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Mandate for the Government Pension Fund Global – investments in renewable energy infrastructure

Background

In Recommendation 344 S (2018-2019), the Storting agreed to permitting the fund to be invested in unlisted renewable energy infrastructure within the limit for the environment-related mandates. The Storting also agreed that the upper limit for the environment-related mandates should be increased from 60 billion kroner to 120 billion kroner. The Ministry proposes to amend the Management Mandate for the Government Pension Fund Global (GPFG) accordingly and asks in its letter of 26 June for the Bank's comments on the proposed changes to the relevant provisions of the mandate. The Bank's comments follow below.

Restrictions on investments in renewable energy infrastructure

The Ministry proposes regulating the fund's investments in unlisted renewable energy infrastructure in a similar way to the fund's unlisted real estate investments. This is in keeping with the Bank's advice in its letter of 29 October 2018. Investments in unlisted infrastructure will be regulated through a combination of restrictions set by the Ministry and restrictions set by the Executive Board. We envisage that the Executive Board's restrictions will largely be defined as a share of the maximum allocation to investments in unlisted renewable energy infrastructure.

The Bank has no comments on the Ministry's proposed changes to the provisions in Chapter 3 of the mandate. The Ministry might, however, consider the wording of Section

3-5 (4) on fund structures. Our understanding of this provision is that the Ministry wishes the Executive Board to provide guidance on the level of fund investments. If so, this should be made clearer.

Calculation of expected relative volatility and expected shortfall
The fund's investments in unlisted renewable energy infrastructure are to be made within the existing limit for expected relative volatility (tracking error) of 1.25 percentage points. For that to be possible, it will be necessary to calculate a representative time series for these investments. There are various ways of doing this. We have considered two different methods.

The first is based on a model the Bank currently uses for calculating relative volatility. This model was developed by an external supplier. We can use it to model the uncertainty in expected cash flows from infrastructure investments by linking relevant risk factors to historical time series. The method cannot capture all of the idiosyncratic risk in these investments, but could easily be integrated into the Bank's existing framework for calculating expected relative volatility.

The second method is based on an internal risk model where the uncertain variables in each project are simulated and measured against the expected cash flows for the project. The model is used to estimate probability distributions for present value and extreme losses for both individual projects and the overall portfolio of unlisted infrastructure investments. This method will be better at capturing idiosyncratic risk, but cannot readily be integrated into the Bank's existing framework for calculating expected relative volatility. An internal model will also be less transparent and verifiable.

We propose using the model developed externally. We have attached importance here to the model having been developed by an independent party, and to the Bank having lengthy operational experience of the framework with which the model can be integrated. We will nevertheless continue our work on developing the internal model for use in ongoing risk management and analyses of unlisted infrastructure investments.

The Executive Board intends to decide on the method for calculating expected relative volatility at a later date and will submit this to the Ministry for approval before it is taken into use, as required by Section 4-3 of the management mandate. At the same time, the Executive Board will update the method for calculating the limit for expected shortfall (extreme deviation risk) and set the limit for this, cf. Section 3-5 (1) (h).

Other matters
The Ministry proposes defining the term "environment-related investments" in Section 2-4 of the mandate. The new provision is based on the Ministry's presentation of the idea behind these investments in Report to the Storting No. 20 (2008-2009). The investment opportunity set has evolved somewhat since then. To better reflect the opportunity set the definition should include a reference to environmental-related services. Waste management is one example of such services.

The management mandate currently requires a thorough due diligence review ahead of each unlisted investment. It is proposed that Section 4-10 (4) gives the Executive Board the responsibility for setting guidelines for these due diligence reviews. We therefore plan to update the Executive Board's Principles for Risk Management with general guidelines for these reviews.

The Ministry proposes extending the reporting requirements for the environment-related investment mandates. As the Bank wrote in its letter of 29 October 2018, it may eventually be appropriate for a substantial part of the limit for environment-related investments to be used for investments in unlisted renewable energy infrastructure. The detailed reporting requirements for the environment-related mandates should be considered in the light of this.

The Bank has no further comments on the proposals to adjust the mandate provisions to include investments in renewable energy infrastructure. The Bank assumes that the changes to the mandate could enter into force at the same time as the changes to the bond index, cf. the Bank's letter of 12 September 2019.

Yours faithfully

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