2018, the Bank divested holdings in 30 companies. Such divestments are separate from exclusions decided on the basis of the ethically motivated guidelines. Norges Bank has been analysing the portfolio's carbon footprint since 2015, and reports, inter alia, on greenhouse gas emissions from the companies in which the Fund is invested. For last year, such emissions were calculated at about 107 million tonnes of CO₂ equivalents, based on the Fund's percentage holdings in each company. The portfolio carbon footprint calculations are based on the recommendations for asset managers from the Task Force on Climate-related Financial Disclosures (TCFD). Norges Bank is also pursuing the development of a number of different methodological tools for climate scenarios that can provide a broad understanding of how various scenarios may affect individual companies and the portfolio as a whole.

The mandate from the Ministry of Finance requires Norges Bank to establish dedicated environment-related investment mandates. The Bank is in its implementation seeking to identify long-term investment opportunities in companies and technologies that facilitate more environmentally friendly economic activity. About NOK 57 billion

was invested under the environment-related mandates as at the end of 2018. Just over NOK 43 billion was invested in equities of 77 companies, whilst about NOK 13 billion was invested in green bonds. The return on the environment-related equity investments was -8.3 percent in 2018. Average annual return was 4.5 percent over the period from 2010 to 2018, inclusive. The environment-related mandates are described in further detail in section 3.2.

4.2.2 Observation and exclusion of companies from the GPFG

The Ministry of Finance has adopted ethically motivated guidelines for the observation and exclusion of companies from the GPFG; see Box 6.2. The Executive Board of Norges Bank makes decisions on the observation and exclusion of companies, based on recommendations from the Council on Ethics. For companies falling within the scope of the coal criterion, Norges Bank may exclude companies or place them under observation without a recommendation from the Council on Ethics. The Guidelines for Observation and Exclusion require both Norges Bank and the Council on Ethics to assess, on a regular basis, whether observation or exclusion remains justified.

Norges Bank publishes which companies are excluded or placed under observation, as well as the rationale behind decisions on the observation and exclusion of coal companies.² The recommendations under the other criteria are available on the Council on Ethics website.

138 companies were excluded and 22 companies placed under observation as at the end of 2018. The coal criterion accounted for just over half of the decisions under the guidelines, with 68 excluded companies and 14 companies under observation.

In 2018, a total of 13 companies were excluded and four were placed under observation. Companies falling within the scope of the coal criterion accounted for two of the company exclusions and two of the observation decisions. Four companies were excluded for the production of nuclear arms, two companies were excluded under the human rights criterion and four companies were excluded for both serious human rights violations and severe environmental damage. One company was placed under observation under the criteria for severe environmental damage and serious

² <https://www.nbim.no/en/the-fund/responsible-investment/exclusion-of-companies/>

human rights violations and one company was placed under observation under the serious human rights violation criterion. The exclusion of two companies was revoked on the basis of advice from the Council on Ethics.

The guidelines require the Council on Ethics to provide recommendations on the exclusion or observation of companies. The decisions are made by Norges Bank, which performs an independent assessment as to whether exclusion or observation is justified. The Bank may also assess whether other measures, including active ownership, may be better suited to reducing the risk of continued norm violation or may be more appropriate for other reasons. Norges Bank shall take a comprehensive approach to the full range of measures at its disposal and apply these in a coherent manner, to ensure that the most suitable tool is applied in each case. Such an integrated assessment may in some cases result in Norges Bank deciding to apply a different measure from that recommended by the Council on Ethics. In 2018, the Executive Board of Norges Bank decided on active ownership in one instance for a company that the Council on Ethics had recommended be placed under observation. Both observation and active ownership require extensive follow-up on the part of the Council on Ethics and Norges Bank, respectively.

The Council on Ethics' application of the product criteria

The Council on Ethics uses a consultancy firm to monitor the companies in the fund portfolio on an ongoing basis for production that may potentially violate the guidelines, and to report on this to the Council every quarter. If production is suspected to violate the guidelines for the Fund, the Council on Ethics will contact the companies in question. If the companies provide information confirming the suspected violation of the guidelines, Norges Bank will be advised to exclude these companies. Companies which fail to respond to the communication will be recommended for exclusion if the documentation of the Council on Ethics indicates a high probability that the companies have products falling within the scope of the exclusion criteria. This procedure is intended to provide a reasonable degree of certainty that companies with production that violates the guidelines will be excluded from the Fund. However, there is no guarantee that all relevant companies are captured by the monitoring of the Council on Ethics at any given time.

The government bond exemption clause was introduced in 2010 and pertains to fixed-income instruments issued by states that are subject to large-scale UN sanctions or other international initiatives of a particularly large scale and where Norway supports the initiatives. This currently applies to fixed-income instruments issued by North Korea and Syria. Nor can the GPFG be invested in companies that sell weapons or military materiel to governments of such states. The Council on Ethics has yet to identify any companies in the fund portfolio that violate this criterion.

As at the end of 2018, a total of 37 companies were excluded on the basis of other product-based criteria than the coal criterion. 19 of these were excluded as the result of production of weapons that violate fundamental humanitarian principles through their normal use, whilst 18 companies were excluded because they produce tobacco.

The Council on Ethics' application of the conduct-based criteria

For the conduct criteria, the Council on Ethics investigates companies and areas where the risk of guideline violations is deemed to be highest. Whilst the review of particularly high-risk areas will often be based on a long-term plan, individual matters will, inter alia, be raised on the basis of news coverage. A consultancy firm performs daily searches of a large number of news sources in several languages for information on companies held in the Fund. The Council on Ethics also receives input from individuals and organisations concerning companies or issues that may merit investigation by the Council.

The Council on Ethics selects the cases considered to be most serious for further assessment, based on the severity and scope of the norm violation, the implications of the norm violation, the company's responsibility for, or contribution to, the situation in question, the company's efforts to prevent or remedy any damage incurred and the risk of similar incidents in future. The purpose is to identify companies where there is an unacceptable risk that guideline violations are taking place and will continue.

The Council on Ethics gathers information from researchers and research institutions, from international, regional and national organisations and from several other sources. The Council often hires consultants to investigate suspected guideline violations. The investigated companies are also important sources of information. There is often a close dialogue, both oral and written,

with companies during this process. The Council on Ethics approaches companies at an earlier stage of the process, asking them to answer questions or forward information to the Council. Weight is attached to soliciting information directly from companies, but the Council on Ethics may also make recommendations to Norges Bank if companies fail to respond to the inquiries of the Council.

The Council on Ethics has in 2018 continued its systematic investigation of sectors considered to be at particularly high risk of human rights violations. This has primarily focused on the investigation of labour rights violations in the textiles industry in South East Asia. Thus far, three companies have been excluded and two companies have been placed under observation as the result of this effort. In addition, the Council has addressed conditions akin to forced labour for migrant workers in the Gulf states, child labour in seed production, as well as matters relating to freedom of speech and the rights of indigenous populations.

The Council has also continued to investigate companies selling obsolete vessels for scrapping; so-called *beaching*, in Bangladesh and Pakistan, in 2018. Thus far, four companies have been excluded and one company has been placed under observation on the basis of an unacceptable risk of contributing to both human rights violations and severe environmental damage as the result of such activities. Under the environmental criterion, the Council has been pursuing investigations into several of the priority areas identified already in 2010, such as for example tropical deforestation, threats to conservation areas, mining and industrial pollution and particularly environmentally harmful fisheries.

Under the climate criterion, the Council focuses on sectors where total emissions are high. The Council on Ethics has in 2018 made one recommendation under this criterion. Relevant sectors addressed include, inter alia, cement and international shipping. Norges Bank has yet to make any decision based on the Council on Ethics' recommendations under the climate criterion, but has requested the Ministry of Finance to provide clarification as to the application of the said criterion; see the discussion in section 4.4.

Authorities in several countries have uncovered extensive corruption in recent years. The Council has in 2018 focused its effort in this regard on companies identified through portfolio monitoring resulting in one company being excluded from the GPFG.

By yearend, 33 companies were excluded under the conduct criteria. 15 companies were excluded under the environmental criterion, five were excluded under the human rights criterion, six were excluded on the basis of both the environmental damage criterion and the human rights criterion, three on the basis of other particularly serious violations of fundamental ethical norms, two on the basis of serious violations of the rights of individuals in situations of war or conflict, whilst two companies were excluded on the basis of a risk of gross corruption.

As at yearend, eight companies were placed under observation on the basis of recommendations from the Council; three under the corruption criterion, three under the human rights criterion, one under the environmental criterion and one under both the environmental criterion and the human rights criterion. The Council on Ethics is monitoring these companies on an ongoing basis and submits an annual assessment to Norges Bank.

Exclusion revocations

The Council on Ethics performs annual assessments of whether exclusion or observation of individual companies remains justified. If new information suggests that this is no longer justified, the Council on Ethics makes a recommendation on revocation of the earlier decision. The exclusion of two companies was revoked in 2018.

The annual report of the Council on Ethics provides further details of its activities in 2018.

4.3 Application of the coal criterion

4.3.1 Introduction

The Storting adopted, in connection with its deliberation of the fund report in the spring of 2018,³ a petition resolution calling for an «*assessment of whether the current criteria for exclusion of coal companies from the GPFG are adequate for purposes of excluding companies with considerable coal-related operations*».⁴

Against this background, the Ministry requested, in a letter of 28 June 2018, Norges Bank to describe its efforts to consider the observation and exclusion of companies under the coal criterion. The Bank was also asked to describe the scale of coal-related operations and the size of

³ Meld. St. 13 (2017–2018); *The Government Pension Fund 2018*.

companies excluded or placed under observation under this criterion. Furthermore, the Bank was requested to describe, to the extent feasible, the scale of coal-related operations and the size of mining companies and power producers which themselves or through entities they control derive part of their revenue from or base part of their operations on thermal coal, but are not excluded or placed under observation under the coal criterion. Moreover, the Bank was asked to provide information on the number of companies still retained, as well as such companies' plans, if any, for changing the thermal coal-related portion of their revenues and/or operations.

4.3.2 The product-based coal criterion

In 2014, the Ministry of Finance appointed an expert group to assess GPFG's investments in coal and petroleum companies and the use of policy instruments in relation to such companies. The expert group was requested to assess, *inter alia*, whether the exclusion of coal and petroleum companies seems a more effective strategy than active ownership for addressing climate issues and bringing about future changes.

The Ministry endorsed the expert group's assessment that the energy production, energy use or CO₂ emissions of coal and petroleum companies cannot in themselves be said to violate generally accepted ethical norms; see the discussion in the fund report in the spring of 2015⁴. The Ministry was therefore of the view that it would not be appropriate to introduce a product-based criterion for the exclusion of coal and petroleum companies. The Ministry also agreed with the expert group's assessment that one must nonetheless expect portfolio companies to meet certain minimum standards with regard to the climate impact

⁴ The background to the petition resolution was that the Standing Committee on Finance and Economic Affairs noted, in its recommendation (Recommendation No. 370 (2017–2018) to the Storting), *inter alia*, that it was observed by several organisations in the public consultation that the GPFG continued to hold investments in coal industry companies, and raised the question of whether the coal criteria are sufficiently tight to accommodate the Storting's intention that the Fund shall not be invested in coal. The Standing Committee on Finance and Economic Affairs referred to the comment in Recommendation No. 326 (2015–2016) to the Storting, in which the Standing Committee stated «*that the application of a new product-based criterion should also be subject to development over time based on, inter alia, changes in energy production and technological matters*», and requested that this be followed up in coming years.

⁵ Meld. St. 21 (2014–2015); *The management of the Government Pension Fund in 2014*.

of their operations, and with the expert group's recommendation to establish a conduct-based climate criterion that might be applied across companies and industries.

The Standing Committee on Finance and Economic Affairs stated, in its recommendation on the report, that there are ethical aspects to the operations of some coal companies in both mining and power production, and that it is therefore «*appropriate to have a separate product-based criterion in the Guidelines for Observation and Exclusion in relation to such companies*»; see Recommendation No. 290 (2014–2015) to the Storting. Against the background of the Standing Committee on Finance and Economic Affairs' recommendation, the Ministry presented, in the National Budget for 2016, a proposal on how the criterion might be operationalised. The Storting endorsed the Ministry's proposal; see Recommendation No. 2 (2015–2016) to the Storting. The criterion was, in contrast to other product criteria, worded as a «*may*» criterion and observation was included as an ownership measure. The intention was to provide necessary scope for discretionary assessment in attending to the considerations identified by the Standing Committee on Finance and Economic Affairs, including forward-looking assessments, a chain of policy instruments and other measures from Norges Bank.

The Ministry of Finance introduced the coal criterion with effect from 1 February 2016 in accordance with the Storting's deliberations. Section 2 of the Guidelines for Observation and Exclusion from the GPFG is worded as follows:

«Observation or exclusion may be decided for mining companies and power producers which themselves or through entities they control derive 30 percent or more of their income from thermal coal or base 30 per cent or more of their operations on thermal coal. Such assessments shall, in addition to the company's current share of income or activity from thermal coal, attach importance to forward-looking assessments, including any plans the company may have that will change the share of its business based on thermal coal and the share of its business based on renewable energy sources»

Norges Bank may make decisions under the coal criterion without any recommendation from the Council on Ethics.

The guidelines establish that recommendations and decisions on exclusion of companies based on the coal criterion shall not include green

bonds issued by the company in question where such bonds are recognised through inclusion in specific indices for green bonds or are verified by a recognised third party. Hence, the coal criterion does not encompass green bonds.

As at the end of 2018, 68 companies were excluded under the coal criterion, whilst 14 companies were placed under observation. The reasoning behind the decisions is published in accordance with the guidelines.

4.3.3 Norges Bank's application of the coal criterion

Norges Bank has in letters of 25 October and 14 December 2018, respectively, to the Ministry provided an account of its application of the coal criterion. In its letters, the Bank describes, inter alia, how the criterion is operationalised, including data gathering and company contact. It also provides an estimate as to the scale of coal-related operations amongst the companies still retained in the fund portfolio.

Operationalisation of the coal criterion

Norges Bank has established processes to identify companies falling within the scope of the coal criterion, and to prepare recommendations on exclusion and observation to be decided on by the Executive Board of the Bank. Starting out from the Fund's investments in about 9 000 companies, the Bank identified some 200 companies that were examined more thoroughly. The Bank has focused on the most relevant sectors for mining companies and power producers in the sector classification of Industry Classification Benchmarks (ICB), but other relevant companies have also been analysed.

Norges Bank notes that information on companies' mining operations is often more readily available than information on power production, which normally requires more analysis. The Bank contacts relevant companies and uses several external data sources for this purpose, partly for the reason that there exists no single source covering all relevant power production companies. Moreover, the information reported by companies themselves is not normally sufficiently detailed for purposes of the required analysis. The Bank emphasises that company contact has been necessary to establish a sound basis for decision-making.

Norges Bank notes that operationalisation of the criterion has required considerable time and

resources. The wording of the criterion, with a focus on thresholds and forward-looking assessments, necessitates extensive information gathering and analysis. In addition, the criterion addresses industries characterised by a significant number of corporate events, such as the acquisition and divestment of plants and subsidiaries, which necessitates continuous market monitoring, also after companies have been analysed and decisions made. In addition, the Bank needs to analyse any new companies entering the market. Proximity to investment management has been important in this context.

Norges Bank discusses certain operational challenges in implementing the green bond exemption. Any green bonds issued by companies that are excluded on the basis of the coal criterion shall, according to the guidelines, not be excluded from the investment universe or benchmark index for the Fund. However, the Bank identifies certain challenges in relation to the handling of benchmark inclusion or exclusion of individual bonds issued by the same company. This results in such green bonds not being included in the reported return on the benchmark index. This applies, according to the Bank, to a small number of bonds, thus implying that the reported return has thus far not differed from the return on a benchmark index that includes these bonds.

The scale of coal-related operations that are not excluded or placed under observation

Norges Bank estimates the scale of coal-related operations in mining companies and power producers by examining thermal coal extraction and coal power capacity, respectively.

Norges Bank estimates that companies accounting for 74 percent of total coal power capacity and 77 percent of total thermal coal extraction have been excluded from the Fund or placed under observation. The Bank notes that it is difficult to precisely estimate the scale of coal-related operations in companies that are not excluded or placed under observation, without a thorough analysis of each company. This may apply to a large number of companies in several different sectors. The Bank's estimate is therefore based on data from the World Electric Power Plants coal power capacity database, and on reporting from companies identified by the Bank as having operations that involve coal extraction.

The Bank has identified 202 companies accounting for the remaining coal power capacity. Most of the remaining coal power production is

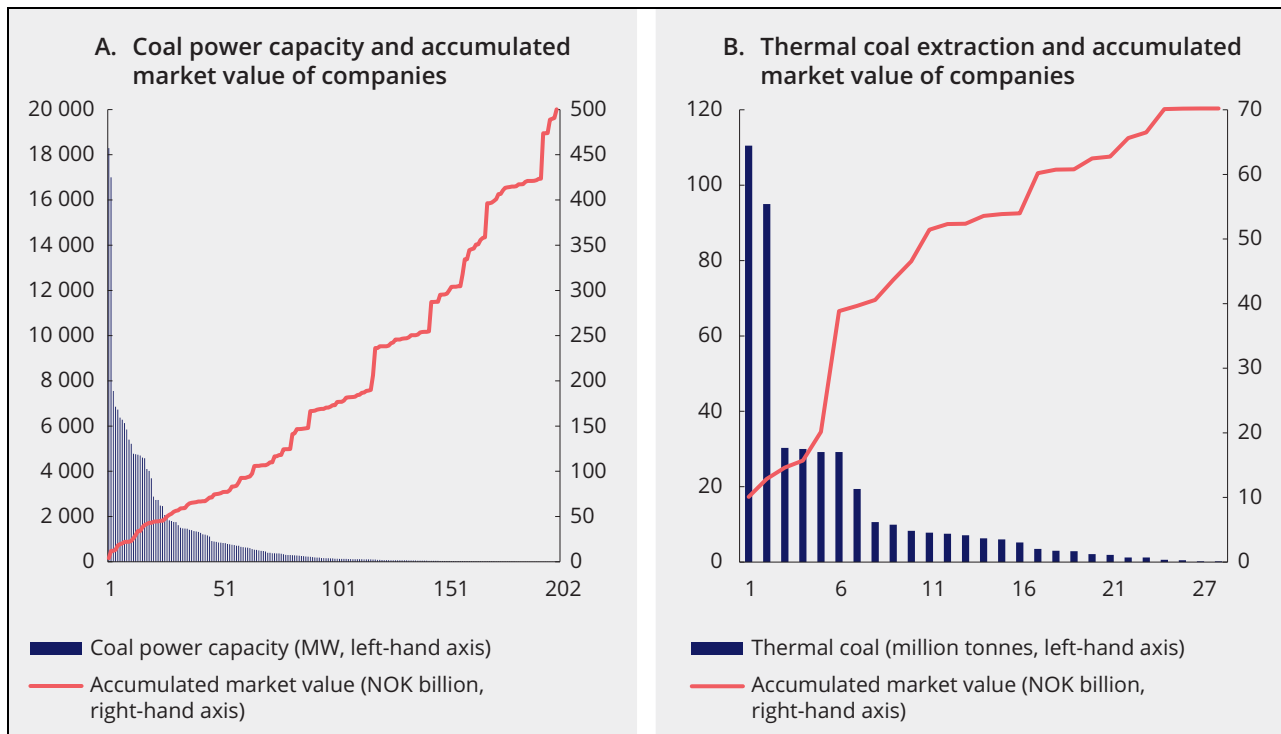


Figure 4.2 Companies' coal power capacity and thermal coal extraction. Most recent available data, market value of equity benchmark holdings as at 30 September 2018

Source: Norges Bank.

concentrated in a small number of companies; see Figure 4.2A. The information from Norges Bank shows that two companies have coal power capacity in excess of 10,000 MW and together account for more than 15 percent of remaining capacity. 15 of the 202 identified power companies together account for more than 50 percent of total remaining coal power capacity. Norges Bank notes that power production is not the primary activity of most of the remaining companies.

The Bank has, furthermore, identified 27 companies that extract thermal coal, but are not excluded or placed under observation. Also for these companies is the main part of the remaining coal extraction concentrated in a small number of companies; see Figure 4.2B. The information from Norges Bank shows that the two companies with the largest-scale extraction account for 48 percent of remaining extraction, and the six companies extracting more than 20 million tonnes of thermal coal together account for 75 percent of remaining extraction. However, the portion of revenues derived from thermal coal is well below the 30-percent threshold for all of the 27 remaining mining companies.

Norges Bank notes that it is challenging to obtain data that can provide a total overview of companies' plans, if any, for changing the thermal

coal-related portion of their revenues and/or operations, and that forward-looking assessments must be made for each company. In addition, the acquisition and divestment of assets or subsidiaries will have a material impact on whether a company exceeds the thresholds under the criterion. This necessitates continuous monitoring of the market. The Bank also observes that several companies are undergoing a transition process to, inter alia, increase their renewable energy portion.

4.3.4 The Ministry's assessments

The Ministry is of the view that Norges Bank has established processes which ensure a sound, structured and consistent implementation of the coal criterion. The Ministry has taken note of the fact that operationalisation of the criterion has required considerable time and resources. The Bank observes that the wording of the criterion, with an emphasis on thresholds and forward-looking assessments, necessitates extensive information gathering and analysis. The Bank emphasises that it is challenging to obtain information of sufficient quality and detail for operationalisation of the criterion. In addition, the criterion addresses industries characterised by a significant number

of corporate events, and a potential reduction of thresholds under the criterion would add to the information gathering challenges and the transaction costs, since a larger number of companies would be exiting or entering the investment universe. The Ministry is of the view that this suggests that the threshold values should not be too low, and that relative thresholds of 30 percent therefore still remain appropriate.

The current criteria are based on what portion of the total revenues or total operations of mining companies and power producers are accounted for by coal-related operations. Hence, the criterion is based on relative measures, and not on the absolute size of the coal-related operations of a company. This is in line with the observation of the Standing Committee on Finance and Economic Affairs that the criterion should, as a general premise, encompass mining companies and power producers for which a *material* portion of their operations are related to coal used for energy purposes; see Recommendation No. 290 (2014–2015) to the Storting. The Standing Committee on Finance and Economic Affairs specified, furthermore, that a threshold value of 30 percent would be material.

According to the Global Coal Exit List,⁶ 30 companies account for half of coal extraction in the universe covered by the website, but only for 20 of these does the portion of revenues from coal extraction come to more than 30 percent. Furthermore, 31 power producers account for half of coal power capacity in the universe covered by the website. However, in only about a third of these companies does coal represent more than 50 percent of power capacity.

The petition resolution refers to «considerable coal-related operations». The Ministry is of the view that the current criterion, which is based on relative measures, should be supplemented by absolute thresholds to capture companies with considerable coal-related operations in absolute terms. Figure 4.2 shows that the remaining coal-related operations, as measured by both coal extraction and coal power capacity, are concentrated in a relatively small number of companies. Figure 4.2 further shows that the Fund is invested

in six companies with extraction in excess of 20 million tonnes and two companies with coal power capacity in excess of 10,000 MW.⁷

It is stipulated in the coal criterion that the assessment as to whether a company falls within its scope shall attach weight to forward-looking assessments, including any plans that will reduce the thermal coal-related portion of revenues or operations and/or increase the renewable energy-related portion of revenues or operations. Moreover, Norges Bank may choose to place companies under observation under the coal criterion. Norges Bank notes that observation is relevant for companies that are held to exceed the applicable thresholds, but for which information on stated plans, initiatives or other material factors makes it likely that the company will move below the thresholds within a reasonable period of time. Examples of this are, according to the Bank, planned or recently completed acquisitions or divestments of companies and assets, publicly communicated shutdown plans, commencement of new, or modification of existing, production capacity, as well as drought, accidents or other specific events that may have affected the energy mix.

The Ministry proposes, based on an overall assessment, that the 30-percent threshold value for the relative portion of revenues or operations under the coal criterion be kept unchanged, but that such relative portions be supplemented by thresholds for absolute coal extraction and coal power capacity of 20 million tonnes and 10,000 MW, respectively. The Ministry proposes that the assessments under the criterion shall continue to be forward-looking. The Ministry will be monitoring the functioning of the absolute thresholds and in view of this consider potential threshold value reductions.

If carbon capture and storage turns out to be a cost-effective technology for reducing emissions from coal power production in the longer run, it

⁶ The German organisation Urgewald is behind the website www.coalexit.org, which includes a database (Global Coal Exit List) of information on companies with coal-related operations and provides information on about 770 companies that represent an estimated 88 percent of global coal production and 86 percent of global coal power capacity. This information is used by many investors and funds in addressing responsible investment and climate risk.

⁷ Companies with extraction and power capacity in excess of the said levels are considered to be the companies with the largest coal operations in the world. According to the Global Coal Exit List, 20 million tonnes of coal extraction corresponds to the coal consumption of a country such as Italy. A coal power capacity of 10,000 MW requires the burning of more than 20 million tonnes of coal annually.

Institutional investors that have introduced coal criteria primarily use relative threshold values corresponding to those applied for the GPF. The Ministry is aware of a small number of large investors which have supplemented the relative thresholds with absolute thresholds, and which have done so at levels corresponding to those mentioned here, for example the European insurance companies AXA and Generali.

may be appropriate to consider this when assessing companies against the product-based coal criterion.

4.4 The conduct-based climate criterion

4.4.1 Background

Against the background of the Storting's deliberation of a Private Member's Motion, the Ministry of Finance appointed, in 2014, an expert group to assess the investments of the GPFG in coal and petroleum companies and the use of policy tools in relation to such companies. One of the group's proposals was to add a conduct-based climate criterion to the Guidelines for Observation and Exclusion from the GPFG.

The climate criterion was added to the guidelines with effect from 1 January 2016. The criterion implies that observation or exclusion may be decided for companies where there is an unacceptable risk that the company contributes to or is responsible for *«acts or omissions that on an aggregate company level lead to unacceptable greenhouse gas emissions»*.

The Ministry of Finance outlined the general interpretation of the climate criterion in the fund report in the spring of 2015,⁸ whilst at the same time emphasising that the detailed interpretation would be developed over time. In the report, the Ministry observed, inter alia, that:

- The criterion will be inherently dynamic and will neither depend on industry or sector, nor on the type of greenhouse gas.
- The criterion should reflect the consideration that norms may develop over time in line with, inter alia, changes in energy production and technological development.
- Greenhouse gas emissions shall form the basis for an overall assessment under the criterion.
- There must be a link between the acts or omissions of a company and the greenhouse gas emissions.
- The expert group expected that the Council on Ethics would in practice focus on companies in industrial sectors with significant absolute emission levels, and that the energy sector and electricity generation from fossil energy sources would form a key part of such focus.
- The expert group emphasised that it seems reasonable, in considering the severity of a vio-

lation of ethical norms in this regard, to focus, as one of several considerations, on emission intensity, and not necessarily on absolute emission levels. By emission intensity is meant emissions relative to, for example, production or sales.

- The assessment shall be made at an aggregate company level. Such an overall company assessment is appropriate in view of the underlying premise of existing systems for curtailing greenhouse gas emissions and limiting global climate change, that activities in one area may be offset by activities in other areas, for example through emission allowance trading. Excluding a company that operates in conformity with the guidelines of such a system might be counterproductive. It may, at the same time, be difficult to assess this, since many companies are engaged in activities in several countries with various degrees of regulation.
- It is appropriate for the overall assessment to take into consideration whether the greenhouse gas emissions of companies are subject to taxes, mandatory emissions trading systems or other regulations.
- «Unacceptable» implies that the criterion is aimed at serious norm violations, in line with the established exclusion threshold under the Guidelines for Observation and Exclusion. The Ministry noted that the expert group stated that serious norm violations should for this purpose be assessed in the context of specific comparable operations, sectors and industries based on, for example, generally accepted international standards.
- Both the expert group and a number of those submitting consultative comments noted that actively opposing, for example, international agreements on the reduction of greenhouse gas emissions may be an element to which weight should be attached in the overall assessment under the criterion.
- The assessments shall, as for other conduct-based criteria, be forward-looking.

The Standing Committee on Finance and Economic Affairs observed, in its recommendation on the report, that the criterion will be independent of industry or sector, as well as of the type of greenhouse gas, and also that it should reflect the consideration that norms may develop over time. The Standing Committee also noted that the criterion must be considered in the context of the product-based coal criterion (the 30-percent

⁸ Meld. St. 21 (2014–2015); *The management of the Government Pension Fund in 2014*.

threshold), which was added to the guidelines with effect from 1 February 2016.

In the fund report in the spring of 2017,⁹ the Ministry of Finance provided an account of experience thus far with the conduct-based climate criterion and the product-based coal criterion. At that point in time, a recommendation under the climate criterion had yet to be made. The report summarises the key points of a letter from the Council on Ethics to the Ministry, in which it was stated, *inter alia*, that the climate criterion provides limited information on which types of emissions it is intended to encompass, and that unlike for most of the other criteria, there is not, according to the Council on Ethics, any regulatory framework or internationally recognised norm as to what is acceptable. The Council on Ethics characterised, against this background, its efforts as involving the establishment of norms, and the Council has deemed it necessary to spend some time on this, in order to enable the adopted interpretation of the criterion to be applied across industries and companies. The Council on Ethics also observed that the limited data available at company level is a challenge, and emphasised that it will therefore be necessary to base the assessments on both emissions data, where available, but also on other indicators, such as technology and raw material choices. The Council on Ethics further stated that:

«Even when emissions data are available, it will in heterogeneous industries be challenging to make company comparisons. The Council on Ethics is tentatively assuming that «aggregate company level» means that comparisons can be made between different companies, but in such cases on comparable activities, such as for example emissions relating to all production of comparable products.»

The Ministry noted in the report that the climate criterion addresses a field where there is a dearth of both available experience and relevant norms and standards, and took note of the challenges highlighted by the Council on Ethics in its letter. It was also observed that a thorough preparatory effort to interpret the criterion is a priority, subsequently to enable application of said criterion across industries and companies. The Ministry also concluded that «unacceptable» implies that serious norm violations are the target, in line with

the established high exclusion threshold under the Guidelines for Observation and Exclusion, and that the assessments shall continue to be forward-looking. Key observations from the fund report in the spring of 2015 were also reiterated, including, *inter alia*, in relation to emission intensity and the interpretation of the term «aggregate company level».

In its recommendation on the report, the Standing Committee on Finance and Economic Affairs took note of the details provided on experience with the coal and climate criteria and noted that it «expects Norges Bank and the Council on Ethics to assess and improve this effort on an ongoing basis in accordance with the expectation communicated in the Storting's resolution.»

4.4.2 The Council on Ethics' and Norges Bank's assessments

In May and June 2017, as well as in March 2018, the Council on Ethics forwarded the first exclusion recommendations to Norges Bank under the climate criterion. The Bank asked, in a letter of 2 May 2018, the Council on Ethics for a more detailed assessments as to which principles the application of the criterion shall be premised on, including which aspects of a company's specific conduct should be considered unacceptable as far as the submitted recommendations were concerned. In a reply letter of 12 June 2018, the Council on Ethics provided additional information on which principles it had applied, and proposed a meeting to further the exchange of views. A meeting was held between the Ownership Committee of the Executive Board and the Chair and Deputy Chair of the Council on Ethics on 6 September 2018.

The Executive Board deliberated the recommendations from the Council on Ethics on 24 October 2018, but reached no decision. The Bank stated, in a letter of 7 November 2018 to the Ministry of Finance, that this must be considered from the perspective that there still appears to be diverging assessments in the Council on Ethics and Norges Bank as to how the criterion shall be applied.

The Council on Ethics' and Norges Bank's assessments and questions on implementation of the criterion will be outlined below, based on the letter of 7 November 2018 from Norges Bank to the Ministry of Finance, as well as the letters between the Bank and the Council on Ethics enclosed with the Bank's letter to the Ministry. In conformity with the division of responsibilities on

⁹ Meld. St. 26 (2016–2017); *The management of the Government Pension Fund in 2016*.

the observation and exclusion of companies from the GPF, the Ministry has no knowledge as to which companies are subject to recommendations, or the specific contents of individual recommendations. However, it is publicly known that the Council on Ethics has completed its review of companies engaged in unconventional oil production and coal-based power production. The Council on Ethics will now be reviewing companies that produce cement or steel, and also take a closer look at international shipping emissions.

Norges Bank's questions and assessments

Norges Bank asked, in its letter to the Ministry, how the climate criterion shall be interpreted as a conduct criterion. The Bank is of the view that the criterion, when compared to other criteria under the guidelines, does not provide a particularly precise definition as to what type of conduct shall give rise to an exclusion decision.

Norges Bank requested the Ministry to contribute to clarifying whether companies' emissions are meant to be the primary basis for assessment under the criterion, as well as whether forward-looking assessments may attach decisive importance to greenhouse gas intensity, relative to an industry average, not being improved over time.

Norges Bank also raised the question of whether an industry average may constitute a fundamental ethical norm. Norges Bank agrees with the Council on Ethics' assessment that high absolute emissions or emission intensity may serve as a basis for selecting companies for assessment against the criterion, but believes, at the same time, that the criterion invites assessment of company-specific acts or omissions in relation to greenhouse gas emissions beyond the actual emissions. Examples may, according to the Bank, be how the company relates to the climate framework under which it operates, its conduct relative to international standards, as well as its handling of, and reporting on, greenhouse gas emissions.

Furthermore, Norges Bank asked the Ministry of Finance to assess whether there is a need for providing further details in relation to the Ministry's earlier discussion of the significance of certain companies operating under climate schemes, including carbon taxes, or carbon pricing and emission allowance trading systems. Norges Bank stated that the Council on Ethics has not, in the recommendations made under the criterion, attached weight to whether a company is covered by mandatory emissions trading systems or other

forms of emissions regulation. In Norges Bank's understanding of the *travaux préparatoires*, factors such as whether a company operates under a climate scheme or a system involving carbon taxes, carbon pricing or emission allowance trading should nonetheless form part of the basis for assessment against the climate criterion. The same applies to how companies address relevant frameworks.

The Council on Ethics' assessments

The Council on Ethics stated, in a letter to Norges Bank, that it is of the understanding that conduct relating to emissions is the key consideration, and that two qualifying aspects of a company's conduct determine whether it can be recommended for exclusion: Firstly whether the company's emissions are high, and secondly whether such emissions are substantially higher per unit produced than for companies with which a comparison is appropriate. In other words, the Council on Ethics considers emissions and emission intensity in themselves as being implications of conduct. The Council on Ethics has based such considerations on the production of relatively homogenous products, for which, inter alia, production methods and inputs nonetheless have a major impact on emission intensity.

The Council on Ethics thereafter considers the future risk, including whether the company has specific, credible and timed plans for reducing its emissions, within a reasonable period of time, to a level where emissions do not differ materially from that of other companies producing the same product. The Council is of the view that it is not sufficient for the company to have a general policy on reduction of greenhouse gas emissions in the distant future. In making such assessment, the Council on Ethics also attaches weight to the likely emissions reduction of companies with which it is appropriate to make comparisons, as well as the viability of the company's plans in view of any industry challenges with regard to technological development.

The Council on Ethics notes that the Paris Agreement applies to countries, and does not involve commitments at the industry or company level. The Council on Ethics states that it has, in the absence of company-specific requirements for the reduction of greenhouse gases, taken the view that all companies with high emissions have a particular ethical obligation to contribute to meeting the target of a global temperature rise well below two degrees. Moreover, the Council has taken the

view that if the emissions are unacceptable at the outset, emissions reductions beyond the industry average are warranted. In the opposite case, emissions would be equally far from the industry average subsequent to such reductions.

Furthermore, the Council on Ethics notes that it has concluded, based on an overall assessment, that it is now difficult to attach decisive weight to whether a company falls within the scope of an emissions trading system or other regulatory mechanism relating to emissions. The Council on Ethics emphasises that this has been a difficult issue. The Council has, in reaching this conclusion, attached weight to the wording of the fund report in the spring of 2015, developments in country commitments from the Kyoto Protocol to the Paris Agreement, as well as the practical implications of various interpretations.

The Council on Ethics notes that only 20 per cent of global emissions are currently subject to some form of carbon pricing (taxes and/or emissions trading systems) and that emission prices in most jurisdictions are far below the levels necessary to meet the targets under the Paris Agreement. The Council on Ethics also notes that the EU ETS marks an exception, and that, inter alia, coal power will over time become unprofitable under this system. The Council is of the view that this may indicate that companies under a strict/ambitious climate framework should not be excluded from the Fund under the climate criterion.

On the other hand, the Council is of the view that it is difficult to take the position that companies within the scope of a climate scheme shall be treated differently from companies outside such scope, and that attaching weight to climate schemes in the assessment means that the Council would be moving away from the fundamental principle of grossly unethical conduct (high emissions and high emission intensity). In addition, the Council on Ethics is of the view that the climate scheme has changed, through the conclusion of the Paris Agreement, since the introduction of the climate criterion (when the Kyoto Protocol was applicable). Most countries now have nationally determined targets as part of the Paris Agreement, but these have been established on the basis of countries' own situations, and the Council is of the view that it is not feasible to start out from one country's targets and plans to assess whether these are sufficiently ambitious in terms of the targets under the Paris Agreement. Countries' implementation of targets under the Paris Agreement will be subjected to international

review, but the Council on Ethics argues that it is uncertain whether such assessments can be used as a basis for evaluating emissions from companies.

The Council on Ethics states that it will, where this is possible to identify, consider it an aggravating factor if a company in its lobbying takes a critical and negative stance on national and international climate initiatives and, for example, systematically withholds key information or makes misrepresentations.

Incomplete or inadequate information on company-specific matters will for all of the conduct criteria normally result in the Council on Ethics considering the future risk to be higher than if there is good access to information. Moreover, the Council on Ethics states that it is only in case of doubt that factors such as a company's participation in industry-specific benchmarking, focus on technological development or participation in disclosure systems such as the CDP,¹⁰ may result in companies that are found to have unacceptable emissions being nonetheless considered acceptable.

4.4.3 The Ministry's assessments

4.4.3.1 General premises

Application of the conduct-based climate criterion should be based on the following general premises:

The exclusion threshold

The established high threshold for exclusion of companies on the basis of the conduct criteria under the Guidelines for Observation and Exclusion from the GPFG shall remain in place.

Dynamism versus stability

The climate criterion shall be dynamic over time, to reflect, inter alia, changes in energy production, in technological development and in national and international climate schemes.

On the other hand, the basis for exclusions under the criterion should be sufficiently robust, thus implying that decisions will normally remain appropriate for a certain length of time. A company frequently oscillating between being above and below the exclusion threshold is a situation that should be avoided.

¹⁰ Formerly the Carbon Disclosure Project.

The criterion as a conduct criterion

Whilst the product-based criteria under the guidelines apply to the production of certain products, the conduct criteria are based on the conduct of individual companies. The climate criterion does not define the production of specific products as grossly unethical in itself. Instead, the relative emissions (emission intensity) of individual companies are considered an implication of their conduct (actions or omissions). Factors influencing emission intensity may, for example, include the choice of production method, including inputs and technology. It may in some cases be relevant to assess such conduct in view of the choices faced by the company in practice with regard to, inter alia, access to raw materials and technology, as well as geographical location.

Chain of policy measures, recommendations and decisions

The Council on Ethics is responsible for making recommendations on the observation and exclusion of companies from the GPFG. All factors of relevance to an overall assessment of companies under the climate criterion should be addressed in the recommendations from the Council on Ethics. The guidelines require the Council on Ethics to present draft recommendations to the companies. This affords the company in question an opportunity to correct any errors or omissions in the informational basis for the recommendation.

With effect from 2015, decisions in such matters are made by the Executive Board of Norges Bank. The purpose of this new division of responsibilities was, inter alia, to facilitate efficient cooperation between the Council on Ethics and Norges Bank, thus enabling various measures to be more readily considered in relation to each other and used in an appropriate manner in each case.

Where there is doubt as to whether the exclusion criteria are met, and especially with regard to future developments, the Council on Ethics may recommend observation. Before observation or exclusion is decided, Norges Bank shall assess whether other measures, including active ownership, may be better suited for reducing the risk of continued norm violation or may be more appropriate for other reasons. The overarching objective is to identify the most suitable measure for each case. Observation and active ownership decisions require extensive follow-up on the part of the Council on Ethics and Norges Bank, respectively.

Norges Bank would outline its reasoning in more detail in cases where the Executive Board decides to use a different measure than that recommended by the Council on Ethics; see section 6.7.

4.4.3.2 Overall assessment

Assessments of companies in the GPFG against the conduct-based climate criterion shall, in addition to being based on the premises discussed in the above section, be based on an overall assessment against the background of the following considerations:

Emissions, emission intensity and basis for comparison

As far as the other conduct criteria are concerned, the Council on Ethics may to a large extent start out from established ethical norms against which the conduct of companies may be assessed. For the climate criterion, there are no corresponding norms for unacceptable greenhouse gas emissions.

In order to be considered for observation or exclusion under the criterion, a company needs to have high emissions in absolute terms, both in aggregate and based on the type of industry under assessment. The company must also have significantly higher emission intensity than companies with which it is appropriate to draw such comparisons.

The Ministry expects that application of the climate criterion involves identifying the most relevant basis for comparison when assessing emission intensity, and that such basis may to some extent depend on what type of production is under assessment.

Forward-looking assessments

As with the other conduct criteria, forward-looking assessments are of key importance under the climate criterion. Their purpose is to assess the risk that the unacceptable conduct will continue. A key consideration will be whether there are specific and credible plans for how emission intensity shall be reduced to an acceptable level within a reasonable period of time.

The assessments shall be in line with the overarching premise of a high threshold for exclusion of companies. Such forward-looking assessments may be complex and subject to considerable uncertainty, and will in all probability require discretionary assessment. It may, furthermore, be

relevant to consider the company's own plans and its assumed ability to deliver on, inter alia, the phase out of highly emission-intensive technologies, expected developments in the peer group, as well as anticipated developments in relevant technologies, standards and practices. As far as assessments of the company's ability to deliver are concerned, it may for example be relevant to consider whether the company provides the Council on Ethics with adequate information, the company's public disclosures on climate-related matters, as well as how the company's plans are embedded in its organisation and in specific strategies.

It will also be relevant to consider the climate scheme applicable to the company, cf. the entries below on «Climate scheme» and «Basis for assessment and other factors» for further details.

Climate Scheme

The international climate framework will from 2020 be the Paris Agreement. This agreement encompasses all countries, and countries themselves decide their own contributions and implementation. The agreement stipulates that industrialised countries should have targets for absolute emissions reductions that cover their economy as a whole, whilst developing countries are encouraged to move in the same direction over time. National climate frameworks, such as regulation, taxes or emissions trading systems, will differ between countries and regions. The Paris Agreement includes provisions on voluntary collaboration between countries on emissions reductions to meet their emissions targets; see Box 4.3 on the EU's and Norway's climate framework.

The climate framework facing a company will affect that company's conduct (emissions at present and in future). Companies under a strict climate scheme will over time have lower emissions than corresponding countries under less strict schemes. Besides, capital goods often have a long lifespan. This implies that emissions measured at a given point in time under the same climate scheme may vary considerably between companies manufacturing the same products. There is reason to assume that such differences may persist over a number of years.

Companies' emissions are affected by their choice of production method, including choice of technology for major investments. A company will, as a general rule, opt for the most profitable available solutions, in view of expected emission

prices and other regulatory conditions. If a company chooses more emission-intensive technologies for such investments than the best technologies that are available, this may appear to be an omission. However, under an emissions trading system with a financially-binding allowance cap, increased emissions or omitted emissions reductions in one company will be offset by reduced emissions elsewhere in the system. It may therefore be assumed, under a strict and credible climate scheme, that the company takes the emissions cost, like other costs, into account in its investment and production plans. The public authorities have adopted a specific and credible plan on how to reduce emissions, which companies are required to adhere to.

This indicates that the threshold for exclusion of companies under a strict climate scheme should be higher than for other companies. As noted in the fund report in the spring of 2015, it might also prove counterproductive to exclude companies that operate in conformity with the applicable regulations of such a system.

As discussed in the fund report submitted in the spring of 2015, it is appropriate for an overall assessment under the climate criterion to pay heed to whether companies' greenhouse gas emissions are subject to taxes, mandatory emissions trading systems or other regulations. Although it may be challenging to assess the strictness of a specific climate scheme, this implies that available information on regulation in a country or region must be taken into consideration and form part of the overall assessment, when assessing companies against the climate criterion.

The EU emissions trading system applies a reduction factor to the number of allowances issued annually, which entails that new allowances will no longer be issued shortly after the middle of this century. In addition, the system has strict compliance mechanisms. In the absence of international guidelines or standards in this regard, it would be appropriate to consider the EU emissions trading system, which may be classified as a strict climate framework on the basis of its rules, compliance mechanisms, linear reduction factor and emission allowance prices, as a norm or basis for comparison when assessing the framework faced by companies. This implies that companies whose emissions are subject to taxes, mandatory emissions trading systems or other regulations will, as a general rule, be treated equally across countries and regions.

Box 4.3 The EU's and Norway's climate framework

Norway introduced a CO₂ tax as early as 1991, long before any international commitment. The EU developed its emissions trading system in advance of the first commitment period under the Kyoto Protocol (2008–2012). Norway has been an integral part of the EU emissions trading system (EU ETS) since 2008 via the EEA Agreement. The number of emission sources encompassed by the EU ETS has subsequently been expanded and the provisions under the system have been further harmonised. At present, 80 percent of Norwegian emissions are subject to a climate tax (of about NOK 500 per tonne of CO₂ equivalents) and/or participation in the EU ETS, where the emission allowance price has been in the NOK 200 to 250 range per tonne since the summer of 2018.

The EU ETS, as well as the regulatory framework applicable to non-EU ETS emissions (the Effort Sharing Regulation), means that EU is in compliance with its international commitments. Norway wishes to collaborate with the EU on meeting the emissions target for 2030 under the Paris Agreement. Norwegian businesses contribute on a par with EU businesses to reducing EU ETS emissions. In addition, an agreement will provide Norway with a target for non-EU ETS emissions and for greenhouse gas emission and sequestration in forests and other land areas.¹ The EU regulatory framework allows for several forms of flexibility, including scope for over-complying countries to sell their surplus to other countries.

Participation in the EU ETS is a key element of Norwegian climate policy. The Climate Act emphasises that putting the emissions target for 2030 and the objective of becoming a low-carbon society in 2050 on the statute book is not an obstacle to collaboration with the EU on emissions reductions. The effect of Norwegian participation in the EU ETS shall be taken into

account in assessing whether Norway meets the objectives under the Climate Act.

At present, in excess of 40 percent of EU emissions and just over half of Norwegian emissions are encompassed by the EU ETS. The emissions trading system caps overall emissions from EU ETS businesses through the number of allowances made available in the market (issued). Companies need to use allowances to cover their annual emissions. The allowances can be traded between companies. This ensures that emissions reductions take place in the companies with the lowest costs of such curtailment. Which companies actually reduce their emissions is immaterial. The relevant issue is the overall emissions from all businesses encompassed by the EU ETS.

A key mechanism in the emissions trading system is the annual reduction in the total number of allowances issued. In the current period, the annual reduction is 1.74 percent of a quantity of allowances calculated for 2010. After 2020, the reduction in the quantity of allowances will be accelerated, to 2.2 percent per year. This implies that issued allowances in 2030 will be 43 percent lower than emissions from the EU ETS sectors in 2005. If the annual reduction in the quantity of allowances continues unchanged after 2030, the number of allowances made available to the EU ETS businesses will in 2050 be 84 percent lower than emissions from the EU ETS sectors in 2005, and thereby approach zero shortly after the middle of this century.²

¹ The agreement will formally be a decision of the EEA Joint Committee recorded in Protocol 31 on cooperation in specific fields outside the four freedoms.

² Moreover, there is a designated revision provision in the EU ETS Directive in relation to, inter alia, the global review under the Paris Agreement and assessment of the need for enhanced measures, including the annual reduction factor.

Basis for assessment and other factors

Companies' emission intensity and forward-looking assessments may constitute the primary basis for assessment under the climate criterion.

However, when companies act in compliance with applicable statutes and regulations and are

subject to strict climate regulation such as the EU ETS, their emissions cannot in themselves be said to imply unacceptable conduct. Hence, additional factors would need to come into play in order for the conduct of such companies to be considered unacceptable under the criterion. The reason for this is that it must be assumed, under a

Box 4.3 (cont.)

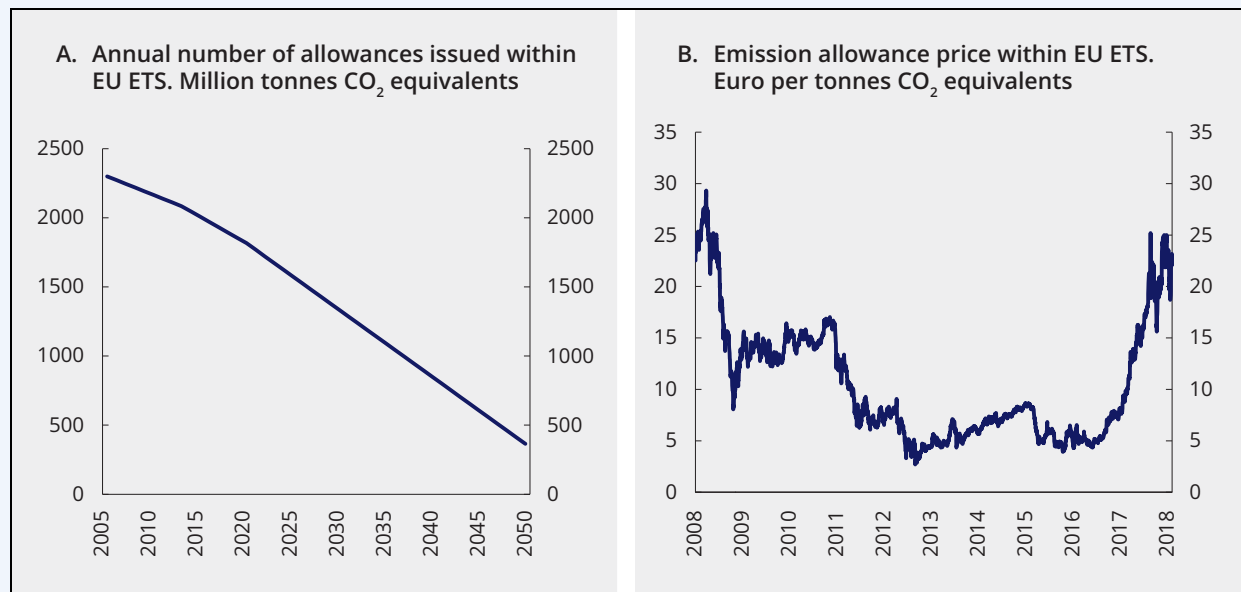


Figure 4.3 Annual number of allowances issued and emission allowance price in the EU ETS

Sources: Macrobond, European Commission and the Ministry of Climate and Environment.

strict and credible climate scheme, that companies will take emissions prices into account in their investment and production plans and that aggregate emissions from all companies will be reduced over time. Which companies actually reduce their emissions at any given time, and by how much for each company, is immaterial. The relevant issue is overall emissions from all companies falling within the scope of the climate framework.

It will also for other companies be relevant to consider any other factors as part of an overall assessment, although emission intensity and forward-looking assessments may constitute a sufficient basis for assessment.

A number of such other factors may be of relevance. The following listing is not exhaustive and additional relevant factors may be identified:

- Relocation of high emission intensity production from countries with a strict climate scheme to countries with no climate framework («carbon leakage»).
- Opposition to, or circumvention of, climate schemes.
- Positive conduct under a climate scheme, such as the purchase of allowances in excess of the commitment or other contributions to emis-

sions reductions in other companies/countries.

- Inadequate reporting of, or on, greenhouse gas emissions, as well as any omissions, for example failure to make sufficient disclosures to the Council on Ethics.
- How the company integrates climate considerations in its corporate governance, assessed in view of, inter alia, relevant international standards and guidelines, as well as the framework recommended by the Task Force on Climate-related Financial Disclosures (TCFD).

4.5 The conduct-based human rights criterion

4.5.1 Introduction

In connection with the Storting's deliberation of the fund report in the spring of 2018, the Standing Committee on Finance and Economic Affairs stated, in Recommendation No. 370 (2017–2018) to the Storting, inter alia, the following: «*When the benchmark index for the GPFG is expanded to include countries where there is cause for concern about the human rights situation in general, it is important that the guidelines for observation and*

exclusion be reviewed and operationalised such as to make these sufficiently robust in relation to the challenges posed by such markets.» Against this background, the Ministry requested, in a letter of 28 June 2018, the Council on Ethics to provide an account of its application of the human rights criterion.

Under Section 3 a) of the Guidelines for Observation and Exclusion from the GPF, observation or exclusion may be decided for companies where there is an unacceptable risk that the company contributes to or is responsible for serious or systematic human rights violations, such as murder, torture, deprivation of liberty, forced labour or the worst forms of child labour. The decisions are made by the Executive Board of Norges Bank, based on recommendations from the Council on Ethics. Five companies were excluded under the human rights criterion, whilst three companies were placed under observation, as at the end of 2018.

The role of the Fund as a responsible owner is expressed through guidelines and frameworks governing Norges Bank's responsible investment practices. The mandate from the Ministry refers to international principles and standards such as, inter alia, the UN Global Compact and the OECD Guidelines for Multinational Enterprises; see Box 4.1. Both of these standards include human rights principles applied by Norges Bank in its responsible investment practices.

Human rights are an important focus for the responsible investment practices of Norges Bank. In 2016, the Bank published an expectation document on human rights, in which it is stated that the Bank as a financial investor expects companies to respect human rights in accordance with the United Nations Guiding Principles on Business and Human Rights (UNGP). The Bank expects companies to implement relevant measures in their business strategy, risk management and reporting. Norges Bank has also published a separate expectation document on children's rights, and has since 2008 made annual assessments of how companies with operations or supply chains in sectors and countries with a high risk of child labour report on their children's rights involvement. Part of the information gathered through the Bank's children's rights assessments captures how companies report on social issues and human rights in general. Moreover, the Bank integrates human rights in its active ownership in general, including in company dialogue, in voting, via industry initiatives and by contributing to the development of international standards.

The Council on Ethics provided an account of its application of the human rights criterion in a letter of 13 November 2018 to the Ministry of Finance. The letter outlines, inter alia, how the criterion is operationalised, including the Council's interpretation and approach, as well as certain specific operationalisation challenges in relation to expansion of the benchmark index; see section 4.5.2. The Ministry's assessments are presented in section 4.5.3.

4.5.2 The Council on Ethics' application of the human rights criterion

The Guidelines for Observation and Exclusion refer to a number of examples of what may be considered serious human rights violations. The Council on Ethics makes the general observation that the criterion encompasses very different categories of violations, from murder and torture, to poor working conditions and violations of the freedom of association and the freedom of speech. The Council therefore bases its assessments on whether there are violations of internationally recognised conventions and authoritative interpretations of such conventions. In addition, it makes use of guidelines from UN agencies, the OECD, the World Bank, etc.

The guidelines stipulate that acts or omissions need to be «serious» or «systematic» in order to qualify as human rights violations. Serious violations, as interpreted by the Council on Ethics, are those violating bodily integrity,¹¹ whilst systematic violations involve acts or omissions on a significant scale.¹² The Council emphasises that it takes the view that a small number of human rights violations may be sufficient for a company to be excluded if such violations are deemed serious, whilst it is not necessary for the violations to be equally serious to qualify for exclusion if these are held to be systematic.

The guidelines for the observation and exclusion of companies stipulate that a company may qualify for violation of the conduct-based guidelines if it is responsible for or contributes to such violation. The Council on Ethics states that it has assumed that the exclusion threshold is lower for a norm violation which a company is directly responsible for than for a norm violation to which the company contributes, but for which govern-

¹¹ Torture, murder, deprivation of liberty, the worst forms of child labour, forced labour, etc.

¹² «Systematic» implies that such infractions are not considered isolated violations, but represent a pattern of conduct.

ment bodies or business partners are directly responsible. If there is a risk of serious human rights violations, such as for example forced labour or the worst forms of child labour, the Council on Ethics takes the view that companies may in principle be held responsible for violations taking place in, for example, the supply chain.

Whilst the guidelines focus on individual companies, the legal obligations under international human rights conventions apply to states. The Council on Ethics assesses whether the relevant company acts in such a manner as to represent a contribution to violations of internationally recognised human rights, and does not consider the extent to which the state is responsible for possible human rights violations in any given case.

The Council on Ethics' application of the human rights criterion is, in all key respects, aligned with the Council's application of the other conduct-based criteria; see section 4.2. The Council on Ethics aims to perform an evaluation of its application of the human rights criterion during the course of 2019.

In its letter, the Council on Ethics highlights certain factors that may represent challenges to the Council in connection with the inclusion of additional countries with higher risk of human rights violations in the benchmark index. When the Council on Ethics was established in 2003, the Fund was invested in 27 developed markets and about 3,000 companies. As at the end of 2018, the Fund is invested in more than 9,000 companies in over 70 countries. This development has, according to the Council on Ethics, resulted in the Fund being invested in more companies with operations in countries that pose high ethical risk, and also affects the Council's role as researcher, analyst and advisor.

Which countries are included in the benchmark index for the GPFG depends on the assessments of the index provider; see section 2.1. The management mandate requires all markets to be approved by Norges Bank before investments can be made. These assessments are predominantly based on characteristics of the marketplace. The Council on Ethics' experience suggests that there is not necessarily any correlation between well-functioning financial markets and a well-functioning state governed by the rule of law which is capable of protecting the rights of its citizens.

Moreover, the Council on Ethics makes the observation that information access is generally low in many countries. This makes it challenging to obtain sufficiently reliable or neutral sources to substantiate and document, on the balance of

probabilities, norm violation relating to human rights. Poor information access is, according to the Council on Ethics, especially prevalent in closed, repressive countries, in which, more generally, concerns about the human rights situation are somewhat elevated. Challenges with regard to limited and unreliable information are also a feature of certain industries, such as the defence industry or high-technology industries.

For large multinational companies operating in countries with an elevated degree of government control and low tolerance of government criticism, the Council on Ethics will normally have access to some information from international networks of non-governmental organisations (NGOs) and Western media that follow up on the large companies. For the local companies that operate and are domiciled in such countries, on the other hand, there is often very limited access to information.

The implication of dissimilar information access may often be, according to the Council on Ethics, the unequal treatment of companies in which the Fund is invested.

The Council on Ethics also observes the challenges associated with companies that operate in countries with different sets of norms than those underpinning internationally recognised conventions and appurtenant authoritative interpretations. Companies may thereby in different ways become implicated in human rights violations whilst at the same time being in compliance with local laws. The Council on Ethics is thereby confronted with the dilemma between recommending exclusion of companies based on violations of international norms, and thus running the risk that its recommendations are perceived as criticism of the authorities, or only assessing those violations that a company can itself influence. The latter may be perceived as legitimising violations that would in other contexts have resulted in an exclusion recommendation.

The Council on Ethics also states that if the sum total of policy measures at the disposal of Norges Bank and the Council on Ethics is not sufficient for proper ethical risk management in especially exposed countries, the question may be posed of whether responsible investment requirements are satisfied. The Council on Ethics sees a need for further examination of these issues.

4.5.3 The Ministry's assessments

The Ministry is of the view that it is important for the human rights criterion to be followed up in a

consistent, predictable and principled manner in relation to the companies in which the Fund is invested. The Ministry has taken note of the Council on Ethics' assessment that a small number of violations may be sufficient for a company to be excluded under the human rights criterion if such violations are deemed serious, whilst it is not necessary for the violations to be equally serious to qualify for exclusion if held to be systematic. The Ministry has also taken note of the assessment that the threshold may be lower for norm violations for which a company is directly responsible than for norm violations to which a company contributes.

The Ministry has also taken note of the challenges and dilemmas highlighted by the Council on Ethics in its application of the human rights criterion in some countries. The Ministry notes, in this context, that the Government is proposing the appointment of a committee to review the ethically motivated guidelines for the Fund.

Besides, the Ministry has initiated a review of the framework for the equity investments in the Fund, including the geographical composition of the benchmark index; see section 3.4.

