

Ministry of Finance
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Government Pension Fund Global – Investments in real estate

In December 2014, the Ministry of Finance announced plans to review the upper limit of 5 percent for real estate in the Government Pension Fund Global (GPFG). In its letter of 26 March 2015, the Ministry asked Norges Bank for advice and analysis on how investments in real estate can help improve the trade-off between risk and return in the GPFG. The Bank's assessments and recommendations are set out below. The Ministry also asked the Bank to assess whether the GPFG should be permitted to invest in unlisted infrastructure, and how investments in real estate and infrastructure should be regulated in the management mandate from the Ministry. These two questions are addressed in separate letters from the Bank.

In its letter of 20 October 2006, Norges Bank recommended a strategic target of investing up to 10 percent of the GPFG in real estate and infrastructure. We argued that investments of this kind would yield diversification gains that improve the trade-off between risk and return. The Bank has now been asked to make a fresh assessment. We begin by discussing how real estate investments affect the trade-off between risk and return in the Fund. We then outline our experience of investing in real estate, before summarising the Bank's recommendations for real estate investments. The assessments in this letter build on the analysis in NBIM Discussion Notes 1/2015 *The diversification potential of real estate* and 2/2015 *Global trends and their impact on real estate*.

Investments in real estate – Risk and return characteristics

Real estate is the third-largest asset class behind equities and bonds. When the Ministry allowed real estate investments in Report to the Storting No. 16 (2007-2008), it stressed that the GPFG is to be a highly diversified and global portfolio and should therefore be exposed



to an asset class as large as real estate. Most of the GPFG's peers invested in real estate, and the Ministry found it hard to see why the GPFG's strategy should depart significantly from that of other large global funds. The Ministry also emphasised that investments in real estate could help improve the diversification of risk, and that the GPFG's special characteristics made it well-suited to take on the risk associated with investments of this kind.

To understand how real estate investments can result in a better-diversified portfolio in the long term, we have examined the relationship between real estate returns and a number of underlying drivers of these returns: economic growth, inflation and interest rates. Economic growth impacts positively on real estate returns through increased employment and retail sales, for example, which boost the demand for premises. Our analysis confirms a long-term relationship between economic growth and the return on unlisted real estate investments, and that this relationship is stronger for real estate than it is for equities.¹ We also find a positive relationship between consumer price inflation and real estate returns, but with significant variations between countries and sectors. The relationship between real estate returns and changes in interest rates is not as clear, however, and depends on the underlying cause and the speed of the change.

Another approach is to analyse the level of correlation between real estate returns and returns on the GPFG's other investments. One general challenge here is the limited availability of long-term and high-quality data. Different studies have dealt with this challenge in different ways. The conclusion of almost all these studies, and of our own analysis, however, is that investments in real estate help improve the trade-off between risk and return, although the correlation will vary over time.

Analyses of historical return series show that factors such as a building's location, design, condition and tenant types are the most important sources of risk and return for individual investments. For the GPFG, the issue is whether this risk is eliminated as the real estate portfolio grows. Studies find that it is not possible to diversify away all such risk. This also results in an opportunity for the manager to create value through active choices, and a need for in-depth knowledge of the real estate markets the Fund is invested in.

Norges Bank believes that real estate investments help improve the trade-off between risk and return in the GPFG.

Investments in real estate – The Bank's experience

In 2010, Norges Bank was given a mandate to invest up to 5 percent of the GPFG in real estate. The Fund's market value was around 3,000 billion kroner at the time, and 5 percent was equivalent to around 150 billion kroner. We have gradually built the portfolio up towards the levels we assumed when we were awarded the mandate. At the end of the third quarter of 2015, the GPFG had 208 billion kroner invested in real estate. Because the Fund's market

¹ See, for example, NBIM Discussion Note 5/2012 *Economic growth and equity returns*.



value is now much higher than it was in 2010, this corresponds to just over 3 percent of the Fund.

The first real estate investments were made in the largest European markets. The number of countries has gradually been increased, and we now manage a global, but concentrated, real estate portfolio with investments in selected major cities and global distribution networks. Of the unlisted part of the real estate portfolio, 46 percent is invested in the US and 54 percent in Europe. Office properties make up around 60 percent of the Fund's unlisted real estate investments, the other two main sectors being logistics and retail, which account for 27 and 14 percent respectively. Investing in both unlisted and listed real estate gives us access to a broader set of investment opportunities. The mix of unlisted and listed real estate investments will vary over time and depend on local market conditions, but stood at 77/23 at the end of the third quarter of 2015.

The Fund's size, long investment horizon and capacity to hold illiquid assets are defining characteristics that may be an advantage in large real estate transactions. We can submit bids that are not contingent on financing, we can take the time needed to develop a property, and we have no need to sell assets to meet short-term liquidity requirements. Together with other investors, we are supporting work on a global reporting standard for sustainability in the real estate market (the Global Real Estate Sustainability Benchmark – GRESB).² Energy efficiency, water consumption and waste management are key factors in our investment appraisal ahead of a transaction. Large ownership stakes provide a good starting point for being a responsible real estate manager.

Unlisted real estate investments are less standardised than investments in listed instruments. We have chosen to make most of our investments through partnerships (joint ventures) with established real estate investors. Our partners bring the necessary local knowledge and experience from the management of large real estate investments. All of our unlisted real estate investments are organised through subsidiaries in order to limit Norges Bank's liability and so protect the Fund's other investments and the rest of the Bank's balance sheet. Investing through subsidiaries is the most common way of organising unlisted real estate investments and serves to make the investments more marketable. The Bank is currently exploring the possibility of grouping its subsidiaries into regional holding structures for Europe, the US and Asia. In this context, we are considering whether it would be appropriate to use Norwegian rather than foreign holding companies. We plan to return to this issue in a separate letter to the Ministry.

The cost of managing an unlisted real estate portfolio is higher than that of managing listed equities and bonds. Properties are not bought and sold in a regulated marketplace but through individual contracts. The day-to-day management of the portfolio also requires more practical follow-up. We have attached considerable importance to establishing cost-effective structures. This also applies to tax, which can be a significant cost item in some cases. The

² For a discussion of the sustainability of the real estate market, see NBIM Discussion Note 2/2015 *Global trends and their impact on real estate*.



GPFG's total management costs going forward will depend on the investment strategy for real estate. Costs will vary with the type of property, the type of lease and how ownership of the property is structured. Responsibility for the details of the real estate strategy has been delegated to Norges Bank, and the results need to be assessed on the basis of the net return after all costs. We expect the GPFG's total management costs to rise if the limit for real estate investments is raised, but we still expect to be able to manage the Fund within the current budget for management costs of 9 basis points.

Our experience has been that there are limited synergies at an operational level between real estate investments and the Fund's other investments, and we have therefore organised real estate management as a separate unit with a clear decision-making structure. The real estate department had 96 employees at the end of November 2015. An additional 16 staff were employed at the subsidiary in Luxembourg, and three at the subsidiary in Tokyo.³ The number of employees in the real estate operation will increase as more of the Fund is invested in real estate. The size of this increase will depend on the strategy pursued – for example, the balance between fully and partly owned properties, and the balance between listed and unlisted real estate investments. Economies of scale in the operational management of the portfolio indicate, however, that the workforce will not grow at the same rate as the portfolio.

Since its inception, the real estate portfolio has returned 6.9 percent per year measured in the Fund's currency basket, and 6.4 percent in local currency. The return on real estate investments is a combination of rental income and appreciation in property values, which have contributed around 45 and 55 percent respectively of the return since inception. Transaction costs when investing in unlisted real estate are substantial and have reduced returns by 1.4 percentage points since inception, giving a return before transaction costs of 8.3 percent measured in the Fund's currency basket. During the same period, a portfolio comprising 60 percent equities and 40 percent bonds has returned 6.6 percent before transaction costs. As transaction volumes fall in relation to the size of the portfolio, the negative contribution from transaction costs will decrease. We are already seeing this effect: transaction costs have reduced real estate returns by just 0.2 percentage point so far in 2015. Public reporting on risks and returns in the real estate portfolio is to be extended with a separate real estate report in which we aim to provide the broadest possible picture of the drivers of returns on our real estate investments, the types of risk these investments are exposed to, and the costs that are incurred in the various parts of their management.

Norges Bank believes that the organisational and operational basis for a further increase in real estate investments is in place.

Investments in real estate – The Bank's recommendations

³ NBIM S.à r.l. and NBRE Management Japan Advisors K.K. (wholly owned by Norges Bank's subsidiary NBRE Management Singapore Pte. Ltd.).



Investments in real estate help improve the trade-off between risk and return in the GPF, and the organisational and operational basis for a further increase in real estate investments is in place. The question of how much of the Fund should be invested in real estate cannot be answered precisely. One approach is to look at the share of total global wealth invested in real estate, which can be estimated at between 10 and 15 percent. Another approach is to estimate an “optimal” allocation based on expected returns, risks and correlation between different types of investment. Estimates of this allocation in academic studies vary but are normally between 10 and 20 percent. A third approach is to look at how much of their portfolios other investors allocate to real estate. Reports from the Ministry’s external advisors on peer comparisons and our own review suggest an average allocation of around 10 percent.⁴ The investors believed to have the longest horizons have a slightly higher allocation. Norges Bank’s conclusion is that the allocation to real estate in the GPF at this stage should be raised to 10 percent.

Investments in unlisted real estate are less liquid than investments in listed equities and bonds. Limited liquidity means that an investor forced to make a quick sale has to expect a lower price than would otherwise have been the case. The Bank’s unlisted real estate investments are currently concentrated in the largest and most liquid real estate markets. We also consider the likelihood of the owner making large unexpected withdrawals from the Fund to be limited. Even then, most of the Fund will still be invested in assets that can be sold quickly without incurring unnecessary costs, and investment income is expected to exceed withdrawals from the Fund.

The balance between equities, bonds and real estate will change in periods when prices in these markets move differently. It is important that the provisions for the GPF’s real estate investments are designed in such a way that Norges Bank is not forced to make unfavourable portfolio adjustments. These considerations indicate that the target for real estate in the Fund should not be defined as a fixed allocation but as an interval. The Bank believes that an interval of +/- 5 percentage points around a target level of 10 percent would be appropriate.

Norges Bank has previously argued that an increase in the Fund’s investments in real estate and other types of real assets should be matched by a reduction in the Fund’s bond investments.⁵ That is still our opinion. We refer to our letter on a new framework for the management of the GPF for a more detailed account.

Norges Bank believes that the target for real estate investments in the GPF at this stage should be raised to 10 percent. The allocation should be defined as an interval of +/- 5 percentage points around this target level.

⁴ CEM Benchmarking Inc.

⁵ Norges Bank’s letter to the Ministry of Finance of 6 July 2010 *Development of the investment strategy for the Government Pension Fund Global*.



Yours faithfully

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