NORGES BANK
INVESTMENT MANAGEMENT

Real estate investments

Government Pension Fund Global

2018

No. 04

Our mission is to safeguard
and build financial wealth
for future generations

2018 in figures

7.5%

Investments in unlisted real estate returned **7.5** percent in 2018.

9.3 billion kr

Net rental income was **9.3** billion kroner. The occupancy was **95.3** percent, and the average remaining lease length was **8.3** years.

3.0%

Investments in unlisted real estate accounted for **3.0** percent of the fund at the end of 2018.

2018	**246 billion kr**
2017	**219 billion kr**
2016	**191 billion kr**
2015	**180 billion kr**
2014	**106 billion kr**

The market value of the fund's unlisted real estate investments was **246** billion kroner at the end of 2018.

737 properties

The fund held **737** properties in its portfolio totalling **14** million square meters. Investments were spread across **14** countries.

Contents

1

RESULTS

1.1 CEO letter 9

1.2 Investing in real estate 10

1.3 Key figures 21

2

INVESTMENTS

2.1 Investments in Europe 25

2.2 Investments in the US 33

2.3 Investments in Asia 40

3

REAL ESTATE MANAGEMENT

3.1 Investment process ______ 45

3.2 Risk management ______ 48

3.3 Valuations ______ 54

4

INCOME AND COSTS

4.1 Income ______ 58

4.2 Costs ______ 61

4.3 Cash flow ______ 66

1

Results

Stabilizing the portfolio

The fund's real estate investments returned 7.5 percent in 2018. Rental income continues to be stable, and capital values continue to grow despite volatile financial markets. Our real estate portfolio provides diversification as an asset class with seemingly low correlation with listed equities and bonds.

Oslo, 20 March 2019

Karsten Kallevig
Chief Executive Officer of
Norges Bank Real
Estate Management

2018 was another year marked by uncertainty. Long interest rates rose significantly in most of our markets during the year, while coming back down at the end of the last quarter. This created some uncertainty about the direction and speed of yield movements. Political uncertainty surrounding the UK's future relationship with the EU, continued to affect the London investment and occupier market. In most of our markets, vacancy remains low, creating a buffer against cash flow volatility.

In 2018, Norges Bank Real Estate Management sold 7 billion kroner worth of assets and acquired assets for 13 billion kroner. While we continue our strategy to own assets with long term potential in our core markets, there is also a natural adjustment of the portfolio taking place over time. We have now been actively acquiring assets for more than eight years, and minor directional changes in strategy, or unforeseen developments in individual assets may trigger disposals.

Since the fund's mandate was expanded to include investments in unlisted real estate in 2010, our portfolio and organisation have reached a level of maturity where growth no longer is a core motivation. Our portfolio is one of the largest among institutional owners globally, and our organisation consists of highly capable individuals operating within a framework that leverages our presence globally.

We continue to operate efficiently, professionally and commercially, for the benefit of the fund and its stakeholders.

Investing in real estate

We invest in real estate to improve the fund's risk-return profile and to achieve a more diversified portfolio.

The fund has gradually built a global, but concentrated portfolio of office and retail properties in selected cities around the world, as well as logistics properties that are part of global distribution networks.

Real estate returns have had varying, and at times low, correlations with equities and fixed income, which means that the inclusion of real estate has reduced the fund's total risk. The specific risks that come with real estate investments are diversified by their size and number.

Since both rents and construction costs are influenced by inflation, real estate has historically preserved its real value over time, in addition to providing income through rents.

The income return is typically not sensitive to short-term market changes, as it is usually based on stable long-term leases with different expiry dates. This protection is particularly evident in our high-quality buildings with low vacancy.

Our strategy is based on the fund's overall objective and aims to take advantage of our long-term investment horizon, limited liquidity requirement, and significant portfolio size. We invest in high-quality properties that can deliver good risk adjusted returns over time.

Strategic sectors

We target sectors where we can efficiently deploy our capital. The office sector forms the backbone of our strategy. We invest in high-quality office buildings that will remain attractive and relevant for tenants. Office investments

Chart 1 Investments by sector as at 31 December 2018. Percent

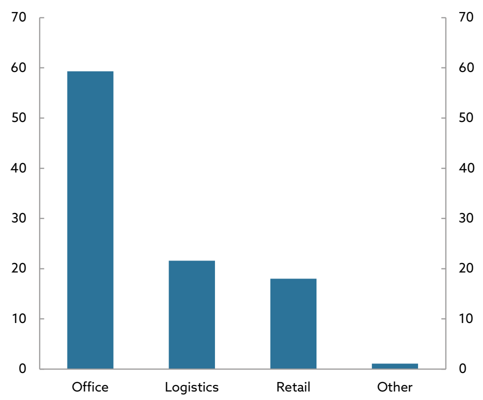
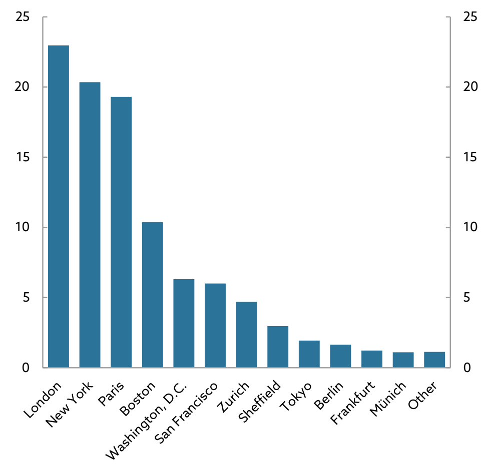


Chart 2 Investments in office and retail by city as at 31 December 2018. Percent



made up 59.3 percent of our portfolio at the end of 2018, compared to 58.2 percent at the end of 2017.

The retail sector is adapting to the rise in e-commerce. We invest in prime high-street retail properties that will complement e-commerce and continue to attract retailers and customers. Retail investments made up 18.0 percent of our portfolio at the end of 2018, compared to 19.4 percent at the end of 2017.

The logistics sector has grown with globalisation, and the rise in e-commerce has increased the need for high-quality warehousing in proximity to consumers. We invest in logistics properties that are part of global distribution networks and located near key transport infrastructure and sizeable population centres. Logistics investments made up 21.6 percent of our portfolio at the end of 2018, compared to 21.2 percent at the end of 2017.

Strategic cities

We target a limited number of global cities in Europe, the US and Asia, with common characteristics. These cities have transparent real estate markets with sufficient scale, expected population and/or employment growth, and potential for economic growth and increased trade.

The cities typically have regulatory or topographical constraints on the development of new real estate, resulting in less fluctuation in supply. They tend to be highly connected to the global economy, have well developed infrastructure, and attract financial, intellectual and cultural capital that drives demand.

At the end of 2018, 90.0 percent of our office and retail investments were concentrated in 9 strategic cities in Europe, the US and Asia. Our largest single city exposure was to London at 23.0 percent, followed by New York at 20.3 percent and Paris at 19.3 percent.

Chart 3 Investments by country as at 31 December 2018. Percent

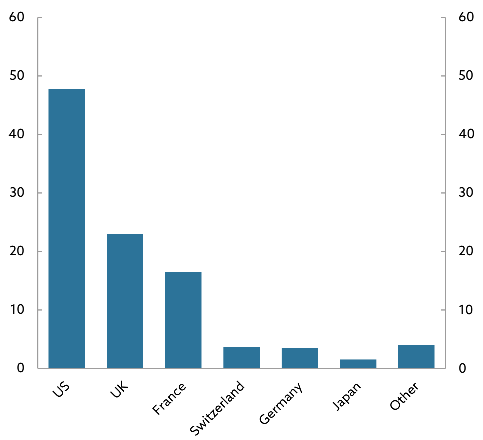
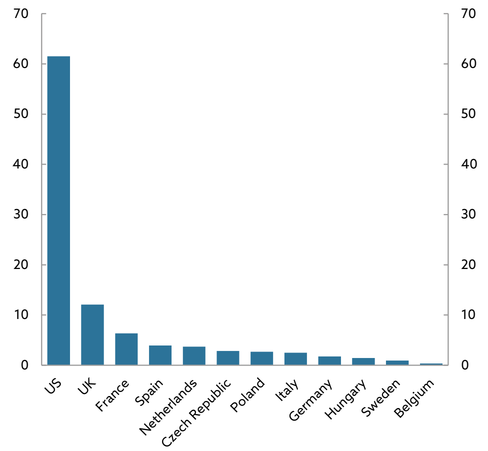


Chart 4 Investments in logistics by country as at 31 December 2018. Percent



Partnerships

We have chosen to partner with large, well-known and respected investors with a local presence and a long-term investment horizon, whose interests align with those of the fund.

We invest with partners to benefit from their local knowledge and expertise. Investing with local partners improves our access to market information and investment opportunities.

Asset management

Asset management of our properties is key to maximise the return on our investments and to control the associated risks.

For our joint venture assets, we review and approve annual business plans, budgets, the signing or renewal of major leases, significant works and capital expenditure, and other material matters for each property. This ensures control over major decisions and that the management and operation of our investments align with our strategy and expectations.

For our wholly-owned assets, we also develop and implement business plans, manage leasing to ensure stable cash flows and the right tenant structure, identify accretive asset management initiatives, and perform works or redevelopment projects.

Table 1 Investment partners as at 31 December 2018. Percent

Investment partner	Region/country	Sector	Share of portfolio
Prologis US	US	Logistics	13.3
Boston Properties	US	Office	8.6
Prologis Europe	Europe	Logistics	8.3
Trinity Church Wall Street	US	Office	8.0
The Crown Estate	UK	Retail and office	7.6
TH Real Estate	US	Office	6.9
MetLife	US	Office	5.4
AXA Real Estate France	France	Office and retail	3.6
British Land	UK	Retail	2.3
AXA Real Estate Germany	Germany	Office and retail	2.3
Kilroy Realty	US	Office	2.0
PGIM Real Estate	US	Office	1.6
Tokyu Land Corporation	Tokyo	Retail and office	1.5
Generali Real Estate	France	Office and retail	1.5
American Realty Advisors	US	Office	0.7
Oxford Properties Group	US	Office	0.7
Total			**74.1**

Managing our investments internally increases our operational control and understanding of the assets and the market. It may also reduce costs. Complex or intensive asset management is outsourced.

Debt

We do not normally raise external debt. However, some investments are encumbered with debt at the time of the acquisition, and some investment partners require it.

At the end of 2018, 32 assets had an element of debt, with a total loan-to-value ratio of 7.0 percent for the whole portfolio. Of this debt, 27.9 percent was in British pounds, 48.7 percent in US dollars, 19.5 percent in Japanese yen and 3.9 percent in euros.

Table 2 Debt maturity as at 31 December 2018. Millions of kroner

	Debt
More than 5 years	14,344
Between 1 and 5 years	3,304
Within 1 year	712
Total	**18,361**

Environmentally sustainable management

We invest and manage our portfolio in a focused, responsible and environmentally sustainable manner.

Environmentally sustainable management of our properties supports our objective of a high long-term return.

Our goal over time is to obtain a green building certification for all our office and retail properties. We believe that green building certifications will be increasingly important for a building's competitiveness.

Changes in market value

The net market value of the fund's unlisted real estate investments was 246.0 billion kroner at the end of 2018. Since inception, 152.9 billion kroner has been allocated from the fund's fixed-income and equity portfolios, and we have reinvested 29.1 billion kroner of income.

Changes in property and debt values have contributed 33.9 billion kroner to the net asset value, and a positive currency effect has contributed 30.2 billion kroner.

Chart 5 Investments per sector by region

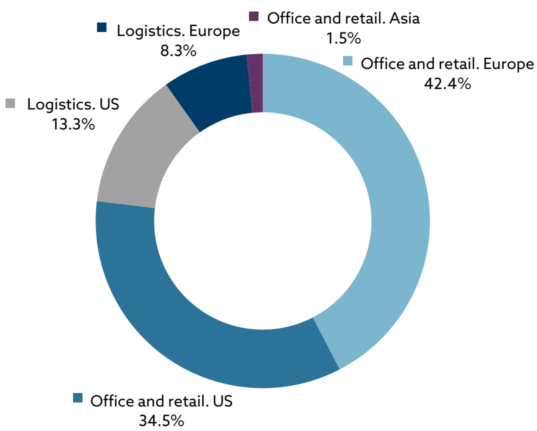


Table 3 Changes in net asset value of investments by market. Millions of kroner

	Total	Europe	US	Asia	Group cash
Net value real estate as at 31 December 2017	218,643	113,524	100,151	3,485	1,483
Payments to new investments	12,710	8,702	4,007	0	0
Repayments from sales	-4,717	-3,605	-1,112	0	0
Payments for property development	1,562	502	1,060	0	0
Repayments from ongoing operations	-1,430	-1,315	0	-116	0
Net payments external debt	513	0	513	0	0
Unrealised gain/loss	10,599	5,746	4,801	53	0
Foreign currency translation effect	7,442	850	6,273	299	20
Changes in cash and other net assets	691	0	0	0	691
Net value real estate as at 31 December 2018	**246,013**	**124,404**	**115,693**	**3,721**	**2,195**

Chart 6 Changes in the market value. Billions of kroner

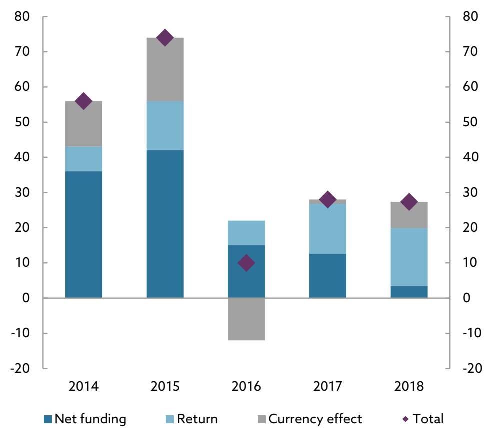


Chart 7 Accumulated changes in the market value. Billions of kroner

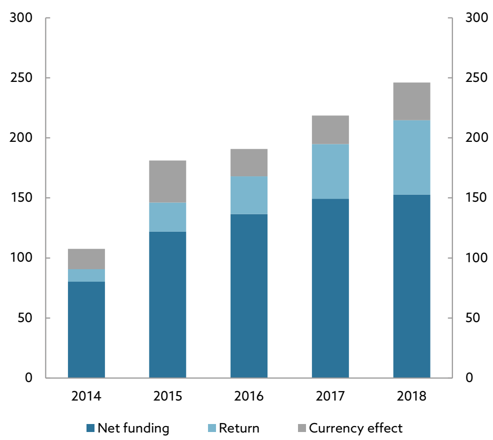


Chart 8 Change in the market value during 2018. Billions of kroner

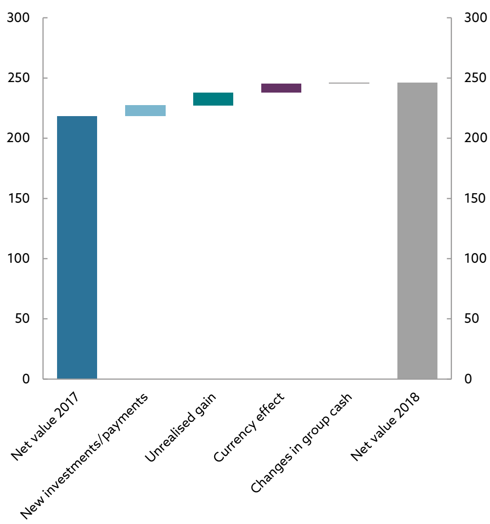
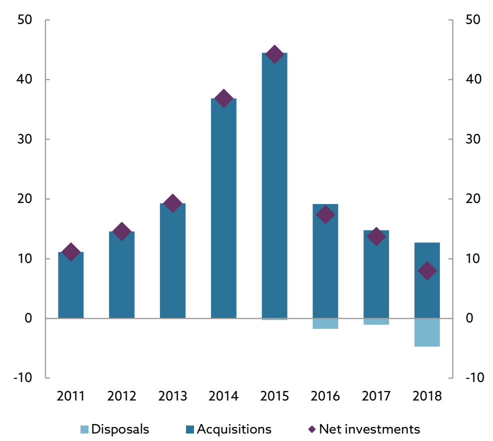


Chart 9 Annual investments. Billions of kroner



Unlisted real estate investments

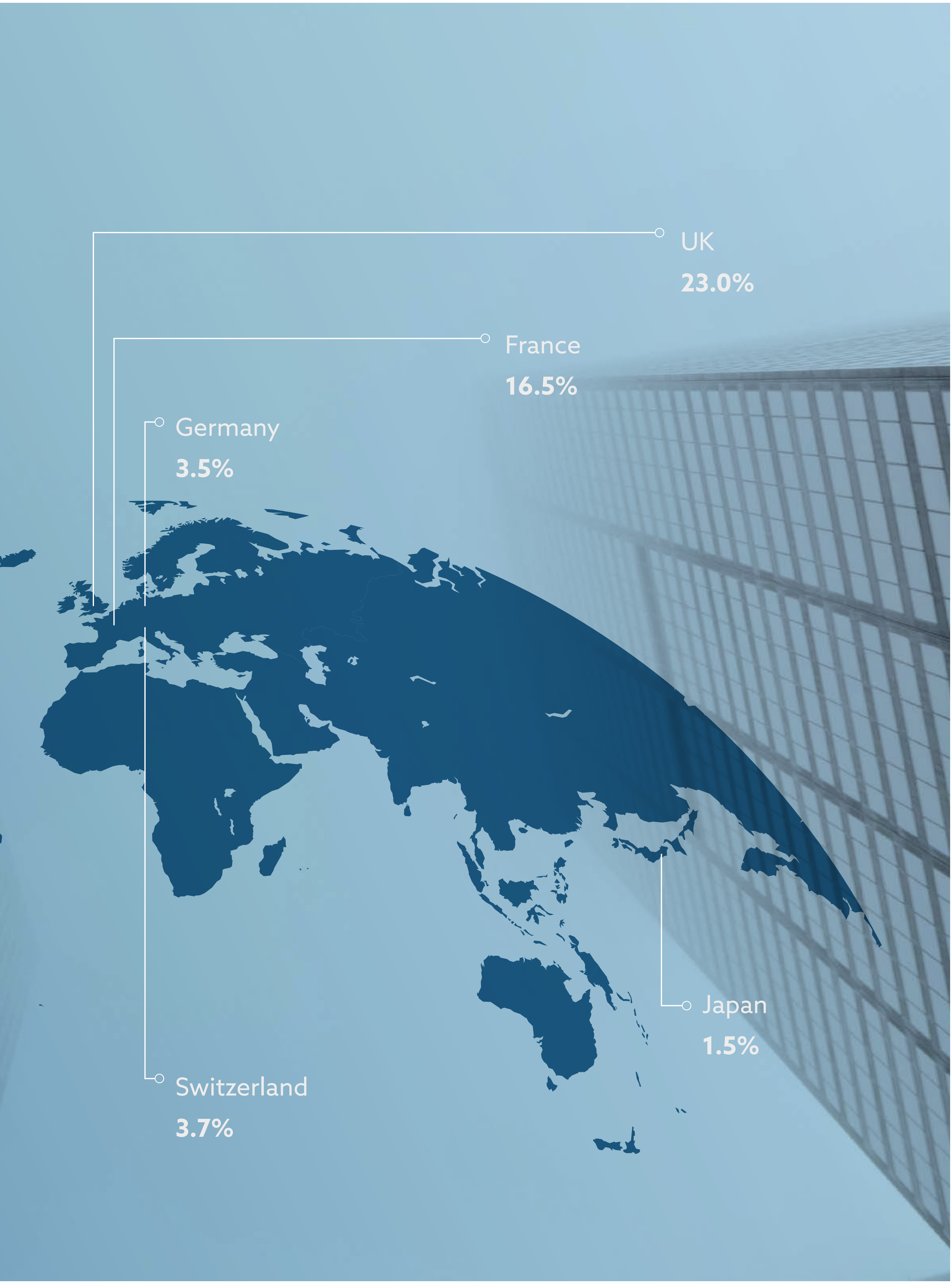
Share of market value

US

47.8%

Other countries

4.0%


UK
23.0%
France
16.5%
Germany
3.5%
Switzerland
3.7%
Japan
1.5%

Return
Percent

Key figures 2018

The fund's investments in unlisted real estate returned 7.5 percent in 2018. Measured in local currency, the return was 7.6 percent.

The return on unlisted real estate investments depends on rental income, operating costs, changes in the value of properties and debt, leverage, movements in exchange rates, and transaction costs.

Income return comprises net rental income less operating costs. Operating costs consist of interest on external debt, taxes, fixed asset management fees, and costs at management companies and cash in the holding structure.

Capital return comprises realised gains and losses, changes in the fair value of properties, external debt and other assets and liabilities, and variable asset management fees. Measured in local currency, the income return was 3.6 percent in 2018, compared to 3.7 percent in 2017. The capital return was 4.1 percent, compared to 3.8 percent in 2017. Transaction costs reduced the return with 0.2 percentage points.

Exchange rate movements contributed -0.1 percent in 2018 due to the currency composition of our real estate investments being different from the fund's currency basket.

Since inception in 2011, the unlisted real estate portfolio has generated an annualised return of 6.4 percent in local currency. The annualised five-year return has been 8.0 percent measured in local currency. The money-weighted return since inception has been 7.4 percent.

Table 4 Annual return. Percent

	Since inception[1]	2018	2017	2016	2015	2014
Income return	3.9	3.6	3.7	3.7	4.1	4.4
Capital return	3.6	4.1	3.8	0.7	6.7	7.1
Transaction cost	-1.2	-0.2	-0.2	-0.2	-0.2	-0.8
Currency effect	0.0	-0.1	0.1	-2.5	0.1	-1.0
Total	**6.4**	**7.5**	**7.5**	**1.7**	**10.8**	**9.6**

[1] From March 2011.

Return comparison
We report results quarterly and annually. However, longer time series provide a better understanding of the performance of our assets. Since our first investment in 2011 and until the end of 2016, the annual return on the fund's unlisted real estate investments was 6.0 percent. In this period, the real estate investments were funded by the fund's fixed income portfolio. The annual return on the fixed income benchmark was 4.4 percent in this period. From 2017, unlisted real estate was funded with a mix of fixed income and equities. This funding benchmark returned -2.1 percent in 2018 and unlisted real estate 7.5 percent. The equivalent figures for 2017 were 6.8 percent and 7.5 percent, respectively.

Unlike for listed assets, there are no replicable or investable indices for unlisted real estate. Therefore, benchmarking serves as an indicative assessment of historical returns, rather than forming a basis for asset allocation.

The MSCI Global Annual Property Index, or MSCI Global, is an appraisal-based global benchmark for unlisted real estate and serves as the main source of benchmarking for our property returns.

The index covers 25 countries, including all markets and sectors we are invested in, but for 2011-2012 we have adjusted the weights to only include pan-European investments to reflect the investment mandate in that period. The office and retail sectors are the main sectors in the index, similar to the fund's portfolio. MSCI Global measures property-level performance, excluding elements related to corporate structures such as impacts of leverage, cash, tax and management fees. It is important to note that the portfolio's focused investment strategy leads to differences between portfolio and benchmark performance.

The MSCI Global data are not published until the second quarter, and 2018 figures were not available at the time of finalizing this report.

Results
In the period 2011-2017, the fund's property-level annualised return was 8.2 percent, equal to the MSCI Global return of 8.2 percent. Although the return is in line with the benchmark, there are regional and sectoral differences between the two. Prior to 2013, NBREM had a portfolio concentrated in two European countries leading to large deviations from the benchmark. From 2013, the fund's portfolio also includes US, and Japan was added in late 2017.

In the period 2013-2017, the fund's property level annualised return was 8.9 percent, compared to an MSCI Global return of 9.1 percent. Neither overall country weighting nor sector weighting had significant impact on the fund's return difference versus MSCI Global, but overweight to the US logistics sector and the UK had positive effects.

Table 5 Return on unlisted real estate and funding return, measured in the fund's currency basket. Percent

	2018	2017	2016	2015	2014
Return unlisted real estate	7.5	7.5	1.7	10.8	9.6
Funding benchmark[1]	-2.1	6.8	4.2	0.6	7.6
Return difference funding benchmark	**9.6**	**0.8**	**-2.5**	**10.2**	**2.1**

[1] Funding benchmark was fixed income until 2016 and a mix of equities and fixed income thereafter.

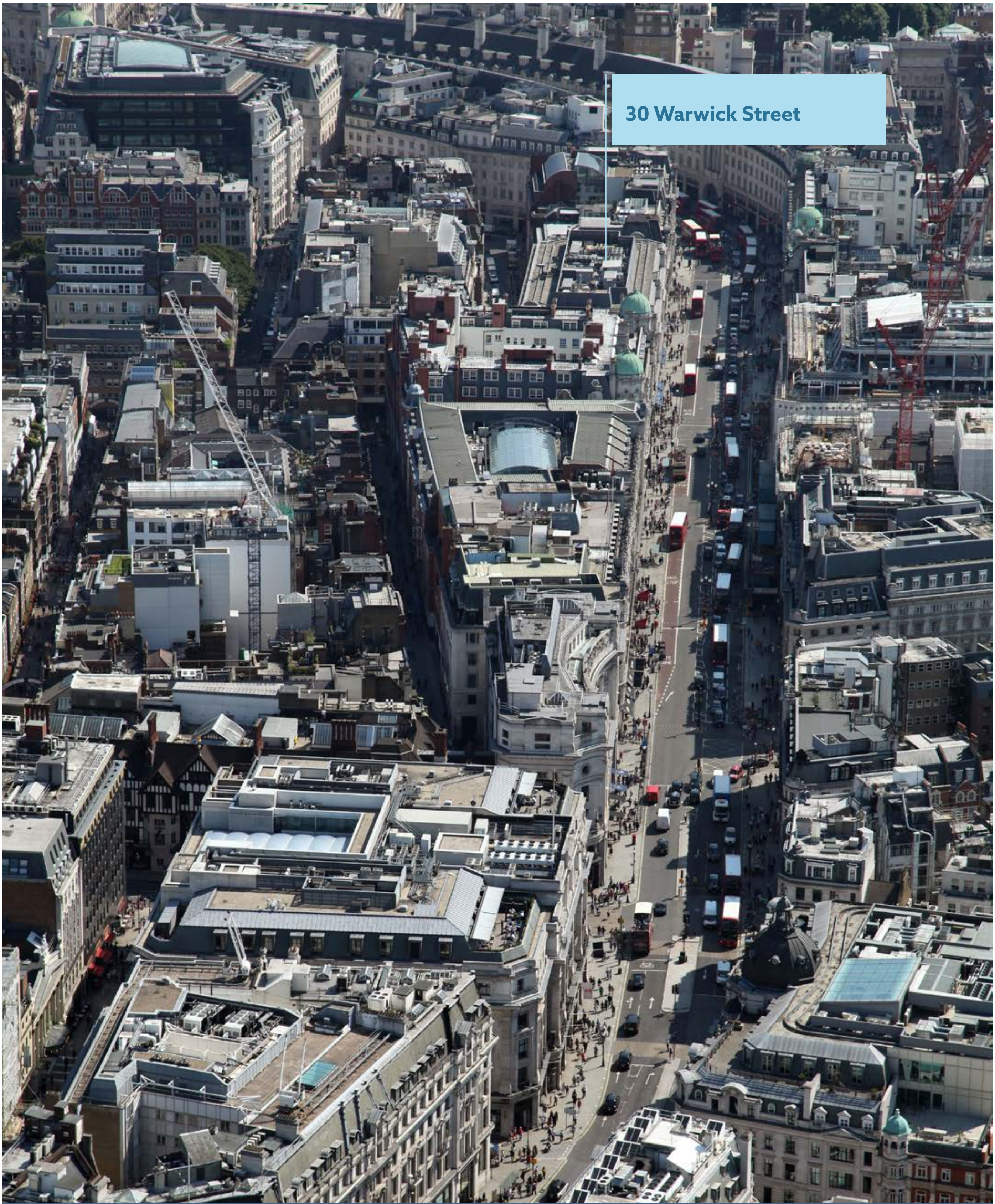
Table 6 Property returns measured against MSCI Global, measured in local currency. Percent

	2018[2]	2017	2016	2015	2014
Property return unlisted real estate investments	7.9	8.4	5.6	10.6	11.4
MSCI Global[1]	n/a	8.3	7.7	10.9	10.1
MSCI Global, portfolio weights	n/a	8.6	6.9	11.6	11.4
Return difference to MSCI Global	**n/a**	**0.1**	**-2.1**	**-0.3**	**1.2**
Return difference to MSCI Global, portfolio weights	**n/a**	**-0.2**	**-1.3**	**-1.0**	**0.0**

[1] Adjusted for transaction costs.
[2] MSCI figures for 2018 were not available at the time of print.

2

Investments



30 Warwick Street, London
In June 2018, the fund announced the acquisition of a 25 percent interest in a property located at 30 Warwick Street in London in joint venture with The Crown Estate. The property comprises 7,000 square meters of office space.

Investments in Europe

Rental growth for French and German offices strengthened in 2018, while rents in the UK remained stable. The retail sector experienced some challenges, although prime high street retail continued to be the best segment within retail due to low vacancy and stable rents.

Market trends
European markets showed mixed performance in 2018. Offices in the German and French cities had strong occupier demand, while the London office demand was more moderate. Vacancy increased slightly on most key shopping streets, although Regent Street and Bond Street in London were resilient. In logistics, vacancy decreased in many countries in Europe outside the UK, as tenant demand for logistics space continued to be high.

The UK market
Office vacancy in London increased, although in the West End conversion of use to residential limited the increase in office vacancy which remained at 3.3 percent. Vacancy increased more notably, and is at a higher level for the other major London office sub-markets.

Office rents, as well as incentive packages, such as rent-free periods offered by landlords, remained stable across all central submarkets. Prime West End office rents ended the year at 105 pounds per square foot per year. Office investment transactions in Central London fell 7 percent to around 14 billion pounds in 2018.

Retail rents remained stable in most prime locations in London, despite problems in the wider retail sector with a number of store closures and failures for nationwide retail operators. Regent Street continues to record relatively low vacancy levels at 4.1 percent – a 1.1 percentage point increase during the year. In neighbouring Oxford Street, vacancy declined to 3 percent.

Transaction volumes for retail high street units in Central London moved higher compared to 2017, to around 1.1 billion pounds, in line with the 5-year average prior to the referendum.

In the UK logistics market, vacancy increased by 1.5 percentage points, to 7.3 percent, despite a firm increase in take-up during the year, supported by continued growth in e-commerce. Completions of modern industrial property rose marginally on 2017 representing 4.2 percent of stock. Transaction volumes for the logistics sector returned to more normal levels in 2018 at 7.9 billion pounds, having recorded more than 10 billion pounds in 2017.

The French market
In Paris, the office market saw stronger occupier activity and reduced vacancy. Vacancy in the Central Business District fell from 2.9 percent to 1.4 percent and in Paris Centre West from 3.2 percent to 2.7 percent.

Office rents in Paris' Central Business District as a whole were steady over the year, but rose 5 percent in Paris Centre West. Effective rents in Paris Centre West have increased even more as tenant incentive packages by landlords have been reduced. The La Défense submarket remains the slowest with stable rents in 2018, although vacancy fell 2.6 percentage points to 4.9 percent – the lowest level since 2009.

Central Paris office transaction volumes were up in 2018, to around 9.3 billion euros.

Prime retail rents in Paris continued to rise despite a slight increase in vacancy levels. Prime retail rents on Place Vendôme and Place de la Madeleine increased around 25 percent, with similar increases also occurring in rue St. Honoré and on boulevard Haussmann. In Champs Élysées rents rose 5.0 percent.

In the French logistics market, vacancy has fallen to 4.7 percent, which is the lowest level in over a decade, down 9.5 percentage points since 2010. Despite the declines in vacancy, rental growth was modest across many logistics centres with rents flat in the Paris and Lille regions and up only marginally in Lyon and Marseille.

The German market

In Germany, Berlin recorded 11.7 percent annual rental growth, the highest among the large office markets in Germany for the third consecutive year. Munich was also among the best performing cities in Germany, with a 4.1 percent rise in office rents. In the high-street retail market, rents were unchanged across most major German cities.

The office transaction volume in Berlin was 4.8 billion euro in 2018, the second highest investment volume in at least 15 years.

In the German logistics market, transaction volumes decreased somewhat on the record volumes in 2017. Nationwide, vacancy for logistics in Germany was at 2.6 percent, the lowest of the major markets in Europe. This has put upwards pressure on rents. Logistics rents in Berlin rose 18 percent during 2018, while other major metro areas on average rose 2 to 5 percent.

Our investments in Europe

Investments in Europe made up 50.7 percent of our real estate investments at the end of the year and returned 7.5 percent. Investments in office and retail made up 83.5 percent of the total European portfolio and returned 6.3 percent.

Our office and retail investments

We had investments in 180 office and retail properties in Europe at the end of 2018. We have 155 properties in London, including our Regent Street and Pollen Estate portfolios, and 18 properties in Paris. We also have 3 properties across Munich, Berlin and Frankfurt.

The investments consisted of 59.8 percent offices and 40.2 percent retail. Included in this portfolio are also minor residential and other sectors. The three largest tenants were Credit Suisse with 10.9 percent of the European office and retail rent roll, Bank of America Merrill Lynch with 9.4 percent and Sanofi with 4.1 percent. The ten largest tenants generated 33.5 percent of rental income, and the average remaining lease term was 12.2 years.

Our logistics investments

We had investments in 211 logistics properties in 11 countries in Europe at the end of 2018 returning 13.7 percent in local currency. Our investments in European logistics properties made up 38.5 percent of our global logistics portfolio. Our largest exposure was to the UK, at 31.3 percent, followed by France at 16.5 percent and Spain at 10.2 percent.

Table 7 New investments in office and retail in Europe announced in 2018

Address	City	Partner	Sector	Ownership percent	Currency	Price in millions
30 Warwick Street	London	The Crown Estate	Office	25.0	GBP	28.8
60 Holborn Viaduct	London		Office/ Retail	100.0	GBP	321.3
54-56 rue la Boétie	Paris		Office	100.0	EUR	415.5
79 avenue des Champs Elysées[1]	Paris		Office/ Retail	100.0	EUR	613.0

[1] Estimated completion end of 2019.

Table 8 Disposals in office and retail in Europe announced in 2018

Address	City	Partner	Sector	Ownership percent	Currency	Price in millions
31-33 rue de Verdun	Suresnes	AXA Real Estate France	Office	50.0	EUR	63.3
Hultschiner Strasse 8	Munich	AXA Real Estate Germany	Office	50.0	EUR	122.1
2-14 rue de la Verrerie in Meudon	Meudon	AXA Real Estate France	Office	50.0	EUR	128.0

Chart 10 Investments in Europe by sector as at 31 December 2018

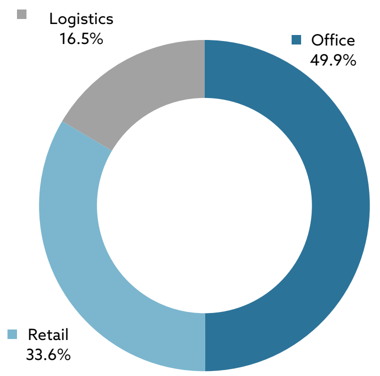
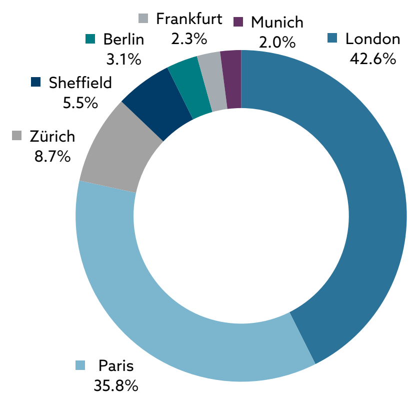


Chart 11 Investments in office and retail in Europe by city as at 31 December 2018



60 Holborn Viaduct, London
In September 2018, the fund announced the acquisition of a 100 percent interest in a property located on 60 Holborn Viaduct in London.The property comprises 22,000 square meters of mostly office space.

54-56 Rue la Boétie, Paris
In November 2018, the fund announced the acquisition of a 100 percent interest in a property located on 54-56 rue La Boétie in Paris. The property comprises 20,400 square meters of office space.

79 Champs Elysées, Paris
In December 2018, the fund announced the acquisition of a 100 percent interest in a property located on 79 Champs Elysées in Paris. The property comprises 7,200 square meters of retail space and 3,100 square meters of office space.

The three largest tenants were Ceva Logistics with 7.5 percent of the European logistics rent roll, Sainsbury's with 5.8 percent and Geodis with 4.2 percent. The ten largest tenants generated 30.5 percent of rental income, and the average remaining lease term was 5.6 years. All of our logistics investments in Europe have been made through a joint venture with Prologis Europe.

In 2018, the partnership announced disposals of 23 properties in total. We received 155.7 million euros for our 50 percent interests.

Chart 12 Investments in logistics in Europe by country as at 31 December 2018

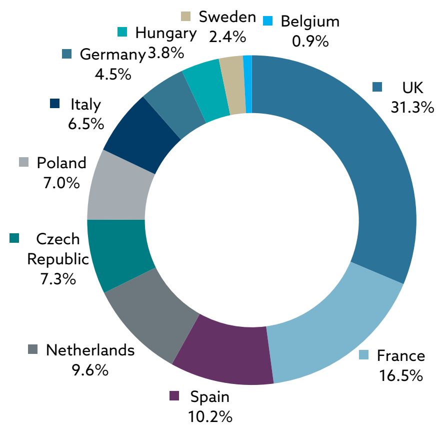
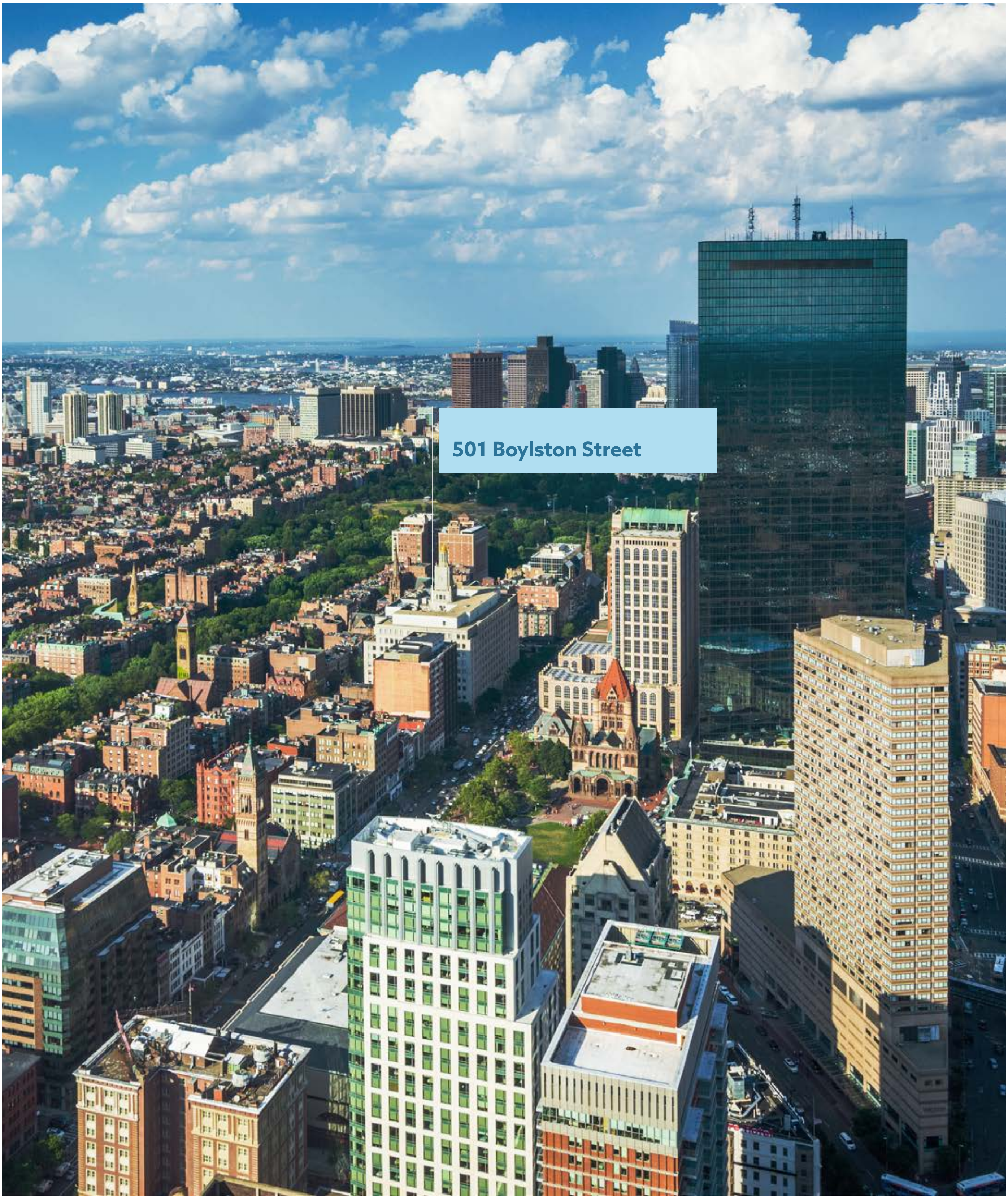


Table 9 Investments in Europe by country as at 31 December 2018. Millions of kroner

	Acquistion year	Percent of total Europe portfolio	Value	Ownership in percent
UK		**40.2**	**50,075**	
2 King Edward Street, London	2014		7,058	100.0
75 Davies Street, London	2015		2,667	100.0
3 Old Burlington Street, London	2015		2,459	100.0
73-89 Oxford Street, London	2016		3,031	100.0
355-361 Oxford Street, London	2016		1,533	100.0
60 Holborn Viaduct, London	2018		3,544	100.0
Pollen Estate			**5,361**	**57.8**
37 assets in Mayfair, London	2014		5,361	
The Crown Estate, partnership			**18,689**	**25.0**
Regent Street portfolio, London	2011		18,689	
British Land, partnership			**5,733**	**50.0**
The Meadowhall Shopping Centre, Sheffield	2012		5,733	
FRANCE		**29.7**	**37,058**	
17-23 boulevard de la Madeleine and 20-26 rue Duphot, Paris	2014		5,327	100.0
9 Place Vendôme and 368-374 rue Saint-Honoré, Paris	2016		10,376	100.0
6/8 Haussmann	2017		4,696	100.0
54-56 rue la Boétie	2018		4,107	100.0
AXA Real Estate France, partnership			**8,833**	**50.0**
12-14 Rond-Point des Champs Elysées, Paris	2011		2,333	
1-2-3 rue des Italiens, Paris	2011		1,758	
77 esplanade du Général de Gaulle, Paris La Defense	2011		1,340	
28-32 avenue Victor Hugo, Paris	2011		1,031	
16 avenue Matignon, Paris	2011		869	
24-26 rue Le Peletier, Paris	2011		561	
99 avenue de France, Paris	2011		558	
27-27ter avenue du Général Leclerc, Boulogne	2011		382	
Generali, partnership			**3,719**	**50.0**
100 avenue des Champs Elysées, Paris	2012		892	
15-17 rue Scribe, Paris	2012		819	
3-5 boulevard Malesherbes, Paris	2012		744	
9 avenue de Messine, Paris	2012		512	
183-185 avenue Daumesnil, Paris	2012		457	
11-15 rue Pasquier, Paris	2012		295	

	Acquistion year	Percent of total Europe portfolio	Value	Ownership in percent
SWITZERLAND		**7.4**	**9,266**	
Uetlihof office campus, Zürich	2012		9,266	100.0
GERMANY		**6.3**	**7,798**	
Luisenstrasse 12, 14, Karlstrasse 23, Munich	2014		2,113	94.9
AXA Real Estate Germany, partnership			**5,685**	**50.0**
Kurfurstendamm 19-24, Joachimstaler Strasse 5, Kantstrasse 160, Berlin	2012		3,302	
An der Welle 3-7, 2-10, Frankfurt	2013		2,383	
LOGISTICS		**16.4**	**20,405**	
Prologis Europe, partnership			**20,405**	**50.0**
Across several European countries	2012		20,405	
TOTAL EUROPE[1]		**100.0**	**124,601**	

[1] Exluding management companies in Europe



501 Boylston Street, Boston
In August 2018, the fund announced the acquisition of a 49.9 percent interest in a property located on 501 Boylston Street, in joint venture with TH Real Estate. The property comprises approximately 57,000 square meters of office and retail space.

Investments in the US

US office rents increased by 2.7 percent in 2018, and transaction volumes rose modestly. In logistics, vacancy was 7.0 percent, and rents increased by 9.3 percent.

Market trends

Rents for high-quality US offices continued to rise in 2018, but at a slower pace than in previous years. Our four strategic cities performed relatively well, with San Francisco being the strongest performer. Capital values for offices in the central business districts rose at a faster pace in Boston and San Francisco compared to 2017, although values decreased in Washington, D.C. and New York by around 0.5 percent. Office transaction volumes increased slightly in the US, although the picture was not uniform across cities.

The New York office market

Rents in New York increased by 0.9 percent in 2018. In Midtown Manhattan, rents decreased by 3.9 percent, and by 1.3 percent in Midtown South. Downtown Manhattan saw a rise in rents of 5.1 percent. Vacancy rates declined marginally to 9.3 percent, with vacancy at 7.2 percent in Midtown Manhattan and 6.3 percent in Midtown South. Office transaction volumes in Manhattan rose 33 percent to around 19 billion dollars.

The Boston office market

Rents in Boston increased 9.9 percent, assisted by the Back Bay District, where rents increased by 11.0 percent. Office rents in the Financial District also rose by 11.0 percent. Office transaction volumes in Boston were 7 billion dollars – a decline of around 11 percent compared to 2017.

The Washington, D.C. office market

Washington, D.C. office rents remained constant compared to the previous year, and vacancy decreased slightly for the first time in three years. Elevated tenant incentives and concessions remain a feature of the Washington, D.C. market compared to our other strategic cities, where incentive packages are typically of lower value. Rents fell 5.3 percent in Capitol Hill and 1.9 percent in the East End. They rose 1.9 percent in the CBD submarket compared to the previous year.

Vacancy remains the most elevated among our US strategic cities at around 13.9 percent, but the upward trend in vacancy moderated in 2018. In the Central Business District and Capitol Hill submarkets, average vacancy was 14.2 percent and 23.5 percent, respectively. Office transaction volumes were down 8 percent at 4.7 billion dollars in 2018, but still represents the second highest deal volume over the last decade.

The San Francisco office market

In San Francisco, office rents were 12 percent higher than in 2017. Vacancy was 5 percent at the end of the year – a decline of 1.8 percentage points. Vacancy rates were low in several of the submarkets where we are invested, including South of Market at 1.8 percent. In the South Financial district, vacancy declined to 4.6 percent from 7.0 percent last year. Office transaction volumes decreased by 14 percent to around 4.5 billion dollars in San Francisco compared to the previous year. This was the lowest volume of activity since 2013.

The logistics market

Vacancy in the US logistics market was 7.3 percent, while rents increased by 9.3 percent nationwide. The California region continued to show high growth in rents in markets such as San Francisco, Inland Empire, Oakland and Sacramento, where rents rose between 8 and 24 percent. Similarly, industrial locations such as Philadelphia, Pennsylvania, Columbus and Detroit saw an increase in industrial rents of 8 to 10 percent. At the other end of the scale, port cities linked to Chinese imports, such as Seattle and Miami, saw a decline in rents of 1 to 3 percent. In Chicago, rents edged higher by 2 percent.

Our investments in the US

Investments in the US made up 47.8 percent of our real estate investments at the end of the year and returned 7.8 percent. Investments in office and retail made up 71.8 percent of the total US portfolio and returned 5.0 percent in local currency.

Our office and retail investments

We had investments in 39 office and retail properties in the US at the end of 2018. Investments in office and retail in the US are concentrated in four cities: New York, Boston, San Francisco and Washington, D.C. Our largest exposure was to New York, at 47.3 percent of the total US office and retail investments.

None of our investments in the US are classified as retail properties. Some properties have a retail component, but they are still classified as office buildings because income from the office component is greater than that of the retail component. The three largest tenants were Kirkland & Ellis with 4.1 percent of the US office and retail rent roll, Proskauer Rose with 2.9 percent and Saatchi & Saatchi with 2.8 percent. The ten largest tenants generated 21.9 percent of rental income, and the average remaining lease term was 9.2 years.

121 Seaport Boulevard, Boston

In October 2018, the fund announced the acquisition of a 45 percent interest in a property located on 121 Seaport Boulevard, Boston in joint venture with American Realty Advisors. The property comprises approximately 37,000 square meters of office space.

Table 10 New investments in office and retail in the US announced in 2018

Address	City	Partner	Sector	Ownership percent	Currency	Price in millions
501 Boylston Street	Boston	TH Real Estate	Office/Retail	49.9	USD	290.9
121 Seaport Boulevard	Boston	American Realty Advisors	Office	45.0	USD	204.8

Table 11 Disposals in office and retail in the US announced in 2018

Address	City	Partner	Sector	Ownership percent	Currency	Price in millions
470 Park Avenue South	New York	TH Real Estate	Office	49.9	USD	122.0

Chart 13 Investments in the US by sector as at 31 December 2018

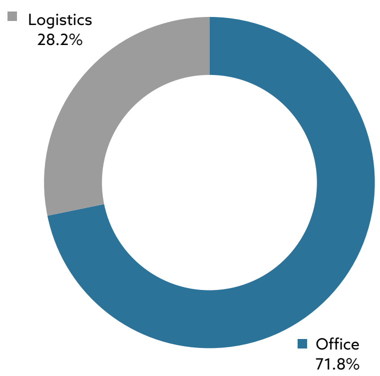
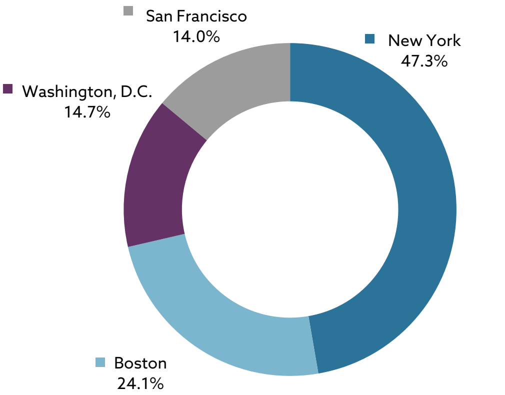


Chart 14 Investments in office and retail in the US by city as at 31 December 2018



New logistics investments in the US in 2018

San Francisco, California
In January 2018, the fund announced the acquisition of a 45 percent interest in a logistics property located in San Francisco, California in joint venture with Prologis. The property comprises approximately 33,200 square meters of leasable space.

Orange County, California
In July 2018, the fund announced the acquisition of a 45 percent interest in a logistics property located in Orange County, California in joint venture with Prologis. The property comprises approximately 28,600 square meters of leasable space.

Carlisle, Pennsylvania and Seattle, Washington
In October 2018, the fund announced the acquisition of a 45 percent interest in two logistics properties located in Carlisle, Pennsylvania and Seattle, Washington in joint venture with Prologis. The properties comprise approximately 111,900 square meters of leasable space.

Our logistics investments

We had investments in 302 logistics properties in the US at the end of 2018 returning 15.5 percent.

Our investments in US logistics properties made up 61.5 percent of our global logistics portfolio. The properties were spread across the country. Our largest exposure was to California at 35.0 percent, followed by New Jersey at 16.3 percent, Pennsylvania at 9.1 percent, and Illinois at 8.5 percent.

The three largest tenants were Amazon with 12.8 percent of the US logistics rent roll, UPS with 2.4 percent and C&S Wholesale with 1.7 percent. The ten largest tenants generated 25.2 percent of rental income, and the average remaining lease term was 6.7 years.

All of the fund's logistics investments in the US have been made through a joint venture with Prologis US.

In 2018, the partnership announced the acquisition of five assets at a combined purchase price of 123.5 million dollars for our 45 percent interests. In 2018, the partnership announced disposals of an aggregate 52 properties. We received 323.7 million dollars for our 45 percent interests.

Chart 15 Investments in logistics in the US by region as at 31 December 2018

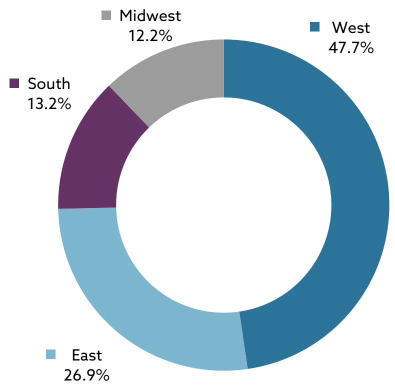


Table 12 Investments in the US as at 31 December 2018. Millions of kroner

	Acquistion year	Percent of total US portfolio	Value	Ownership in percent
NEW YORK		**33.8**	**38,941**	
TH Real Estate, partnership			**2,953**	**49.9**
475 Fifth Avenue	2013		1,319	
2 Herald Square	2014		1,633	
Trinity Church Wall Street, partnership			**19,279**	**48.0**
75 Varick Street	2015		3,749	
345 Hudson Street	2015		3,569	
225 Varick Street	2015		1,361	
100 Avenue of the Americas	2015		1,325	
200 Hudson Street	2015		1,270	
205 Hudson Street	2015		1,228	
435 Hudson Street	2015		1,094	
10 Hudson Square	2015		1,068	
350 Hudson Street	2015		1,032	
155 Avenue of the Americas	2015		674	
12-16 Vestry Street	2015		146	
375 Hudson Street	2017		2,763	
Boston Properties, partnership			**12,885**	**45.0**
7 Times Square	2013		6,132	
601 Lexington Avenue	2014		6,753	
PGIM Real Estate, partnership			**3,825**	**45.0**
11 Times Square	2015		3,825	
WASHINGTON, D.C.		**10.5**	**12,142**	
TH Real Estate, partnership			**6,378**	**49.9**
1101 Pensylvania Avenue, NW	2013		1,067	
800 17th Street, NW	2014		1,770	
1300 Eye Street, NW	2014		1,546	
400-444 North Capital Street, NW	2014		773	
25 Massachusetts Avenue, NW	2015		1,223	
MetLife, partnership			**4,110**	**47.5**
555 12th Street, NW	2014		2,323	
175 N Street, N.E	2016		903	
150 M Street, N.E	2016		883	
Oxford Properties Group, partnership			**1,654**	**44.0**
1101 New York Ave	2017		1,012	
900 16th Street	2017		642	

	Acquistion year	Percent of total US portfolio	Value	Ownership in percent
BOSTON		**17.3**	**19,934**	
TH Real Estate, partnership			**3,610**	**49.9**
33 Arch Street	2013		2,052	
501 Boylston Street	2018		1,557	
Boston Properties, partnership			**8,187**	**45.0**
100 Federal Street	2014		4,189	
280 and 290 Congress Street	2014		3,998	
MetLife, partnership			**6,515**	**47.5**
655 Atlantic Avenue	2013		3,846	
One Beacon Street	2014		2,669	
American Realty Advisors, partnership			**1,622**	**45.0**
121 Seaport Boulevard	2018		1,622	
SAN FRANCISCO		**10.0**	**11,570**	
TH Real Estate, partnership			**4,087**	**49.9**
405 Howard Street	2014		2,501	
888 Brannan Street	2015		1,586	
MetLife, partnership			**2,666**	**47.5**
425 Market Street	2014		2,666	
Kilroy Realty, partnership			**4,816**	**44.0**
303 Second Street	2016		2,992	
100 First Street	2016		1,824	
LOGISTICS		**28.3**	**32,635**	
Prologis US, partnership			**32,635**	**45.0**
Across several US states	2013		32,635	
TOTAL US		**100.0**	**115,223**	

Investments in Asia

The Tokyo office market saw record-low vacancy levels and rising rents in 2018, while the prime retail market recorded steady rents and slightly lower vacancy.

Rents in the Tokyo office market increased by 1 to 2 percent in 2018, although the Shibuya office market, where we have invested, saw headline rents increase by 4 percent. Office vacancy is now at an 11-year low, after having declined for the last two years to below 1 percent. Prime retail vacancy decreased slightly in 2018, to 1.0 percent, with prime rents being stable.

Office investment volumes rose 12 percent in the greater Tokyo area in 2018, and by 36 percent in central Tokyo, compared to 2017.

Office vacancy rates are now below 1 percent in many key central business district submarkets. Given these tight conditions, average office rents are increasing at a faster pace than prime rents. Central Tokyo saw around 1.2 trillion yen of office transaction volumes in 2018.

In the retail market, occupier activity remained fairly stable in prime high street areas, even though consumer confidence and retail sales displayed stronger trends. Prime rents and capital values remained stable in 2018. The Omotesando district, where we own five properties, has seen very low vacancy levels sub 1 percent and continues to attract most new store openings within central Tokyo.

Transaction volumes for retail assets in central Tokyo were 162.9 billion yen in 2018, the lowest level of deal activity since 2011.

Our investments in Asia

Investments in Asia made up 1.5 percent of our real estate investments at the end of the year. We had investments in five office and retail properties in Tokyo at the end of 2018. The investments returned 3.4 percent.

Investments in office and retail made up 100 percent of our Asian investments with 70.7 percent retail and 29.3 percent offices. The three largest tenants were WeWork with 28.3 percent of the Japan rent roll, H&M with 26.8 percent and Zara with 16.5 percent. The ten largest tenants generated 98.2 percent of rental income, and the average remaining lease term was 7.3 years.

Table 13 Investments in Asia by country as at 31 December 2018. Millions of kroner

	Acquisition year	Value	Ownership in percent
JAPAN		**3,816**	
Tokyu Land Corporation, partnership			**70.0**
6-12-18 Jingumae, Shibuya, Tokyo	2017	1,097	
1-8-10 Jingumae, Shibuya, Tokyo	2017	1,007	
6-31-17 Jingumae, Shibuya, Tokyo	2017	805	
5-3-2 Minami-Aoyama, Minato, Tokyo	2017	784	
5-3-27 Minami-Aoyama, Minato, Tokyo	2017	123	
Total ASIA		**3,816**	

3

Real Estate Management


LONDON
EVERYONE WELCOME
#LONDONISOPEN
HEDDON STREET W.1.

Investment process

Real estate investments require extensive analysis, in-depth evaluation and efficient decision making.

When considering an investment opportunity, we have assessed and made assumptions about rents, capitalisation rates, vacancy periods, lease terms, refurbishment costs and other costs. We have carried out a thorough due diligence analysis of financial, tax, legal, structural, operational, technical, environmental and insurance-related matters.

Approval process
The decision process for real estate investments has been governed by investment mandates and committees. All significant investments have been considered by boards and committees consisting of internal and external advisors, and all processes have been well documented.

Norges Bank's Executive Board has approved investments above 750 million dollars, based on the Real Estate Investment Board's recommendations.

The Executive Board consists of eight members appointed by the King in Council and is chaired by the Governor of Norges Bank.

The Executive Board has established a Risk and Investment Committee. This sub-committee has supported the Executive Board in its risk and real estate management, and in major investment decisions. The committee has consisted of one of the Deputy Governors of Norges Bank, who chairs the committee, and two of the Executive Board's external members.

The Real Estate Investment Board has reviewed and approved investments above 500 million dollars and made recommendations to the Executive Board on investments above 750 million dollars. The Real Estate Investment Board has ensured that investments have been made in accordance with our mandate and strategy plan. The board has consisted of the Chief Executive Officer of Norges Bank Investment Management, who chaired the board, the Chief Executive Officer of Norges Bank Real Estate Management, the Chief Risk Officer of Norges Bank Investment Management, and two external board members with real estate investment experience.

The Real Estate Investment Committee has considered a range of issues related to new investments, including aspects of the transaction and the decision-making process. Investments that has involved new partners, new markets, new asset managers and/or new holding structures have been reviewed by the Real Estate Investment Committee. The committee has consisted of Norges Bank Real Estate Management's leader group.

Norges Bank Real Estate Management has had three Real Estate Advisory Boards – one for Europe, one for the US and one for Asia. The respective Real Estate Advisory Board has advised on investments above 75 million dollars, including aspects of structure, commerciality, pricing, risk and strategy. The boards have consisted of the relevant chief investment officer, the Chief Risk Officer and two external advisors with real estate investment experience.

When the relevant body has approved an investment, the transaction documents have been finalised. Generally, a subsidiary of Norges Bank has entered into a purchase or sale agreement. The process of closing a transaction – obtaining the proper title to the underlying property and the transfer of funds for payment of the purchase price – has varied from market to market.

Investing through subsidiaries
The Ministry of Finance has set rules for real estate investments in the fund's mandate.

These rules have permitted Norges Bank Real Estate Management to invest in real estate through Norwegian or foreign entities. We have sought to set up entities in Norway and in the locations where the real estate investment is made and avoid structuring via intermediate jurisdictions. Real estate structures must be registered in countries that Norway has tax treaties with or countries that have given Norway the right to obtain tax information under other international agreements.

Real estate investments have been made through subsidiaries to ensure sound risk management and to protect Norges Bank and the fund's assets. It has been standard practice in the real estate industry to invest through subsidiaries.

Investments in real estate differ from investments in listed equities and bonds. A real estate transaction will often take months from first discussions to completion. Purchase contracts, joint venture agreements when the investment is made with a joint venture partner, and asset management and property management agreements need to be negotiated individually in line with local market conventions and rules.

The investment risk associated with real estate has not necessarily been limited to the sum invested. Norges Bank Real Estate Management has assessed suitable holding and operating platforms for the implementation of real estate investments to protect against these risks.

The fund's tax position depends on local rules and on the bilateral tax treaties that Norway is party to. It is important for the fund that it pays the correct tax in accordance with local rules. Expected tax costs are therefore among the factors considered when deciding on a holding structure.

Investments in continental Europe
Since 2011, Norges Bank has invested in continental Europe, including France, Germany and Switzerland, through a holding and management platform in Luxembourg. Logistics investments in the UK have also been held from Luxembourg.

The Luxembourg companies will be moved to Norway and the jurisdictions where the real estate assets are located when the required tax clearances have been obtained. This process is likely to take a couple of years.

The subsidiaries in continental Europe have been financed with equity and intercompany loans. The use of intercompany loans have helped promote efficient cash management, including the repatriation of income back to the fund. These loans have also reduced the tax base. All our structures, including the use of intercompany loans, have complied with relevant laws and regulations on tax allowances, capitalisation and transfer pricing.

The fund's investments in Germany and Switzerland have been held directly by subsidiaries in Luxembourg. The assets in France have been held by French special-purpose entities also owned by subsidiaries in Luxembourg.

The partnership with Prologis Europe for the European logistics portfolio has been held through a Luxembourg company with more than 190 underlying property companies in Luxembourg and the European markets we invest in.

Investments in the UK
Under English law, foreign sovereign investors are exempt from income tax and capital gains tax on property sales. The fund has established holding structures in the UK that meet the requirements for such an exemption, using tax-transparent English limited partnerships for real estate investments.

Investments in the US
In the US, the fund has been exempt from taxation under local laws because it is owned by a foreign government. The real estate holding structures have taken the form of local tax-transparent entities with limited liability. Properties have been held by private real estate investment trusts (REITs).

The US subsidiaries have been registered in Delaware. Because the fund is exempt from US taxation, the choice of state for the establishment of the subsidiary has had no tax implications for the fund, but Delaware has well-developed company laws and an efficient and respected court system for dealing with company law disputes. It is widely used in the US as a preferred state for forming and registering companies.

Investments in Asia
The investment in Asia have been made through a Japanese regulated real estate investment entity (TMK) and joint venture company, which in turn has acquired ownership interests in five underlying real estate assets.

This structure is a common way of owning real estate in Japan. The ownership has been held through two Norwegian subsidiaries of Norges Bank.

Transparency
Transparency about the management of the fund and the results we achieve is important. We report the return on our investments each quarter and announce all purchases and sales above 25 million dollars on www.nbim.no.

Risk management

We use a variety of measures and analyses to understand the risks associated with our real estate investments.

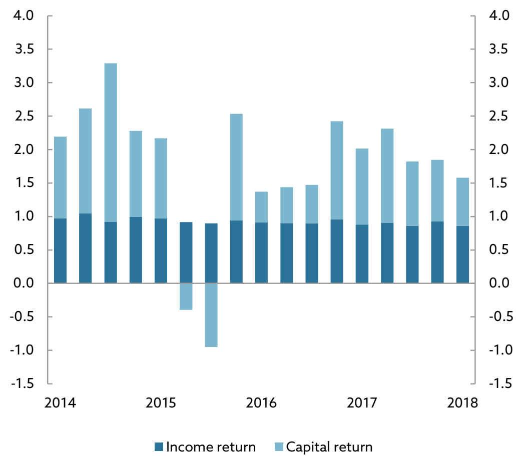
The sources of risk in real estate are different to those in equities and fixed income. Market risk may materialise if tenants default on rental payments or there is a need to reduce rents to attract tenants in an economic downturn. Real estate is also impacted by asset-specific risks such as leasing risk, development risk, physical risks, regulatory/tax risks and other idiosyncratic risks, with reduced impact as the pool of assets grows. The fund can carry such risks because of its size and characteristics.

Market risk is the risk of fluctuations in the market value of individual investments and the real estate portfolio as a whole. Losses due to market risk result mainly from changes in the cash flow received from the properties and changes in the current value of expected future cash flow from the properties. There is no individual measurement or analysis that can fully capture the market risk of the real estate portfolio. Therefore, we use a variety of measures and risk analyses, such as concentration analysis, portfolio scenarios and asset-specific analyses.

Expected volatility for real estate investments, calculated in the form of the statistical measure standard deviation, uses historical prices to estimate how much the annual return on the fund's real estate investments can normally be expected to fluctuate. At the end of 2018, the expected absolute volatility of the fund's unlisted real estate investments was 9.3 percent, compared to 12.6 percent at the end of 2017.

A substantial part of the risk in the real estate portfolio originates from uncertainties about future income. At the end of the year, 95.3 percent of the portfolio was let, and 1.3 percent was under development. The equivalent figures at the end of 2017 were 94.0 percent and 2.9 percent respectively. The increased occupancy was primarily driven by leasing in our US office investments, where occupancy increased to 94.1 percent from 92.4 percent the year before. The lease expiry structure is evenly distributed. The average remaining lease term was 8.3 years at the end of 2018, up from 7.9 years in 2017.

Chart 16 Quarterly income and capital return in local currency. Percent



Risk management process

We seek to balance risks and returns through holistic asset management and investment management.

As the unlisted real estate portfolio grows, asset management is gradually becoming more important. An important element of asset management is letting space, ensuring that properties are generating the highest possible long-term rental income, either through the renewal of existing leases or by signing new leases for available space. We monitor and assess leases, tenants and markets to ensure that leasing risk is mitigated.

The size and number of individual properties in the unlisted real estate portfolio ensure that the fund is well-positioned to benefit from the premium of idiosyncratic risk in individual leases.

Loss of income from a single tenant or property is balanced by the gain of others, thus ensuring stable aggregated income.

Similarly, investment decisions are thoroughly scrutinised to ensure that the acquisition price reflects the risk. We ensure that all risks unique to the investment are identified and assessed prior to a decision, including the risk of loss of income or value through adverse events. We maintain a well-diversified portfolio and assess how each investment impacts the composition of the portfolio. Portfolio diversification supports high and stable returns.

Chart 17 Tenant industry exposure as at 31 December 2018

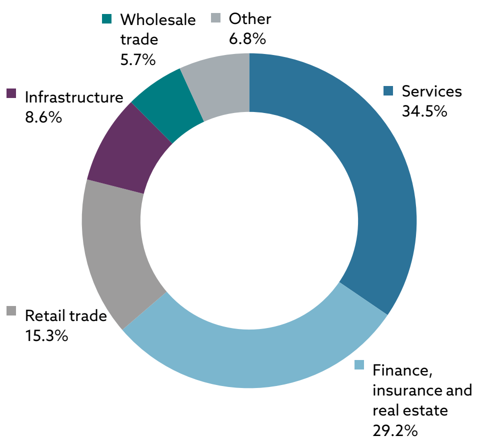


Chart 18 Lease expiry profile as at 31 December 2018

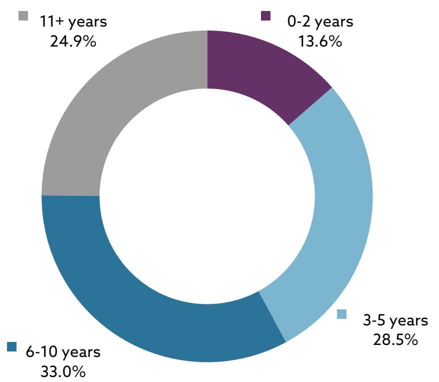


Chart 19 Investments by country as at 31 December 2018. Percent

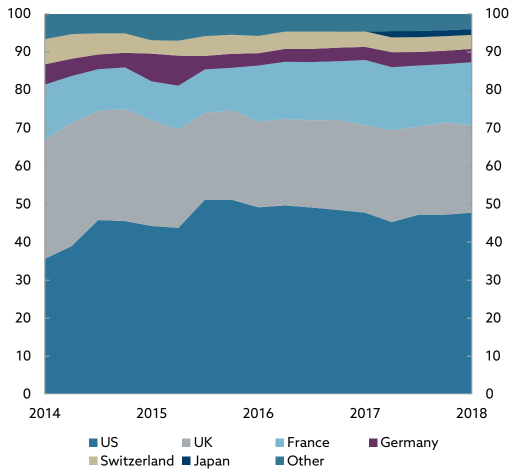


Chart 20 Investments by sectors as at 31 December 2018. Percent

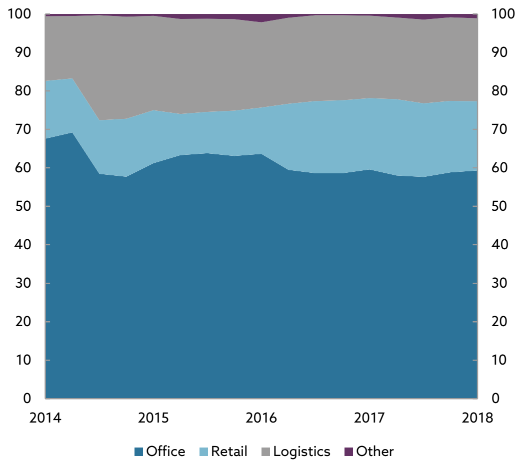


Chart 21 Investments in office and retail by city as at 31 December 2018. Percent

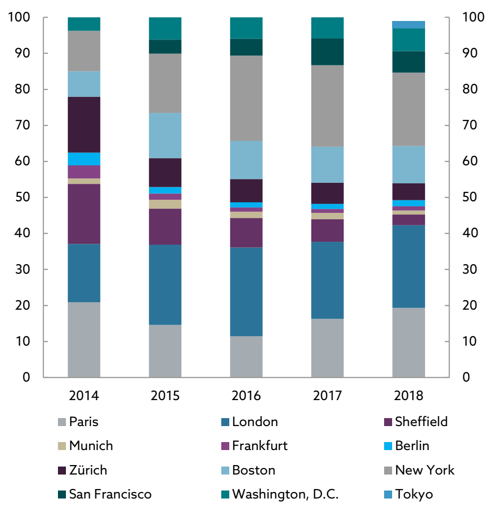
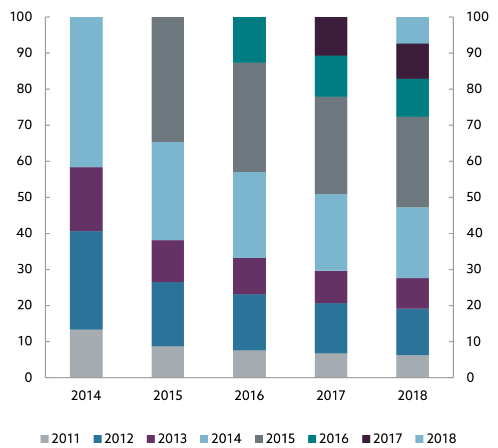


Chart 22 Investments by investment year. Percent



Concentration risk

Concentration risk relates to exposure to different segments of the investment universe. Before each new investment, we assess the related risks and how they might affect the portfolio. The composition of the fund's real estate investments is continuously evaluated, with a particular emphasis on geography, sector, industry and investment year.

We aim to avoid making numerous major investments in any one year, as this reduces the risk of investing excessively in a period when the market subsequently turns out to have been overpriced.

The largest exposure to any one investment year is to 2015, which accounted for 25.1 percent of the total portfolio at the end of 2018. The equivalent figure at the end of 2017 was 27.4 percent.

The fund's largest sector allocation was to offices, which accounted for 59.3 percent of the portfolio at the end of 2018, compared to 58.2 percent at the end of 2017. The fund's largest exposure to a tenant industry was to services, at 34.5 percent. The largest exposure to a tenant sub-industry was to legal services, at 12.1 percent.

Furthermore, the real estate portfolio is exposed to idiosyncratic risks from investments in individual properties and from leases with individual tenants. Large individual investments will expose the fund to risks. The largest exposure to an individual investment was to our asset located on 9 Place Vendôme, at 4.0 percent of the portfolio's gross asset value and 12.4 basis points of the fund's gross asset value. The fund assesses individual investments by analysing selected comparable risk factors and evaluates the properties' risk by using scenarios.

Sustainability risk

The transition to a low-carbon economy will bring both risks and opportunities to real estate. Class A buildings in core cities are increasingly expected to cut energy use, adopt green design features, and be certified in accordance with green building standards and ratings. We work with partners and asset managers to integrate sustainability measures into business plans.

We assess the sustainability performance of our global portfolio on an annual basis using the Global Real Estate Sustainability Benchmark (GRESB). The value-weighted GRESB score for our total portfolio was 76 out of 100 in 2018, compared to 70 in 2017. We outperformed our peer group by 8 percent, compared to 10 percent in 2017.

We believe that obtaining green building certifications helps us communicate the sustainability features of a building to the market, increase its value and lower its risk. The share of our office and retail properties over 2,000 square metres that obtained a green building certification was 68 percent by area in 2018, compared to 60 percent in 2017. In addition, 28 properties in our logistics portfolio have been designed and constructed to a standard that enabled them to obtain a green building certification.

In 2018, we established a sustainability data platform to consolidate information on energy, water, waste, and carbon emissions across our portfolio. We also upgraded the metering infrastructures at our wholly-owned properties to facilitate more efficient collection of energy and water data.

Climate risk

Many of our real estate investments are in cities that are exposed to long-term trends in extreme weather. We estimate that 5 percent of the

Chart 23 Global Real Estate Sustainability Benchmark (GRESB) score

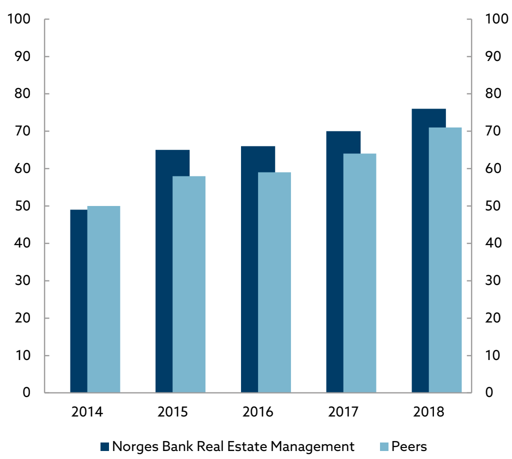
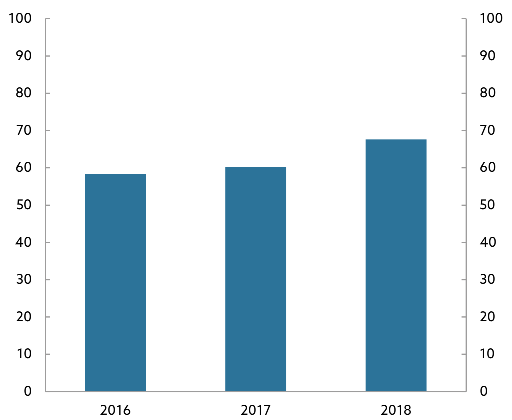


Chart 24 Share of office and retail assets greater than 2,000m² that is certified. Percent



portfolio by value is in locations likely to experience significant coastal or river flooding at least once in the next 100 years. We have integrated flooding risk in our acquisition and asset management strategy. In 2018, we joined an investor network coordinated by the UNEP Finance Initiative that aims to explore methodologies to assess the value at risk for real estate portfolios associated with long-term climate change.

Operational risk

Operational risk is the risk of unwanted operational incidents with financial or reputational impact. The incidents may arise internally from deficiencies in processes, human errors and technological problems, as well as from external factors such as changes in regulatory conditions, supplier errors or other factors affecting business operations.

We work systematically to identify unwanted operational incidents and continuously improve processes. A total of 197 operational incidents occurred in 2018, which is the same as in 2017. Most of the reported incidents had no direct financial consequences, either because they were discovered early or because they had only a non-financial impact. The estimated total financial loss of unwanted operational incidents in 2018 was 1.2 million kroner, compared to 1.9 million kroner in 2017. There were no incidents which resulted in a financial gain. No significant incidents were reported in 2018.

Compliance

No material breaches of the management mandate from the Ministry of Finance were registered in 2018. We did not receive any notifications from local supervisory authorities of any significant breaches of market rules or general legislation.

Chart 25 Sustainability measures specified in business plans for office and retail buildings. Percent by topic.

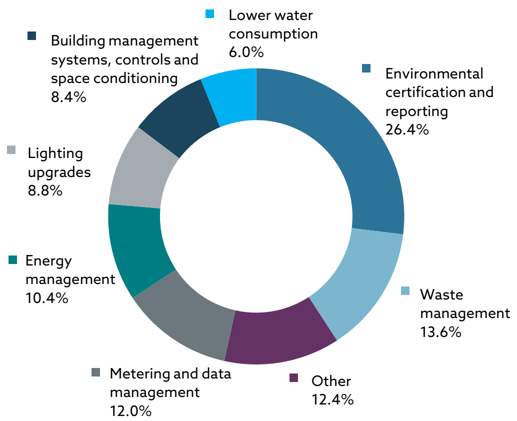
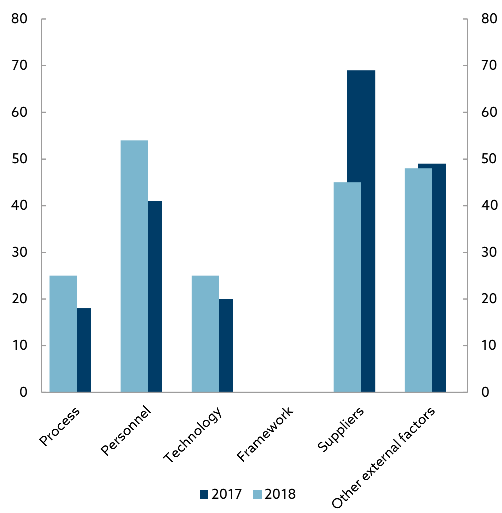


Chart 26 Unwanted events at Norges Bank Real Estate Management sorted by cause



Valuations

We obtain external valuations and report the value of our real estate investments on a quarterly basis.

The value of a real estate portfolio is the net sum of its assets and liabilities. The fair value is the estimated price that would have been obtained from the sale of a property or transfer of a liability between two market participants.

Valuing real estate

The value of a property before it is sold will always be subject to a degree of uncertainty, because real estate is an asset class with less frequent trading than listed equities and bonds. Having a diverse base of different valuers helps increase the quality of estimated values. Valuations are performed in accordance with internationally recognised standards. We quality-assure the information on which valuers base their valuations.

Valuing debt

At the end of 2018, the portfolio's financial leverage was 7.0 percent, compared to 7.5 percent at the end of 2017. As with the properties themselves, debt is measured at fair value. Where there are no observable prices, debt is valued by external valuers or by using various relevant models.

Valuation uncertainty

Property valuations are based on forward-looking judgements. The estimates generally reflect comparable recent transactions for properties with similar characteristics.

These estimates of property values are particularly sensitive to changes in discount rates and assumptions that affect future income. This uncertainty can be measured by looking at the effect of changes in these variables. An increase in the discount rate of 0.2 percentage point and a decrease in expected rental income of 2.0 percent, will reduce the estimated value of the portfolio at the end of 2018 by around 6.0 percent, compared to 6.0 percent at the end of 2017. Similarly, a decrease in the discount rate of 0.2 percentage point and an increase in expected rental income of 2.0 percent will raise the estimated value by 7.3 percent, compared to 6.9 percent at the end of 2017.

We review the value of the investments at the end of each quarter. This includes documenting the results of controls and analyses and presenting the most important sources of valuation uncertainty.

External valuers

Valuers	Cities
Altus Group	Boston, San Francisco, Washington, D.C.
BNP Paribas Real Estate	Berlin, Frankfurt, Munich, Paris
Capright	Boston
CBRE	London, New York, Paris, San Francisco, Sheffield, Washington, D.C., Zürich, logistics
Colliers International	New York, logistics
Cushman & Wakefield	London, New York, Paris, Washington, D.C., logistics
Integra	Boston
JLL	Sheffield, Tokyo, logistics
Joseph Blake	Boston, Washington, D.C.
Knight Frank	London
Newmark Knight Frank	Boston, San Francisco
NVC	Boston
Qval Property Advisors	San Francisco
USRC	Washington, D.C.

Table 14 Net asset value. Millions of kroner

	2018	2017	2016	2015	2014
Properties	262,364	235,507	204,635	197,549	118,515
External debt	-18,361	-17,694	-15,727	-17,432	-11,985
Net other assets and liabilities[1]	-185	-653	-439	-96	-99
Total assets and liabilities in underlying real estate companies	**243,818**	**217,160**	**188,469**	**180,021**	**106,431**
Group cash and net assets in consolidated subsidiaries	2,195	1,483	2,201	1,120	1,199
Net asset value unlisted real estate	**246,013**	**218,643**	**190,670**	**181,141**	**107,630**

[1] Net other assets and liabilities comprise of cash, tax and operational receivables and liabilities.

4

Income and costs

Income

The fund receives a stable rental income from tenants.

Net rental income amounted to 9,312 million kroner and net income from ongoing operations amounted to 7,736 million kroner in 2018. This is an increase of 733 million kroner for net rental income and of 869 million kroner for net income from ongoing operations on 2017, both increases due primarily to new investments and new leases.

The real estate portfolio has a diversified tenant base of 2,672 tenants in different industries in Europe, the US and Asia. In some cases, we own the land but not the building, in which case we only receive a ground rent.

In 2018, movements in exchange rates had only a limited impact on rental income in Norwegian kroner. The British pound depreciated by 0.3 percent against the Norwegian krone, whereas the US dollar and the euro appreciated by 5.9 and 0.8 percent respectively.

Table 15 Total income in unlisted real estate. Millions of kroner

	2018	2017	2016	2015	2014
Net income underlying real estate companies[1]	*16,421*	*14,237*	*6,942*	*14,537*	*7,160*
Operating costs within the limit from the Ministry of Finance in consolidated entities	-20	-19	-19	-11	0
Other income/costs in consolidated entities	9	8	-5	0	40
Transaction costs at group level	-1	-1	-16	-8	-1
Net income in real estate[2]	**16,409**	**14,224**	**6,902**	**14,518**	**7,199**

[1] See table 15.
[2] Management costs reimbursed by the Ministry of Finance are not included.

Table 16 Income in underlying unlisted real estate companies. Millions of kroner

	2018	2017	2016	2015	2014
Net rental income	9,312	8,579	7,645	6,921	3,747
External asset management – fixed fees	-506	-482	-454	-308	-165
External asset management – variable fees	-88	-248	-39	-343	-16
Internal asset management – fixed fees	-38	-32	0	0	0
Management costs within the limit from the Ministry of Finance	-88	-97	-83	-86	-83
Other operating costs, not within the limit from the Ministry of Finance	-94	-88	-103	-129	-80
Interest expense external debt	-506	-626	-622	-666	-354
Tax expense payable	-256	-140	-151	-100	-82
Net income from ongoing operations	*7,736*	*6,866*	*6,193*	*5,289*	*2,969*
Realised gain/loss - properties	1,212	199	109	320	-
Unrealised gain/loss – properties	7,807	8,375	1,416	9,265	5,464
Unrealised gain/loss – debt	233	-420	-191	435	-395
Unrealised gain/loss – other assets and liabilities	-176	-461	-174	-452	-292
Realised and unrealised gain/loss	*9,077*	*7,693*	*1,160*	*9,568*	*4,777*
Stamp duty and registration fees	-147	-217	-340	-83	-401
Due diligence and insurance costs	-244	-108	-71	-237	-185
Transaction costs purchases and sales	-391	-324	-411	-320	-586
Net income underlying real estate companies[1]	**16,421**	**14,237**	**6,942**	**14,537**	**7,160**

[1] See Note 6 in the annual report 2018, Government Pension Fund Global.

Management costs

Purpose	Costs
Ensure an organisation that can contribute to a highest possible return on the fund's real estate investments, by finding investment opportunities, completing transactions and following up on existing investments.	Personnel costs, IT services, legal fees and consulting fees

Investment structure costs

Purpose	Costs
Safeguard the fund's financial interests. Risk management and limitation of liability.	Audit fees, accounting services, IT services, legal fees, valuation fees and board remuneration, in addition to personnel costs in the internal asset management company.

Asset management costs

Purpose	Costs
Ensure the highest possible rental income and return on investments by continuous asset management.	Fixed fees to asset managers. Variable fees to asset managers.

Property costs

Purpose	Costs
Ensure net rental income from tenants.	Maintenance, letting, cleaning, electricity, insurance, health and safety, security, caretaking, billing and day-to-day tenant services.

Transaction costs

Purpose	Costs
Ensure transfer of ownership, and thorough due diligence to mitigate risks.	Stamp duty and other taxes, and cost of due diligence.

Interest costs

Costs for external loans.

Tax costs

Costs to local tax authorities.

Costs

We are cost-conscious in our management of real estate investments.

There are different types of costs in the management of the fund's unlisted real estate investments. For every category we strive to keep the cost as low as possible while simultaneously maximising the return to the fund. Over the last couple of years, management costs have steadily decreased as a share of the average net asset value of unlisted real estate. The decrease in total management costs from 2017 to 2018 of 34 million kroner was mainly driven by lower personnel cost and lower costs relating to IT systems and accounting service providers.

Table 17 Management costs based on average net asset value. Percent

	2018	2017	2016	2015	2014
Management cost in Norges Bank Real Estate Management	0.19	0.23	0.25	0.24	0.29
Management costs in real estate subsidiaries	0.05	0.06	0.06	0.06	0.11
Total management costs	**0.24**	**0.29**	**0.31**	**0.30**	**0.40**

Table 18 Management costs. Millions of kroner

	2018	2017	2016	2015	2014
Management cost in Norges Bank Real Estate Management	429	455	440	333	199
Management costs in real estate subsidiaries	108	116	99	97	83
Total management costs	**537**	**571**	**539**	**430**	**282**

Management costs

Management costs comprise costs relating to the management of the fund. This includes costs for personnel, IT, consulting, legal services, offices for our employees, and a proportion of common costs shared with Norges Bank and Norges Bank Investment Management. These costs are mainly incurred in Norges Bank, as well as wholly-owned subsidiaries of Norges Bank exclusively established as part of the management of the fund's investments in unlisted real estate.

The Ministry of Finance reimburses Norges Bank for costs incurred in connection with the management of the fund, in the form of a management fee. The management costs in subsidiaries of Norges Bank are not reimbursed by the Ministry of Finance, but are measured against the Ministry of Finance's limit for management costs. The management costs in Norges Bank relating to Norges Bank Real Estate Management amounted to 429 million kroner in 2018, and the management costs in subsidiaries amounted to 108 million kroner.

Table 19 Management costs in Norges Bank Real Estate Management. Millions of kroner

	2018	2017	2016	2015	2014
Salary, social security and other personnel related costs	230	234	215	175	103
IT services, systems, data and information	73	89	74	55	51
Research, consulting and legal fees	12	18	30	17	19
Other costs	113	115	121	86	26
Total management costs in Norges Bank Real Estate Management[1]	**429**	**455**	**440**	**333**	**199**

[1] Included in table 11.1 in the 2018 annual report of the Government Pension Fund Global.

Table 20 Management costs in real estate subsidiaries. Millions of kroner

	2018	2017	2016	2015	2014
Salary, social security and other personnel related costs	25	33	26	26	22
IT services, systems, data and information	41	42	35	31	21
Research, consulting and legal fees	30	23	18	18	24
Other costs	13	17	20	22	17
Total management costs in real estate subsidiaries	**108**	**116**	**99**	**97**	**83**
Of which management costs in non-consolidated subsidiaries	*88*	*97*	*81*	*86*	*83*
Of which management costs in consolidated subsidiaries	*20*	*19*	*19*	*11*	*0*

Investment structure costs
In addition to the wholly-owned subsidiaries mentioned above, the investment structure includes many partly-owned companies as well as property-owning companies. Costs at these partly-owned and property-owning companies are mainly administrative in nature and comprise IT costs, audit and accounting fees, legal fees and valuation fees. In addition, NBRE Management Europe Ltd, which provides internal asset management services on our wholly-owned properties, is considered part of the investment structure costs. The type of costs in this company is comparable to the costs incurred in Norges Bank Real Estate Management. Investment structure costs amounted to 128 million kroner in 2018, of which 34 million kroner was incurred in NBRE Management Europe Ltd.

Table 21 Investment structure costs in real estate entities. Millions of kroner

	2018	2017	2016	2015	2014
Salary, social security and other personnel related costs	18	8	1	0	0
IT services, systems, data and information	11	8	0	0	0
Research, consulting and legal fees	28	48	61	48	29
Other costs	70	44	49	81	51
Total investment structure costs in real estate subsidiaries	**128**	**108**	**111**	**129**	**79**
Of which investment structure costs in non-consolidated subsidiaries	*94*	*88*	*103*	*129*	*79*
Of which investment structure costs in consolidated subsidiaries	*34*	*20*	*8*	*0*	*0*

Table 22 Fees to asset managers. Millions of kroner

	2018	2017	2016	2015	2014
External asset management - fixed fees	506	482	454	308	165
External asset management - variable fees	88	248	39	343	16
Total fees to external asset managers	**594**	**730**	**493**	**651**	**181**
Internal asset management - fixed fees[1]	38	32	0	0	0
Total fees to asset managers	**632**	**762**	**493**	**651**	**181**

[1] Internal asset management fees between 100% owned properties and the NBREM asset management company have zero effect on the net income in real estate in table 16.

Asset management costs

Internal and external asset managers handle the commercial management of the properties and implement action plans to obtain the best possible return with the least possible risk. In some cases, the fees to external asset managers have a variable component, normally based on excess return over several years. External asset management costs amounted to 594 million kroner in 2018.

In addition, NBRE Management Europe Ltd provides internal asset management services on our wholly-owned properties.

Property costs

Costs for the day-to-day operation and maintenance of the buildings in the portfolio are incurred by the property companies that own the buildings and are therefore not directly related to investment activities. These costs include activities relating to letting, cleaning, electricity, insurance, health and safety, security, caretaking, billing and day-to-day tenant services. A significant amount of the operating costs is reimbursed by tenants. Sometimes operating costs are paid by the tenant directly. In cases where we own the land, but not the building itself, we do not incur operating costs for the building. Property costs amounted to 3,194 million kroner in 2018 before reimbursement of 1,692 million kroner by tenants.

Tax costs

The fund's tax position depends on local regulations and on the tax treaties with each country. Taxes on real estate investments totalled 269 million kroner in 2018, which include 13 million kroner in consolidated entities.

Interest costs

Our investments are mainly internally financed with equity and intercompany loans. Some investments, however, also involve external debt. External interest costs amounted to 506 million kroner in 2018.

Transaction costs

Transaction costs are incurred when buying and selling properties. They include stamp duty and other transfer taxes and fees to the local authorities. These costs can vary considerably depending on the jurisdiction and structuring of the investment and amounted to 147 million kroner in 2018.

Costs are also incurred for the due diligence reviews that precede an investment. These are carried out to mitigate risks in line with the management mandate and include analyses of market, liquidity, credit, counterparty, operational, legal, tax, technical and environmental risks. These costs are relatively stable in percentage terms for each new investment and totalled 244 million kroner in 2018.

Transaction costs for uncompleted deals are expensed at group level when a subsidiary is not established. These costs amounted to 1 million kroner in 2018. Total transaction costs were 393 million kroner in 2018.

Table 23 Rental income and property costs. Millions of kroner

	2018	2017	2016	2015	2014
Gross rental income	10,815	9,944	8,970	7,816	4,132
Property costs	-3,194	-2,966	-2,852	-2,224	-948
Reimbursements	1,692	1,601	1,527	1,329	563
Net rental income	**9,312**	**8,579**	**7,645**	**6,921**	**3,747**

Table 24 Transaction costs. Millions of kroner

	2018	2017	2016	2015	2014
Stamp duty and registration fees	147	217	340	83	401
Due diligence and insurance costs	244	107	71	237	185
Transaction costs	**391**	**324**	**411**	**320**	**586**
Transaction costs for not completed deals at group level	1	1	16	8	1
Total transactions costs	**393**	**325**	**427**	**328**	**587**

Table 25 Transaction costs based on value of acquired and sold properties. Percent

	2018	2017	2016	2015	2014
Stamp duty and registration fees	0.72	1.40	1.57	0.18	1.06
Due diligence and insurance costs[1]	1.19	0.69	0.33	0.53	0.49
Transaction costs in percent of transacted capital that year	**1.91**	**2.09**	**1.90**	**0.71**	**1.55**

[1] Does not include transaction costs for not completed deals at group level.

Cash flow

In 2018, the fund's subsidiaries repaid 5,871 million kroner from ongoing operations and 6,098 million kroner from property sales. Net transfers from the fund's fixed-income and equity investments to the fund's real estate investments amounted to 3,519 million kroner in 2018.

These funds were mainly used to buy new properties for 12,710 million kroner. In addition, 1,562 million kroner was used to pay for property upgrades and development projects, and 513 million kroner was used to repay external debt in the underlying property companies. Total cash holdings at fund level relating to unlisted real estate increased by 733 million kroner in 2018.

Norges Bank Real Estate Management invests through subsidiaries and underlying property companies. The subsidiaries are financed with equity and intercompany loans. Cash generated at the property companies in the form of cash flow from ongoing operations is distributed to the fund in the form of dividends, interest on intercompany loans or repayments of intercompany loans and equity. The cash flow from ongoing operations which is not repaid to the fund is reinvested in the subsidiaries and underlying companies.

The cash flow from ongoing operations in the underlying property companies amounted to 7,392 million kroner in 2018. Of this amount, 5,871 million kroner were repaid to Norges Bank Real Estate Management, and 1,280 million kroner were reinvested. The total cash holdings in the subsidiaries increased by 241 million kroner in 2018.

Table 26 Cash flow to/from unlisted real estate. Millions of kroner

	2018	2017	2016	2015	2014
Interest and dividend from ongoing operations	4,440	3,839	3,645	3,532	1,966
Interest and dividend from sales	1,381	30	12	0	0
Receipts of interest and dividend from unlisted real estate	**5,822**	**3,869**	**3,657**	**3,532**	**1,966**
Payments to new investments	-12,710	-14,771	-19,147	-44,476	-36,859
Repayments from sales	4,717	1,059	1,752	260	0
Payments for property development	-1,562	-1,590	-1,649	-639	-1,287
Repayments from ongoing operations	1,430	888	1,934	654	436
Net payments external debt	-513	-2,820	-159	-776	0
Net cash flow to investments in unlisted real estate	**-8,638**	**-17,234**	**-17,269**	**-44,977**	**-37,710**
Total cash flow to/from unlisted real estate	**-2,816**	**-13,365**	**-13,612**	**-41,445**	**-35,744**
Cash at group level and in consolidated subsidiaries as at 1 January	**1,468**	**2,186**	**1,101**	**1,151**	**612**
Net cash flow to/from unlisted real estate	-2,816	-13,365	-13,612	-41,445	-35,744
Net funding to real estate from Norges Bank Investment Management	3,519	12,720	14,748	41,584	36,047
Net other cash flow consolidated entities and currency effect	31	-73	-51	-189	236
Cash at group level and in consolidated subsidiaries at end of period	**2,201**	**1,468**	**2,186**	**1,101**	**1,151**

Table 27 Net income from ongoing operations to cash flow. Millions of kroner

	2018	2017	2016	2015	2014
Net income from ongoing operations[1]	*7,736*	*6,868*	*6,193*	*5,289*	*2,969*
Adjusted for:					
Net-rental income - non-cash items	-438	-384	-416	-312	-97
External asset management - variable fees not paid	94	184	-192	343	16
Cash flow from ongoing operations	**7,392**	**6,667**	**5,585**	**5,320**	**2,888**
Cash in non-consolidated subsidiaries as at 1 January	**3,127**	**2,272**	**2,491**	**1,171**	**695**
Cash flow from ongoing operations	7,392	6,667	5,585	5,320	2,888
Cash flow from ongoing operations repaid to NBREM	-5,871	-4,727	-5,579	-4,186	-2,402
Cash flow from ongoing operations reinvested and currency effect	-1,280	-1,086	-225	187	-10
Cash in non-consolidated subsidiaries at end of period	**3,368**	**3,127**	**2,272**	**2,491**	**1,171**

[1] See table 16.

ISSN 2464-3351
Design: Scandinavian Design Group
Bilder: Nils Stian Aasheim , Hans Fredrik Asbjørnsen,
Getty Images, Shutterstock, Alamy, Offset.
Papir: Galerie Art Silk 300 g / Matt 150 g
Produksjon: 07 Media AS | Opplag: 800

NORGES BANK INVESTMENT MANAGEMENT
Bankplassen 2, P.O. Box 1179 Sentrum, NO-0107 Oslo
T: +47 24 07 30 00, www.nbim.no