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# Investments in unlisted infrastructure in the Government Pension Fund Global

Norges Bank recommended in its letter of 2 December 2015 that part of the fund should be invested in unlisted infrastructure. The Bank wrote: "[It is] reasonable to assume that investments in unlisted infrastructure could result in a better trade-off between risk and return in the GPFG in the long term. The fund's size and long investment horizon may mean that the fund is well-suited to invest in some types of infrastructure." Investment opportunities will vary over time, and the Bank argued that it was not appropriate to commit to a specific schedule for building up the fund's unlisted infrastructure investments. In keeping with this, the Bank's recommendation was that the limit for unlisted infrastructure investments should be defined as an interval of 0-5 percent of the fund's total market value.

In Report to the Storting No. 23 (2015-2016), the Ministry chose not to follow the Bank's advice for the time being. In Recommendation 326 S (2015-2016), the Storting backed the Ministry's position that unlisted infrastructure investments should not be permitted at that time, but asked the Ministry to work further on the matter and present a fresh assessment in its annual report on the management of the fund in spring 2017. As part of this assessment, the government was asked to elaborate on how the risk in these investments can be contained, and how the greatest possible transparency about the management of these investments can be achieved. In its letter of 4 July 2016, the Ministry asked for the Bank's input.

The Bank was also asked to look at how the risk in infrastructure investments has been managed in other funds. Recent years have seen an increase in the financing of infrastructure projects with private capital from large institutional investors.[1] Little information is publicly available on how these investors manage the risk that unlisted infrastructure investments entail. Our impression is that this risk is normally managed through a combination of concrete investment restrictions, thorough due diligence ahead of investments, and continuous follow-up.

In this letter, the Bank outlines a set of investment restrictions that will help limit the risk specific to unlisted infrastructure investments. We also recommend that investments in unlisted infrastructure are regulated using the same model as the fund's investments in unlisted real estate, and discuss how we can ensure the greatest possible transparency

[1] See, for example, Inderst, G. (2013): "Private Infrastructure Finance and Investment in Europe", EIB Working Papers 2013/02, and Della Croce, R. and Yermo, J. (2013): "Institutional Investors and Infrastructure Financing", OECD Working Papers on Finance, Insurance and Private Pensions No. 36.

about infrastructure investments through our public reporting. The Bank has not conducted a new, broad-based review of infrastructure investments at this time, but builds on the analysis behind its advice to allow unlisted infrastructure investments in its letter of 2 December 2015.[2]

**Investment restrictions**

In its letter of 2 December 2015, the Bank wrote: "The risk and return characteristics of infrastructure investments will generally vary with the type of asset – whether it is a development project (greenfield) or already in operation (brownfield), the country or region in which the investment is made, the design of the contract, and the choice of financial instrument." It will be natural to define a set of restrictions that attempt to limit risk along these very dimensions. In the same way as with the fund's other investments, there will still be some risk attached to these investments.

Either the investment restrictions can be defined by the Ministry in the management mandate for the fund, or the Executive Board of Norges Bank can be delegated to set concrete restrictions in specific areas. The latter approach will be consistent with the regulation of the fund's investments in unlisted real estate. The Bank's recommendations for the design of restrictions for unlisted infrastructure investments are as follows:

*Countries*

The operation of infrastructure assets is normally subject to public regulation. Unexpected changes in regulatory conditions can affect the value of these investments. One possible strategy for reducing the risk this presents for the fund is to limit investments in unlisted infrastructure to jurisdictions with well-functioning legal systems where the authorities have experience of private ownership of infrastructure. It may therefore be appropriate to limit the universe for unlisted infrastructure investments to the most developed markets in Europe, North America and Oceania.

*Types of infrastructure*

Infrastructure investments span a broad set of asset types with a long lifespan, such as roads, ports, airports, water and sewage networks, power and telecommunications. If the Ministry permits unlisted infrastructure investments, the Bank will approach investment opportunities and build up expertise gradually. Investments in energy, communications and transport would seem the most relevant options at present. These are growing investment fields where there is both experience and acceptance of private ownership, especially in the first two cases. Restrictions on the types of asset the fund may invest in are a sensible way of limiting the risk that such investments entail.

*Types of project*

The risk in an infrastructure project will vary according to whether it is a greenfield or a brownfield project. In the development and construction phase, there may be risks in areas such as permissions, rights and contract negotiations as well as construction risks and general uncertainty about demand for the service in question. To begin with, it will be appropriate to look at investments in infrastructure where there is a high degree of

[2] NBIM Discussion Notes 2/2013 *Infrastructure investments*, 4/2015 *Renewable energy* and 5/2015 *Infrastructure investments in less mature markets*.

confidence about future income.

*Partnerships/ownership*
It will not be natural for the Bank to make its first infrastructure investments on its own. One possibility may be to invest together with institutions such as multilateral/regional development banks or national infrastructure banks.[3] Collaboration with local partners will provide the requisite local knowledge and facilitate ongoing contact with the authorities in the country after the investment has been made. Partnerships of this kind are commonly used for large infrastructure investments. It could be made a requirement that the Bank must invest with partners, and that the Bank must be a minority investor.

All unlisted infrastructure investments will be preceded by thorough due diligence to confirm that the parties involved in the project have aligned interests. To ensure stable conditions for investments in the longer term, the expected return should reflect the risk in the project in question.

*The risk in unlisted infrastructure investments can be restricted by investing in assets in the energy, communications and transport sectors in developed markets in Europe and North America. Collaboration with partners can be made a requirement, and limits can be set for the fund's ownership stake.*

**Management provisions**
The Ministry announced in its annual report on the management of the fund for 2015 that the fund's benchmark index is to consist solely of listed equities and bonds, while real estate investments are to be included in the limit for tracking error. The Bank has been asked to assess whether unlisted infrastructure investments can be adapted to a model of this kind.

The Bank's view is that unlisted infrastructure investments should be subject to the same type of regulation as the fund's unlisted real estate investments, cf. the Bank's letter of 10 October 2016. This means that unlisted infrastructure investments will not form part of the benchmark index, but will be included in the limit for tracking error. A framework of this kind will allow market and currency risk to be managed at an overall level in the fund. If the Ministry decides to permit unlisted investments in infrastructure, the Bank can return to the issue of how the risk in these investments can be calculated in practice.

The fund's potential investments in unlisted infrastructure will be illiquid and have a long horizon. If unlisted infrastructure is not part of the benchmark index, a decision to invest in unlisted infrastructure will represent a deviation from the benchmark index. Deviations of this kind are of a different nature to the management of the fund's investments in listed equities and bonds. The Bank's reporting and assessment of management results will take account of these differences.

*The fund's investments in unlisted infrastructure should be regulated using the same model as for its investments in unlisted real estate. An upper limit should be set for how much of the fund may be invested in unlisted infrastructure.*

[3] One example of such a national infrastructure bank is the recently announced Canada Infrastructure Bank.

**Operationalisation**
If the Ministry permits unlisted investments in infrastructure, the Bank will, as we wrote in our letter of 2 December 2015, approach investment decisions and build up expertise gradually and in the same way as for our first investments in unlisted real estate. Infrastructure investments will be small in number but high in value. Unlisted infrastructure investments are cost-intensive and require different follow-up to listed investments, but can be handled by far fewer employees than the management of unlisted real estate investments.

*The Bank will be able to build on existing expertise and decision-making structures in the operational implementation of unlisted investments in infrastructure.*

**Transparency**
The Bank attaches great importance to transparency about the management of the fund. Our goal is for the people of Norway and others to be able to find all the information they require about the fund and all of its investments.

Our public reporting provides a true and comprehensive overview of how the Bank executes its management duties. The Bank's quarterly and annual reports on the management of the fund consist of an accounting part and a descriptive part. The financial statements are prepared in accordance with International Financial Reporting Standards (IFRS). These require the reports to present information on the policies used to value instruments in the fund, the measurement methods that we use, our investment results and an assessment of risk in the fund. Through this public reporting, the Bank aims to provide the broadest possible account of the results of its management.

The Bank also publishes other types of information and analyses to increase public awareness of how we discharge our management duties. Key publications in this regard are our discussion notes, position papers, asset manager perspectives and expectations documents. The Peterson Institute ranks the fund as the most transparent of all sovereign wealth funds.[4]

In our public reporting, we will aim to paint the broadest possible picture of the drivers of returns on infrastructure investments and the types of risk these investments expose the fund to. We published a separate report on the fund's unlisted real estate investments for the first time in 2016. We will aim to provide the same detailed information on the fund's unlisted infrastructure investments.

*The Bank will provide the same detailed information on the fund's investments in unlisted infrastructure as on the fund's other investments.*

Yours faithfully

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[4] Source: Peterson Institute for International Economics, https://piie.com/system/files/documents/pb16-18.pdf.