STRATEGY 2017-2019 CLOSE OUT

NORGES BANK INVESTMENT MANAGEMENT

27 May 2020

Contents

Introduction

OUR MISSION IS TO SAFEGUARD AND BUILD FINANCIAL WEALTH FOR FUTURE GENERATIONS.

The strategy for 2017-2019 continued in the direction set by the 2014-2016 strategy. The objective of the management is to ensure high long-term return after costs. We have aimed to achieve this goal with moderate risk, as a responsible investor, and through an efficient organisation and transparent management.

The market value of the Government Pension Fund Global grew from 7,510 billion kroner at the end of 2016 to 10,088 billion kroner at the end of 2019. On 25 October 2019 the fund's market value passed 10 000 billion kroner.

The fund is invested in equities, fixed income and real estate across the world. During the strategy period we have prepared for investments in unlisted renewable energy. The fund provided an annualised absolute return of 8.57 percent over the strategy period. The annual net return adjusted for inflation and management costs was 6.61 percent in the period. The fund outperformed the benchmark by 18 basis points annualised in the same period.

Our main achievements in the strategy period were:

- We successfully completed the transition to 70 percent equity share.
- We expanded our relative value strategies and reduced our overall implementation costs.
- We strengthened our specialised China and environmental strategies.
- We specialised our compliance function and automated control activities.
- We reduced management costs through insourcing and automation of processes, improved IT security and moved our solutions to the cloud.

1. Large global investor

ADVICE

The fund's investment strategy has been developed gradually over time. We contribute to this development through our role as an advisor to the Ministry of Finance. In the strategy period, we provided advice on a range of different topics.

Based on a request from the Ministry, we assessed the composition of the fund's fixed income benchmark, and put forward several recommendations, with attention given to the segments, currencies and duration.

Norges Bank proposed to continue to adjust the geographical distribution in the equity benchmark further towards float-adjusted market weights.

We proposed to narrow the band for rebalancing and allow for a slower transition back to the strategic target. The band for rebalancing defines how far the equity share can move away from the strategic target before a rebalancing is triggered.

Norges Bank proposed to allow the fund to be invested in unlisted equities and unlisted infrastructure for renewable energy. We recommended that these unlisted investments should be subject to the same type of mandate regulations as the fund's investments in unlisted real estate. We proposed to adjust the regulation of the fund's pre-IPO investments to better facilitate such investments.

In 2017, we proposed to remove oil and gas stocks from the fund's equity benchmark. The proposal took as starting point the broader wealth context of the nation reflecting the ambition in the 2017-2019 Strategy Plan. We advised on the transition to 70 percent equites and proposed that the increase should be implemented over a long period taking market movements into account. Following the Ministry's decision to remove emerging market debt and upstream oil companies from respective benchmarks, we proposed plans for how these changes should be implemented in the benchmark.

We have received a number of requests for information, data, and answers to specific questions from the Ministry. During the period, we prepared responses in around 20 letters to the Ministry.

Our advice to the Ministry is supported by internal research and analysis. We publish some of this research as *Discussion Notes.* Throughout the period we published six Discussion Notes compared to 15 in the period from 2014 to 2016. In addition, we prepare internal Allocation Research Notes. In the strategy period, we prepared 33 such notes.

From 2017 to 2019, we hosted more than 30 academic seminars, where international scholars presented their most recent research at our premises. Through the Norwegian Finance Initiative, we funded the National Bureau of Economic Research's (NBER's) annual research conference on New Developments in Long-Term Asset Management.

Our work on the fund's currency composition continues and alternative risk measures suitable for the mandate have yet to materialise in advice to the Ministry, although significant progress has been made on both topics.

REFERENCE PORTFOLIO

The exposures reflected in the reference portfolio will normally be large, limited in number and require a long verification horizon.

We use the reference portfolio to further improve the total return-risk of the fund, fulfil requirements in our management mandate and facilitate cost-efficient transitions. The reference portfolio serves as the starting point for our investment strategies.

Equities

We used the reference portfolio to implement the transition to an equity share of 70 percent. We adjusted the equity share in the reference portfolio more gradually than that in the benchmark index. The reference portfolio includes a higher number of equity markets than the benchmark index. We removed 6 smaller equity markets from the reference portfolio. Our allocation to the onshore Chinese equity market has been managed as part of the reference portfolio since 2014. In 2019, this segment was included in the fund's benchmark index.

We expose the fund to systematic risk factors to enhance returns. An important priority in the period has been to ensure efficient implementation of the desired risk factor exposure. We lowered turnover by between 30 and 35 percent over the strategy period, reduced single-name exposure, and included the small-cap segment in the factor specification.

Companies we divest from due to concerns about the sustainability of their business model, are removed from the reference portfolio. The number of companies removed from the reference portfolio increased from 210 to 282 in the period.

Fixed income

We have tilted the emerging markets debt exposure towards higher-yielding currencies. The number of currencies in the reference portfolio for fixed income was reduced from 31 to 23.

We have re-introduced inflation linked bonds to the reference portfolio and adjusted the duration, reflecting the composition of the benchmark index. We have also adjusted the fiscal strength position in response to improved fiscal fundamentals in some European countries.

Real estate

The real estate allocation was removed from the fund's benchmark index at the start of the strategy period. Since then, the fund's allocation to real estate has been funded with a combination of equities and fixed income and reflected in the reference portfolio.

We evaluated the equity and currency risk in our real estate investments and introduced a funding model where the ambition is to ensure that our real estate investments serve to differentiate the portfolio, not to add exposures similar to those we already have. We use the same framework for funding listed and unlisted real estate.

Rebalancing

The reference portfolio is rebalanced between asset classes, bond segments and currencies. We have improved the tools we use to rebalance the reference portfolio cost-efficiently including how we monitor the portfolio, changes to the benchmark index and market movements.

The reference portfolio, (including real estate) contributed -3 basis points annually to the fund's excess return over the strategy period.

2. Long-term owner

ASSET IMPLEMENTATION

We continued to enhance our capabilities to manage broad market exposures efficiently. During the strategy period, 14 new instruments were added to the investment universe, and 4 instruments were taken out. From a country perspective, Slovenia equity was added to the universe, Ghana and Pakistan were removed.

Asset exposure

We implemented several strategic portfolio changes during the strategy period, most notable the equity share increase to 70 percent, an expanded equity reference index universe in China, and a reduced allocation to external managers including termination of environmental related mandates.

We improved our ability to efficiently balance relative risk and transaction cost through sharpened risk analytics and further aligning the portfolio management and trading processes. By trading less and increasingly when liquidity is available, we reduced our implementation cost, particularly within our equity management.

We expanded our relative value strategies, both in our equity and fixed income management by further specialisation.

The Chinese market has been a focus and a significant contributor to excess return.

The market environment for risk factor strategies was challenging throughout the period. Towards the end of the strategy period, we simplified our implementation model.

Our asset exposure strategy contributed 2 basis points annually to the fund's excess return over the strategy period.

Liquidity provisioning

The share of equities on loan at 7 percent has been maintained despite a challenging equity lending environment. Demand for short selling has steadily decreased, more asset owners have made their holdings available for loan, and prime broker/bank intermediaries are becoming more efficient at utilizing their internal inventory to satisfy client needs. Together, this has put pressure on equity lending volumes and margins.

From 2016 to 2018, we doubled the share of fixed income on loan to 28 percent, mostly by a larger offering of term funding. In 2019, a shift in supply and reduced demand for counterparty leverage contributed to margin compression. With insufficient compensation for risk, we actively scaled back positions, reducing fixed income on loan to around 12 percent.

We continued to develop our lending strategy and expanded our equity synthetic lending activities to additional counterparties. In 2019, we implemented the first non-bank counterparties for securities lending and cash management.

We have continued to respond selectively to liquidity demand situations, such as capital markets events and larger block offerings. Based on early experiences, we chose not to further expand our efforts to systematically provide liquidity to other market participants.

Our securities lending strategies contributed 6 basis points annually to the fund's excess return over the strategy period.

Transaction costs

Overall trading volumes were up across all asset classes. The growth in equity trading was driven by increased assets under management, as the portfolio turnover was close to unchanged. Internalization of equity orders (internal crossing) more than tripled. A more challenging equity trading environment increased the average trade cost marginally during the period.

The turnover increase in our fixed income portfolio was driven by the expansion of relative value strategies. Transaction cost is an integrated part of decision making for these strategies, and sub-strategies that provides liquidity like primary market participation may provide a transaction gain.

Markets continued to evolve, becoming faster and more fragmented and data intensive. The number of venues and platforms we utilise in our trading has continued to increase, and now count 344 for equities. We have further advanced our trading analytics and strategies to reduce our transaction cost and have adapted our processes to the regulatory initiatives and reforms coming into effect, most notably MiFID II.

Well-functioning markets

As part of our efforts to improve the functioning of markets, we increased our dialogue with regulators and other market participants. We responded to 15 consultations, published three asset manager perspectives and presented our views to key standard setters.

Our asset management strategy contributed 8 basis points annually to the fund's excess return over the strategy period.

COMPANY INVESTMENTS

We use both external and internal managers for our company investment strategies. At the end of 2019, we had 82 external managers and 52 internal portfolio managers. The number of internal portfolio managers was lower than the target of 60.

Company knowledge

Our internal equity managers covered 752 companies at the end of the strategy period against a target of 1200 companies.

We originally targeted 4000 annual company meetings and achieved 3152 in 2019, reflecting the lower portfolio manager headcount and an increased emphasis of more time-consuming bespoke company meetings.

We now originate 70 percent of our bespoke company meetings and fieldtrips across all company investment teams by using our internal corporate access team. As a result, we have reduced costs in this area by over 90 percent and improved quality of access.

Following the EU's regulatory change regarding unbundling of investment research (MiFID II), we have achieved 40 percent cost savings for external research. We have continued to develop a primary research initiative, generating bespoke proprietary research on company or industry issues.

Sector mandates

This strategy period has been one of consolidation for our specialised internal sector mandates. The number of specialised internal sector mandates has remained stable at around 30, with company coverage maintained at around 600 large companies. We have a special emphasis on Europe, where the fund has an especially strong competitive position and high ownership stakes. We have increased the European weight of the aggregate research list for our specialised internal sector mandates from 55 percent to 65 percent during the period. The specialised internal sector mandates contributed 2 basis points per year to the fund's excess return over the strategy period.

Within our credit mandates, we added coverage of 50 more companies during the period. Our credit team now covers 188 large issuers. Company meetings and field trips with joint participation from equity and credit has more than doubled to 182 meetings in 2019. Corporate bond primary issuance activity has increased by 60 percent. The credit mandates made an immaterial contribution to the fund's excess return over the strategy period.

We have expanded our capital markets team to invest more in initial public offerings (IPOs) and follow-ons. We have been able to double the allocation we receive in such offerings. Overall, we now participate in more than 70 percent of all larger market transactions. The capital market mandates contributed 1 basis point per year to the fund's excess return over the strategy period.

The China team has been rebuilt, with coverage extended to 100 companies and voting input stepped up to 51 companies. The team has also taken on increased responsibility for coverage of Chinese companies listed on foreign stock exchanges, including for some of the fund's largest holdings. In the strategy period the domestic Chinese market was added to the fund's benchmark. The benchmark of the China team has been adjusted to reflect this. The China mandates contributed 2 basis points per year to the fund's excess return over the strategy period.

During the strategy period, internal portfolio managers took over responsibility for the entire environmental portfolio. This was to ensure that the fund had one view of what we consider as environmental investments, as well as to reduce cost. In 2019, our energy team was integrated with the environmental team to improve our understanding of the ongoing energy transition. The security selection within the environmental mandates contributed 1 basis points per year to the fund's excess return over the strategy period.

Overall, our internal security selection strategies contributed 7 basis points annually to the fund's excess return over the strategy period.

External managers

We have focused on using external managers in segments and markets where local and specialist knowledge is of relevance. At the end of 2019 we had 83 external managers down from 91 in the beginning of the period, all of them country specialists. Our 66 mandates in emerging markets managed 30 percent of the fund's investments in the larger markets, being Brazil, Russia, India, China and South Africa and 76 percent of the fund's equity investment in the other markets. Our 17 mandates focusing on smaller capitalisation companies in developed countries managed 15 percent of the fund's investments in the similar market capitalisation in their respective countries.

Our strategy with external managers has continued to evolve. We entered into 34 new mandates and terminated 42 mandates in the strategy period. External environmental related mandates were terminated in 2018 to focus all resources and budget on specialist country mandates.

The funding to external managers is continuously assessed based on expected future excess return. Following extraordinary excess return in 2017, coupled with large absolute return, the funding to specialist country mandates was reduced in 2018. In 2019, the funding was increased again, and 3.9 percent of the fund was managed by external managers at the end of the strategy period, reduced from 4.3 percent at the start of the period.

Security selection in external managers contributed with 4.7 percent excess performance in 2017, 0.9 percent in 2018, and 0.8 percent in 2019, before fees.

Our external security selection strategy contributed 9 basis points annually to the fund's excess return over the strategy period.

Responsible ownership

We have expanded our capabilities, structured our approach towards standard setters, and increased our engagement with companies. We have anchored our priorities and decisions in principles, expectations and guidelines that are publicly available. Our annual publication on responsible investment has provided comprehensive information on all our ownership activities

We have in the strategy period published three new expectations documents to companies on anti-corruption, tax transparency and ocean sustainability. These are in addition to the four expectations published earlier on climate risk, human rights, children's rights and water management. On corporate governance issues, we published four new position papers promoting more efficient boards. The topics cover CEO remuneration, industry expertise on boards, time commitment of board members and separation of chairperson and CEO.

We have reviewed and updated our voting guidelines which are the basis for our voting decisions across the portfolio. In addition to publishing all our voting the day after the shareholder meetings, we have disclosed our voting intentions ahead of such meetings in 12 cases. We share our priorities and findings in our sustainability assessments.

We exercised our right to vote at 98 percent of the shareholder meetings of companies in our portfolio, a percentage that remained stable through the strategy period. We engaged extensively with companies through letters and dialogues. We addressed environmental, social or governance themes in 55 percent of the meetings between the fund and company boards or management in 2019, a slight increase compared to preceding years.

We continued our work with standard setters and other relevant stakeholders to improve global standards and practices related to environmental, social and governance risks and sustainability reporting. We have on an ongoing basis funded 3 academic research projects, seeking high-quality analyses that can inform our investment strategy. We submitted our views to regulators on 46 proposals for new rules or practices in the strategy period. We have worked closely with some standard setters to promote new standards in certain sectors. This included engaging with the United Nations Environment Programme Finance Initiative on developing climate related financial risk disclosures reporting, with UN Global Compact on sustainable oceans, and with UNICEF on abolishing child labour in the apparel sector.

We have prioritised investments in the 800 largest portfolio companies. We developed a framework implementing a sector and risk-based approach as basis for sustainability assessments and decisions. We have further developed and expanded our assessment of companies' sustainability reporting related to our expectations and started using the data to engage with companies that lack or have weak sustainability reporting.

REAL ESTATE INVESTMENTS

The fund invests in real estate to improve diversification. The strategy for real estate was adjusted towards the end of the strategy period with a new emphasis on a combined portfolio of both unlisted and listed investments and an ambition to over time aim for a more diversified portfolio across different sectors. These changes started in early 2019.

Unlisted Real Estate

During the strategy period, the fund increased its exposure to unlisted real estate from 2.5 percent to 2.7 percent, from 191 to 273 billion. At the end of the strategy period the portfolio is one of the largest among institutional owners globally, with a total net asset value of 273 billion. We have made acquisitions in line with the strategy, rather than taking a deliberate view on market timing.

The fund continued to build 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. Net new investments during the strategy period was 24.2 billion. The specific risks that come with real estate investments are diversified by their size and number. Unlisted real estate continued to diversify the fund throughout the strategy period.

Our investments in Europe was at 50.1 at the beginning of the strategy period and at the same level at the end of the strategy period. In the US our investments went from 49.9 to 48.5 percent and in Asia from 0 to 1.4 percent.

High quality assets

We targeted sectors where we can efficiently deploy our capital and high-quality assets within these. We invested in core office and high-street retail properties in our target cities, as well as global distribution networks. The sector allocation of the real estate portfolio remained relatively stable over the period, ending at 56.5 for Office, 21.9 percent for logistics and 18.2 for retail. During 2017-2019 we acquired 15 office properties, 5 retail properties, and 36 logistic properties. The total invested amount was 23.8 billion in office, 9.7 billion in retail, and 2.0 billion in logistics. In November 2019 we signed an agreement to acquire a 45 interest in logistics real estate portfolio for approx. 8.2 billion NOK with expected completion is January 2020.

We disposed 7 office assets and 113 logistics assets for a total amount of 7.3 billion, and 3.5 billion respectively. In addition, we disposed a 25 percent stake in one of our 100 percent retail assets for a total amount of 0.6 billion.

Global cities

We reduced our strategic focus from 10 to eight target cities located in Europe, the US and Asia with certain common characteristics. In June 2019 we sold our investment in Frankfurt and in December 2019 we signed an agreement to sell our investments in Munich, with expected closing in March 2020. In Europe, we now focus on London, Paris and Berlin. In the US we focus on New York, Washington D.C., Boston and San Francisco, and in Asia we focus on Tokyo. At the end of the strategy period, 68.7 percent of our investments were concentrated in these cities.

During the strategy period we completed investments in seven of our target cities. In 2017 we completed our first investment in Tokyo. Within the office and retail portfolio our largest single city exposure was to London at 21.5 percent, followed by Paris at 21.2 percent and New York at 19.3.

Local expertise

We continued to invest through joint ventures in order to benefit from partners' local expertise. We entered into three new joint venture partnerships, two in the US, and one in Tokyo.

In Europe we increased the number of 100 percent owned properties from eight at the end of 2016 to 13 at end of the strategy period. We focused on building internal asset management capabilities related to the 100 percent owned properties. Property management has been outsourced.

We moved Luxembourg companies holding French real estate company shares from Luxembourg to Norway.

We continued to lead acquisitions and follow up investments from our local offices. During the strategy period we had real estate activities from seven work locations in five time zones. Paris was added in 2018 and real estate activities in Singapore were closed the same year. At the end of the strategy period we had real estate activities in six work locations in four time zones. Our local presence ensures proximity to markets and solid understanding of tenant dynamics, and investment opportunities. We remained close to the assets we invest in to operate efficiently, professionally and commercially, for the benefit of the fund and its stakeholders.

We undertook refurbishment and development projects to ensure that our buildings maintain market standards. We entered into two forward purchase agreements to acquire three to-be-constructed properties, two properties in New York and one in Berlin.

Sustainable real estate

We assessed the sustainability performance of our global portfolio using the Global Real Estate Sustainability Benchmark (GRESB). The value weighted GRESB score for our total portfolio was 80 out of 100 in 2019, compared to 70 in 2017

The share of our office and retail properties over 2,000 square metres that obtained a green building certification was 82 percent by area in 2019 Q4, compared to 60 percent in 2017. Moreover, all new construction and major renovations projects in the office sector that were initiated or completed during the strategy period obtained a green building certification.

We strengthened our analytical capability to measure, manage, and monitor sustainability and climate risks. We established a sustainability data platform to consolidate information on energy, water, waste, and carbon emissions across our portfolio.

We worked with partners and asset managers to integrate sustainability measures into business plans.

Our unlisted real estate strategy contributed 4 basis points annually to the fund's excess return over the strategy period.

Listed real estate

The investment objective of the listed real estate mandate has been to build up a portfolio of companies owning high-quality real estate in a limited number of large liquid markets and core sectors. In line with the new focus on a broader diversified portfolio across real estate sectors, we have started to invest more outside of the office sector.

We made new net investments of USD 8 billion during the last 3 years, of which USD 4 billion was made in sectors outside the office sector following the adjustment of strategy announced in early 2019.

As of end 2019 the value of the total portfolio was USD 16 billion, with 37, 34, 22 and 8 per cent in office, residential, retail and other sectors, respectively.

We have chosen to have a concentrated portfolio with investments in 23 companies, with an average ownership stake of 7 percent. We have had an active dialog with all our companies in the portfolio during the strategy period, exercising our ownership responsibilities to enhance and safeguard returns.

Our listed real estate strategy contributed -1 basis points annually to the fund's excess return over the strategy period.

3. Safeguarding assets

RISK MANAGEMENT

During the strategy period we increased measurement, monitoring, analysis and research of portfolio wide risks.

Model risk

We benefit from having our standard risk systems complemented by internally developed risk analytics. We operationalised a cross-asset factor sensitivity framework and developed metrics and investable indices relevant for analysing behavioural biases. In total, we published internally 25 briefs and 45 analysis notes on a wide range of themes relevant for analysing and increasing our understanding of investment risk in the portfolio.

We have developed analysis related to the allocation to various investment strategies from a total risk and return viewpoint. Our scenario analysis work has also been extended.

Environmental, social and governance risk

Environmental social and governance (ESG) risk data continues its rapid developments and offerings, and we added 15 new ESG data themes to our non-financial database. Incorporating this strengthened data in our work, we performed 78 risk-based divestments. ESG considerations were also incorporated in the new framework for the approval of government bonds by the Executive Board. We have completed implemented of the coal criterion across the entire portfolio, covering both relative as well as absolute thresholds. The implementation of the coal criterion resulted in total 74 companies excluded, and 19 companies put under observation.

We expanded our research related to the financial implications of climate change, including climate scenario analysis and climate as a systematic factor.

Tail risk

We enhanced capabilities to measure tail risk and established a 22-year historical return database for the purposes of the robust measurement of market and counterparty risk, as well as positions for all asset classes including collateral. The database is primarily used for tail risk, stress testing and scenario analysis. Analytical capabilities have been enhanced for both market and for counterparty risk, where the actual collateral is used in the measurement. Standard and advanced tail risk measures are used to understand the risk profile in different market conditions.

Reference portfolio

We developed investable, lower turnover systematic factor benchmarks for developed market equities. These formed the basis for the new risk factor implementation in the reference portfolio. Towards the end of the period we implemented changes that align turnover in the reference portfolio with those in our indexing operations. We have also finalised work on research factors relevant for large investors.

Measurement capabilities

The scope of our risk measurement has been extended for both risk and performance. We developed a framework that covers both on and off-benchmark strategies that allows us to measure both performance versus funding- and portfolio benchmark. This includes the governance for all benchmarks in the investment structures. We established the concept of multidimensional measurement structures. This enables us to aggregate positions, including collateral, as well as performance, from the lowest reporting level to multiple aggregated levels in the hierarchy. The performance attribution capabilities have been extended with position level returns in addition to solutions for tailormade attribution dimensions.

Cash flow risk

We model projected cash flows and perform sensitivity assessments of the stream of coupons and dividends for the next 10 years for the combined equity and fixed income portfolio. Work in this area serves as a starting point for analysis and assessments relating to the fund structure itself.

CONTROL AND OVERSIGHT

Risk-based and efficient monitoring and control, and specialist competency in high-risk areas are essential to safeguard the fund's assets.

Risk based

We enhanced our enterprise risk management framework by adding strategic risk as a new risk class. We have further included an assessment of potential reputational impact across all main risk classes; strategic, investment and operational risk resulting in more robust decision making and better reporting of enterprise risk.

Audit activity was extensive over the 3-year strategy period. Our audit bodies conducted 62 audits covering NBIM activity. Audit projects include those from The Office of the Supervisory Council (20), Internal Audit (27) and External Audit (15). The audit activity requires extensive coordination and strong effort and commitment from the business.

Efficient control

We have strengthened our control framework through increased automation of processes and controls to identify and manage risks and prevent occurrence of incidents.

We have made significant improvements for market disclosures following implementation of new systems. The number of late or incorrect market disclosures during the strategy period was 63 with only 8 in 2019. An average of 3,677 market disclosures were submitted per year during the strategy period, with each disclosure filing requiring manual steps before filing. The error rate for the disclosures was reduced by 85 percent during the strategy period.

We have implemented a new solution for trade monitoring to provide protection against unwanted or illegal activity and ensure we operate within the complex set of regulations in the 78 markets in which we invest.

We have enhanced our risk management to include an anti-fraud and sanctions program, formalised monitoring and investigations frameworks, and further developed our framework for managing and safeguarding data privacy (GDPR).

We have implemented effective control and oversight through increased automation of the awareness training through e-learning, integrity due diligence, sanctions, conflict management and outside business activities processes.

Specialist competence

The fund's global investments involve significant challenges within trading, regulatory and real asset compliance. We have established specialist teams for information and IT security, business continuity management, physical and personal security as well as trading, regulatory, business and real asset compliance.

Information and IT security

We significantly strengthened our cybersecurity capabilities during the period. Acknowledging that cyber-threat actors have become more sophisticated and that the existing IT service model was unlikely to deliver the control necessary to safeguard our information and IT systems in the future, we have insourced IT operations and IT security services together with the appointment of providers who are specialists in their field. This included an extensive upgrade of our IT security systems and on-boarding of a specialised security services provider. This and 11 new hires in our 1st and 2nd line IT security specialist teams increased our ability to operate in a more sophisticated threat environment and to provide 24/7 monitoring and management of IT security incidents.

We have established a best-practise governance structure for security that is well-anchored in the organisation. To manage and measure our security efforts, we leveraged the Cybersecurity Framework (CSF) from the National Institute of Standards and Technology (NIST).

To increase security, we have established an information and IT security awareness program which is centred around human risks. The number of individuals with privileged access to the fund's IT infrastructure has been significantly reduced to lower the risk of a successful cyberattack.

4. Efficient execution

INVESTMENT ORGANISATION

As an investment organisation, we constantly strive to foster a performance culture. We have focused on giving our leaders tools and knowledge about setting clear expectations and giving continuous feedback. We have run a customized two-year Leadership Development Program for all leaders across all offices and areas, consisting of five modules on culture and values, communication, people performance, collaboration, and people development.

Cost efficient

We maintain a high level of cost awareness in our management of the fund and work continually to simplify and streamline operations in order to realise economies of scale. Total internal management costs fell from 4.0 basis points in 2016 to 3.7 basis points in 2019, well below our expectations to keep cost below 5 basis points of asset under management. The absolute internal costs increased from 2.9 billion in 2016 to 3.4 billion in 2019.

Approximately 70 percent of costs are billed and in foreign currency. Fluctuations in relevant exchange rates have led to an increase in costs measured in kroner in recent years. Excluding the currency effect, the absolute internal costs have been relative stable during the strategy period, despite of management of the fund has become more complex over time, with a higher allocation to equities and investments in more markets and currencies. We have managed to reduce internal costs further through insourcing and automation in several processes. Compared to peer investors, our costs measured as fraction of assets under management remain low.

Lean organisation

We have focused on remaining a small and flexible organisation. The number of permanent employees has remained relatively stable, with 568 employees at the end of 2016 compared to 540 at the end of 2019.

Changes in investment strategy for unlisted real estate resulted in the decision to discontinue Norges Bank Real Estate Management (NBREM) as a separate organisation. NBREM was fully integrated with NBIM in 2019. The integration has included transfer of all employees and integration of organisational units. It further included alignment of governance model, processes, committees, systems and services and corresponding providers.

We have extended and upgraded our office capacity in New York and London. A total of 43 percent of the employees are working at our international offices outside of Oslo compared to 47 percent at the end of the previous strategy period.

Our share of women has remained stable at 25 percent despite different initiatives to improve the gender balance. At management level the share of women is 22 percent at the end of 2019.

Knowledge based

We have strengthened our employee development programme, through the NBIM Academy, including e-learning based training modules. Our e-learning platform consists of 1,683 available training courses. We have over the period run 434 training sessions, including cloud technology certifications for 72 employees.

INVESTMENT PLATFORM

Our management assignment requires a robust, efficient and secure investment platform for global portfolio management and transaction processing.

Efficient sourcing

During the strategy we conducted a significant effort to insource our IT operations and move all solutions to cloud services. After an assessment of the feasibility of running our solutions in the cloud, we initiated a public procurement process and selected a main cloud service provider. We established the necessary security controls and migrated all our solutions in less than ten months. As part of the migration, we automated provisioning of infrastructure, which enhances the reliability and security of the platform, and enables us to scale up our resources on demand. This major undertaking was finalised below budget and according to plans in May 2019, followed by a decommissioning of our old data centres.

Global operations

In parallel with our migration to cloud services, we terminated service deliveries from our incumbent technology services provider and offboarded around 200 associates. We have consequently strengthened our technology teams in Oslo, Singapore, New York and London to ensure 22/5 coverage for our technology solutions.

Efficient solutions

We have continued our focus on automation in settlement and asset servicing processes. During the strategy period, we have settled an average of 278.000 trades per year. The straight through processing (STP) rates for securities settlement remained stable at an average of 94.5 percent through the strategy period. We have put significant effort in improving these numbers, but we also have seen implementation of new instruments, markets and processes that imply manual steps in our workflows and hence pull the STP rates in the opposite direction. For corporate actions we improved the STP rate from 83.9 percent in 2017 to a level of 93.2 percent in the second half of 2019 as a result of many minor workflow automations. On average we handle 43.000 corporate actions transactions per year. We have a strong focus on continuous improvement of the data quality of our net asset valuations and have reached a high level of quality.

To efficiently execute trade orders and keep transaction costs as low as possible, we have implemented a new execution management solution for equity and foreign exchange trading. We insourced performance measurement for externally managed mandates from our custodian.

COMMUNICATION

We have worked to improve the general knowledge and understanding of the fund and the investment strategy. We have redesigned www.nbim.no, increased availability for journalists, presented at a high number of conferences, introduced new communications channels, launched a new intranet and established an effective process for public reporting.

Comprehensive information

Our main information sharing platform is www.nbim.no, and relevant information about the fund is published through this site. We redesigned our website with increased accessibility of content and improved navigation for the designated target group, the general public in Norway. In addition to the annual report and extended information on responsible investments, performance and risk, and real estate management, we have published six discussion notes, three asset manager perspectives, four position papers, and 51 consultations. Time-series data, analysis and documents are still available and downloadable for more professional users. Our website now has more than 300,000 visits monthly, with an increasing trend.

Increased knowledge

During the strategy period we developed and launched the interactive digital education solution www.generasjonsfondet.no, directed at young Norwegians. We also launched the Facebook page “Oljefondet”.

In the strategy period we presented at 120 meetings and conferences in Norway and internationally annually. In 2019, 60 percent of the presentations were given in Norway, up from 50 percent at the start of the strategy period in 2017. Over the period we also initiated meetings with prioritised opinion-formers in Norway. We arranged four NBIM Talks on topics relevant for the fund and the annual Norwegian Financial Research Conference.

We increased our international visibility and tried to balance visibility on environmental, social and governance topics with the main goal of long-term return.

We increased general availability for media, both in terms of how we respond to written inquiries, and the increased number of press seminars, editorial meetings and interviews with management. During the strategy period, we received more than 700 requests from Norwegian media, and around 1500 requests from international media.

In 2019 the fund was awarded Farmandsprisen for best website, for best idea and design for the digital communications solution generasjonsfondet.no, and for best annual reporting in public sector.