Sovereign Wealth Funds: Sustainable and active investors? The case of Norway

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5. Sovereign Wealth Funds: Sustainable and active investors? The case of Norway[1]

INTRODUCTION

There is a growing interest on the role played by large institutional investors to support sustainable finance and to act as responsible owners. This trend is also affecting sovereign wealth funds (SWFs) who, as long-term investors, are adapting themselves to investment strategies and risk management tools aligned with both responsible ownership and sustainable economic growth.

Indeed, two big global events in 2015, which fostered the awareness on sustainable development goals and climate change, have helped to align the incentives of large institutional investors around responsible investments.

First, in September 2015, after three years of negotiations, the 193 country members of the United Nations agreed on the "2030 Agenda for Sustainable Development" which included 17 Sustainable Development Goals (SDGs), continuing and enlarging the impact of the Millennium Development Goals (MDGs) which expired in December 2015. The main thread is the commitment to eradicate poverty.

SDGs display a strong focus on specific sustainable development actions, in comparison to the often criticized excessively ample MDGs. In particular, goals such as climate action, affordable and clean energy, clean water and sanitation, responsible consumption and production, strong institutions, or innovation and infrastructure, point to a new array of goals that should be achieved to obtain durable and sustained development. For this, the UN acknowledges the critical role of partnerships. Indeed, the last of the goals refers explicitly to "partnerships for the goals" and includes all kinds of measures including "financial support and debt relief, the transfer of technologies and scientific know-how to developing nations on favorable terms, and the establishment of an open, non-discriminatory and equitable trading system to help developing nations increase their exports." But most importantly, the message was sent out to reach all partners, including large institutional private and public investors, including SWFs, in order to fill the immense investment and financing gap required to fulfill the SDGs within the next 15 years.

Second, in December 2015, only 3 months after the release of the SDGs, the 2015 United Nations Climate Change Conference was held in Paris. It was the 21st session of the Conference of the Parties (COP 21) to the 1992 United Nations Framework Convention on Climate Change (UNFCCC). The conference negotiated the Paris Agreement, a global agreement on the reduction of climate change, the text of which represented a consensus of the representatives of the 196 parties attending it. On April 2016, 174 countries signed the agreement in New York, and began adopting it within their own legal systems (through ratification, acceptance, approval, or accession).

These two global calls have resonated among sovereign wealth funds. Actually, in November 2016 during the annual meeting of the International Forum of SWFs (IFSWF), this group of SWFs (representing almost 70% of the assets in the industry, north to US$5 trillion) decided to explore the investment implications of the global commitment to curb greenhouse gas emissions and to identify the most relevant and pressing challenges and opportunities with a view to establishing a long-term program on this subject.

More recently, in December 2017, a group of six SWFs established the "One Planet Sovereign Wealth Fund Working Group", in order to accelerate efforts to integrate financial risks and opportunities related to climate change in the management of large, long-term asset pools through the commitments to develop an environmental, social and governance framework (ESG Framework) to address climate change issues, including methods and indicators that can inform investors' priorities as shareholders and participants in financial markets; and to publish the ESG Framework, methods and indicators in 2018[2].

Founding signatories of the One Planet SWF working group included the Abu Dhabi Investment Authority, Kuwait Investment Authority, the New Zealand Superannuation Fund, Norges Bank Investment Management, the Public Investment Fund of the Kingdom of Saudi Arabia, and the Qatar Investment Authority. These six funds total US$2.9 trillion of assets under management, and represent almost 40% of all the industry assets. More SWFs will be joining in the coming months. China and Singapore are the only missing two big poles of SWFs not represented (yet) in this influential group of sovereign investors.

1. The case of Norway and the Volkswagen emissions scandal was prepared by Marta Santiváñez during her research stay at the Sovereign Wealth Lab at IE Business School. I want to thank her for the excellent research and research assistance.

2. More details available at the press release note here: https://www.nzsuperfund.co.nz/news-media/joint-communiqu%C3%A9-one-planet-sovereign-wealth-fund-working-group

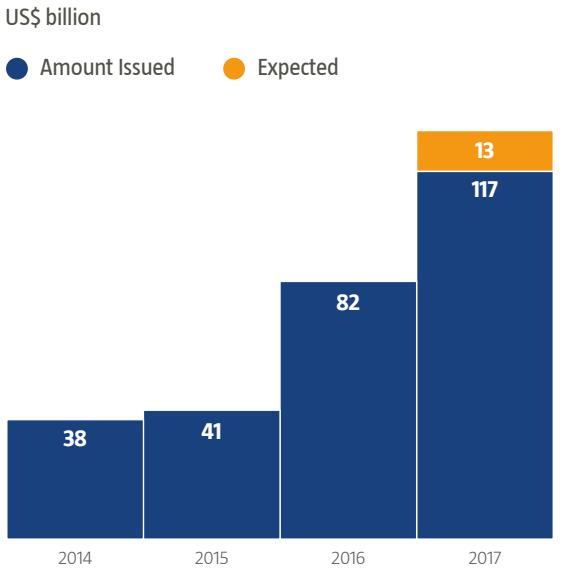
Beyond environmental issues, and conscious of the importance of well governed organizations to sustain portfolio long-term value, SWFs continue their effort to establish the best possible governance, accountability, and operational methods. SDGs include related issues such as responsible production, innovation and infrastructure or strong institutions.

The role of SWFs to finance and invest on climate-related projects and to enhance global governance standards is essential. Indeed, governance provisions enhancing board accountability, better board monitoring capabilities or transparency towards stakeholders, should facilitate avoiding environmental damages, such the paradigmatic case of gas emissions of Volkswagen, which is explored in-depth in this chapter.

The rest of this chapter will explore first the concept of the green economy with a focus on green bonds, and how new regulation may help to enhance the inclusion of sustainable and responsible investment criteria among large institutional investors. The second section describes the main examples of SWFs incorporating green criteria to investment decisions. The third section explains the role of responsible ownership and the strategy developed by the Norges Bank Investment Management (NBIM), the manager of the worlds' largest SWF, the US$1 trillion Government Pension Fund Global of Norway.

Figure 1

Green-labelled bonds issuance per year



Source: Sovereign Wealth Lab based on CBI (2017).

1. THE GREEN ECONOMY

Several studies have tried to capture the size of the green economy. One of the key dimensions refers to green bonds, the most used instrument to finance projects compatible with environmental preservation, which are expected to reach US$1 trillion in 2021. Yet, there is a long way to go.

The size of the green bonds market pales in comparison to the global bond issuance volumes. In 2016, governments, corporations and financial institutions issued US$9.2 trillion in debt bonds worldwide. This trend may reverse in the near future, but so far borrowers keep raising funds to record paces ahead of central banks deciding to tighten conditions and governments removing economic incentives. In comparison, in 2016, green-labelled bonds issuance was worth US$82 billion. That is, at the end of 2016, green bonds issuance volume represented a mere 0.9% of the global bond market size[3].

Yet green bond markets are growing strongly. In 2015, total green-labelled bonds reached US$41 billion; in 2016, it was US$82 billion, doubling year on year. By September 2017, the figure stood at US$56 billion. The optimistic forecast is that the global green bonds market will reach US$130 billion on new issuance by the end of 2017[4]. It would imply a growth rate of 85% in comparison to 2016, and shows the strong support these initiatives are receiving by institutional investors, policymakers, and corporations.

3. Figures used in this study follow the strict definition of green labelled bonds established by the Climate Bonds Initiative, which exclude multiple green bonds issued in China (the world's largest market) under People's Bank of China guidelines. That is, it excludes PBOC's green bonds used to upgrade coal-fired power stations including clean coal, to finance hydropower electricity generation greater than 50 MW, or bonds with more than 10% of proceeds allocated to 'general corporate purposes' rather than disclosed green assets. More details at: https://www.climatebonds.net/market/explaining-green-bonds/china-definitions

4. For details of global green bond issuance check the non-for-profit data aggregator www.climatebonds.net

Table 1

How green is your project? The Shades of Green methodology

Shades of Green	Definition	Examples
Dark Green	Projects and solutions that correspond to the long-termvision of a low carbon and climate resilient future Medium Green.	Wind energy projects with a governance structure that integrates environmental concerns.
Medium Green	Projects and solutions that represent steps towards the long-term vision, but are not quite there yet.	Plug-in hybrid buses.
Light Green	Projects and solutions that are environmentally friendly but do not by themselves represent or contribute to the long-term vision.	Efficiency in fossil fuel infrastructure that decrease cumulative emissions.
Brown	Projects that are in opposition to the long-term vision of a low carbon and climate resilient future.	New infrastructure for coal.

Source: Sovereign Wealth Lab based on CICERO (2015).

One critical aspect of the young low carbon economy is the clarity and the definition of risks and appropriate methods. In the case of green bonds, there is still uncertainty among investors about how "green" will be the usage of the proceeds obtained by the issuers. In this regards, the Center for International Climate Research (CICERO) has developed a methodology named "Shades of Green" to evaluate how well a green bond aligns with a low-carbon climate resilient future (Table 1).

Regulatory push

There are other ways to support the climate-related SDGs. One of the most pressing strategies include regulatory measures such as those introduced in France, the United Kingdom and China.

In France, new regulation passed in 2015 with the law "energy transition for green growth" have reinforced the reporting requirements linked to greenhouse gas (GHG) emissions. The first dimension, directed to listed and large privately-held companies, requires that the boards report on the indirect emission occurring along the supply chain, which is normally not reported despite of the fact it represents three quarters of overall GHG emissions on average. The second aspect of the law is that it targets institutional investors and makes France the first country to introduce mandatory carbon reporting by investors[5]. All institutional investors, with assets above €500 million will be required to report climate change risks, capital expenditure for the development of fossil fuels, carbon footprint, etc. This is a critical aspect as it may help to mobilize the US$100 trillion in hands of institutional investors to greener investments such as green bonds or renewable energy.

5. More details about the passage of the law at https://www.ipe.com/countries/france/france-aims-high-with-first-ever-investor-climate-reporting-law/10011722.fullarticle

The United Kingdom, on its part, have fostered the creation of several new organizations which would help to understand the needs of green financing and to bring some clarity to the often obscure and confusing definitions of sustainability. On behalf of the United Kingdom, the Bank of England (BoE) co-founded and co-chairs the G20 Green Finance Study Group (GFSG) with the People's Bank of China (PBC), and the United Nations Environment Programme (UN Environment). The goal of this high-level group is to "identify institutional and market barriers to green finance, and based on country experiences, develop options on how to enhance the ability of the financial system to mobilize private capital for green investment"[6]. Also, the BoE's Governor chairs the newly-established Task Force on Climate-related Financial Disclosures (TCFD), which aims to bring transparency on climate risk, as it will develop voluntary, consistent climate-related financial risk disclosures for use by companies in providing information to investors, lenders, insurers, and other stakeholders.[7]

China recently launched an initiative jointly promoted by the PBC and the UN Environment to establish China's green financial system. The reasons are clear for China with levels of pollution in many areas that can no longer be ignored. Air quality, for instance, is satisfactory in only 8 out of 74 major cities, and just 25 percent of drinking water reaches national quality standards. The extent and severity of China's environmental pollution is closely related to China's industrial, energy and transportation structure, with heavy industries accounting for almost 30 percent of the national GDP and 67 percent of energy based on coal sources. China urgently needs to initiate its transition toward a green and sustainable growth model. It is estimated that achieving national environmental goals will require an annual investment of at least US$320 billion into environmental protection, energy efficiency, clean energy, and clean transportation"[8]. China seems to mark again a big part of the agenda of the SDGs; as it happened with the MDGs, which became a success due to the millions of people who get out of poverty in the Asian country. To attain important goals in GHG emissions will be linked to the success of Chinese policies to reduce those emissions and would imply a transition to a low carbon economy.

2. SOVEREIGN WEALTH FUNDS AND THE GREEN ECONOMY

Beyond regulation, institutional investors, and SWFs in particular, may have a strong impact on the green economy by setting up sustainable friendly risk management tools and incorporating climate-related criteria to their strategic asset allocation. For instance, SWFs may choose to invest more on equity or bonds issued by green-aligned companies, those who derive the majority of their revenue from climate-aligned assets. The inclusion of climate criteria in the selection of external managers or in the in-house asset allocation strategy is growing among SWFs, as shows the establishment of the Climate Action SWF Working Group and the efforts of the IFSWF in promoting a long-term investment vision which includes climate-related risks and opportunities. For this, the transparency requirements of the Green Transition Law passed in France or the standardization of financial climate-related risk reporting impulse by the TCFD, will be crucial.

SWFs, as part of the institutional investment industry hold specific features to become relevant players in the sustainable economic future. First, SWFs are long-term investors whose goals and time-frame align well with the SDGs. Second, more SWFs are investing in private markets including infrastructure, a crucial sector for achieving SDGs given the large investment gaps in transportation, energy, utilities. Third, SWFs by definition are connected to national governments, and to develop joint efforts with national-wide strategies would amplify the impact on SDGs both domestic and regionally. SWFs, in sum, are well positioned to help on filling the investment gap needed to achieve the SDGs in the coming years.

There are different channels that SWFs may use to generate such a positive impact. The main channels can be grouped on decarbonization strategies (divestments of highly carbon exposed companies), and investments in green assets (commitments to green infrastructure or agriculture funds, support to renewable energy companies, investments in clean tech solutions).

6. More information is available in the G20 Green Finance Synthesis Report at http://unepinquiry.org/wp-content/uploads/2017/07/2017_GFSG_Synthesis_Report_EN.pdf

7. All details about the mission, members and milestones of the TCFD can be traced here: https://www.fsb-tcfd.org/about/

8. See more details at https://www.cbd.int/financial/privatesector/china-Green%20Task%20Force%20Report.pdf

Decarbonization strategies

SWFs control 8% of all listed equities worldwide, according to IE–SWLab estimates. This significant position implies SWFs may exert an important influence and generate imitative processes among other large institutional investors.

Few SWFs have established strategies for reducing the exposure to fossil fuel reserves and carbon emissions. According to the UN Portfolio Decarbonization Coalition (PDC), portfolio decarbonization refers to systematic efforts by investors to align their investment portfolios with the goals of a low-carbon economy. Among SWFs, only France's CDC have joined PDC. Yet, by the size of the divestments made, and the relevance in the SWF industry, it can be said that both New Zealand Superannuation Fund (whose former CEO has been the Chairman of the IFSWF) and NBIM (managing the world's largest SWF) are leading this movement among SWFs.

NZSF, one of the most profitable SWFs, returning 10.5% per annum since inception in 2003, has designed a new global equity benchmark which excludes companies with high carbon impact. This low-carbon benchmark provides the same returns than the general global benchmark. It implies that it is not necessarily true that ethical criteria reduce returns.

The fact that several institutional investors, including sovereign and pension funds, are missing returns after divesting from tobacco producers, have raised the questions on how to be ethical and profitable at the same time. The answer of NZSF is the design of alternative low carbon portfolios with the same expected returns of the global portfolio. The big advantage of such strategy is that in a ceteris paribus situation when green risks are not manifested, NSZF would not miss returns. On the other hand, if latent green related risks (environmental damage, stranded assets, regulatory risks, and the reputational dimension) ever emerge, NZSF is well hedged against these risks.

New Zealand, after years of analysis, has initiated a strong strategy on climate change. NZSF has analyzed where carbon emissions and carbon reserves were concentrated; how best to reduce exposure and carbon risk; and where to focus its efforts in seeking additional low carbon and climate-resilient investments that meet their risk-adjusted return requirements[9]. In 2017, it published the first results of the new strategy. It has reduced its exposure to carbon emissions more than 20% after it reviewed its entire passive portfolio (40% of total portfolio). NZSF plans to extend this low carbon strategy to its entire active and fixed income portfolio in the coming years. By 2020, the goal is to reduce the carbon emission intensity of the fund by at least 20%; and reduce the carbon reserves of the fund by at least 40%. NZSF completed the strategy and it announced in August 2017 that it had sold stakes in almost 300 companies, valued worth US$693 million.

Responsible investment is an integral part of the management of the sovereign wealth fund of Norway. NBIM, which manages the Fund, has a strong commitment to the responsible investment movement. Only in the third quarter of 2017, the NBIM has participated or collaborated with United Nations-backed Principles for Responsible Investment (PRI), to provide inputs on the proposed reforms introduced by the FSB Task Force on climate-related financial disclosures and "the PRI's objective of strengthening fundamental obligations and expectations for signatories' implementation of the principles". NBIM has also backed or assessed on initiatives to improve information on climate, water and reforestation. NBIM only has a small fraction (4.5%) of its capital managed externally. Yet, it includes 7 mandates for environment-related investments.

On its part, NBIM has also initiated a campaign to reduce the carbon footprint and reserves of its portfolio. Following a three-tranche divestments between 2016 and 2017, the GPFG from Norway has divested from 69 coal power or mining companies. Another 13 companies are still under observation because of the coal criterion. The estimated total value of the stakes divested from the excluded companies is US$2,100 million. It is the largest decarbonization strategy to date among SWFs.

The reduction in the carbon intensity or carbon exposure of the NBIM portfolio has been driven by these changes. NBIM publishes the carbon footprint of its equity portfolio since 2014. In 2015, the carbon footprint of NBIM's listed equities portfolio was 12% less than its reference portfolio. In 2016, the figure grew to 16%, implying an improvement of 4 percentage points year on year. The majority of the improvement was attained in the carbon emissions of utilities and basic materials sectors, were most of the companies excluded by the thermal coal criteria were classified.

9. More details in its website: https://ar2017.nzsuperfund.co.nz/climate-change

Moreover, in November 2017, NBIM announced its intention to divest oil and gas stakes, which amounted to 5.5% of its equity portfolio, that is US$39 billion. NBIM details how Norwegian petroleum wealth is exposed to a permanent oil price decline through sectors that co-move with oil prices. This responds to a real long-term view and is compatible with missing short-term returns out of these sectors. Indeed, "oil and gas companies delivered the best return in the third quarter at 8.7 percent, due to higher oil prices in the wake of increased demand for oil, a normalization of global oil stocks, OPEC's quota discipline, and lower production of shale oil in the US"[10]. This relates to one of the fears of institutional investors for investing in green assets and divesting carbon-based companies and high GHG emitters. Yet, for long-term SWFs with high dependence on oil and gas, the inclusion of climate-related risks such as long-term oil price decline, regulatory risks and stranded assets, remain critical and explain why is important for NBIM to divest to prevent the materialization of such risks.

Integrating ESG concerns in the investment decisions is one of the core missions of United Nations-backed Principles for Responsible Investment (UNPRI). Indeed, three funds are among the founding signatories of the UNPRI: Ireland Strategic Investment Fund, New Zealand Superannuation Fund and CDC (France) in April 2006. This group was rapidly joined by GPFG (Norway) in July 2006. Lately, Khazanah Nasional (Malaysia) and Ithmar Capital (Morocco) joined the group in 2016 and 2017, respectively. Given the important financial and institutional role that many SWFs have in their domestic economies, to be part of this initiative may generate imitative trends at home. Other institutional investors, governments and corporations may join UNPRI and other advocacy groups towards more responsible policies and actions.

Yet, policies towards greener portfolios are not restricted to SWFs which are members of the PRI: Other SWFs are also investing, even heavily, in green assets, and thus helping into the transition to low carbon economies. In fact, the role played by Senegal and Nigeria, in renewable energy and in infrastructure and agriculture can be relevant. By integrating ESG considerations in the design of focused funds, these initiatives may generate a trend within Africa's institutional investors to finance the huge investment gaps needed to achieve the sustainable development goals.

Still, the number of SWFs which are considering sustainability on their passive or active portfolios remains small. Along with New Zealand or Norway, South Korea decided to follow a similar strategy and has established a special mandate to invest US$300 million, which represents 0.3% of its portfolio, in low carbon companies. It is a starting point, but the comparison to the total equity portfolios of the SWF industry is quite impressive. The total equity portfolio of the industry is estimated at US$5 trillion. Thus, the impact of decarbonization strategies, including KIC in South Korea, is just residual. The estimated value of the divestments made by NBIM is US$2.1 billion, added to the CDC, KIC and NZSF, the total amount is US$2.9 billion. It implies that the decarbonization strategy followed by SWFs up to date is worth just 0.04% of the total assets of the SWF industry.

Apart from divesting from companies with high carbon impact, other SWFs are investing or remaining as shareholders in companies which are decided to reduce its carbon footprint (this is the case of both Norway and New Zealand).

In this way, SWFs exert both sustainable and responsible active ownership strategies. SWFs in conversations with utilities, energy or infrastructure companies, may catalyze the switching to a more intense green energy source mix. This can be done through communication with the boards, direct talks to the top executive management teams or by disclosing expectations on these particular aspects. And this is precisely one of the hot topics around climate change: the debate between divestments and engagement. The discussion is to decide which channel is more effective. On the one hand, to stay and exert active policies with boards, other shareholders and managers to establish green investment criteria. On the other hand, to sell the equity stakes and divest ("vote with the feet" in the corporate governance jargon) and thus signal high polluting companies. There is still no clear wisdom on how each channel may benefit climate change goals, and which of the two should be applied universally.

10. The Discussion Note on Petroleum Wealth and Oil Price Exposure of Equity Sectors here: https://www.nbim.no/contentassets/e9d384ea85c64381bbdd4c9be6622e53/government-pension-fund-global---q3-2017-report.pdf and the Q3 2017 Report is available here: https://www.nbim.no/contentassets/e9d384ea85c64381bbdd4c9be6622e53/government-pension-fund-global---q3-2017-report.pdf

Investments in green assets[11]

Sovereign funds are increasing their exposure towards privately-held companies and projects. Private markets accounted to almost one third of SWFs portfolios at the end of 2016. This implies a substantial change if compared to only a decade ago, when private markets represented just 12% of the total SWFs portfolios. The presence of SWFs in infrastructure, real estate, private equity funds and venture capital, is more prevalent.

According to Preqin, the data provider, the proportion of SWFs investing in private equity has grown from 47 to 61% in just two years. The share of SWFs investing in real estate and infrastructure has also grown to 63% from 59 and 60%, respectively. More funds have enlarged their investment teams, hired investment bankers from recognized plazas, and established new governance structures and departments to face the specific challenges of investing in complex asset classes such as infrastructure and real estate. This professionalization may facilitate the transition towards green assets, given in-house capabilities have been developed in the recent past in many SWFs.

The strong linkage between infrastructure projects, especially in energy and transportation sectors, and green emissions is undeniable. According to UNCTAD, the bulk of the effort to achieve the COP 21 goals is to change the energy matrix towards greener sources. The development of large-scale sustainable energy projects in emerging markets is critical. The role of domestic SWFs from these countries, in partnership with others is thus preeminent. The financing and investment needs are not covered by current investment flows. Today, investments into power sectors in developing countries total US$260 billion. The projected annual needs stand at US$630-950 billion, leaving an investment gap of US$370-690 billion per year. And this figure represents just one of the sectors in need of new capital; other critical sectors such as transportation, telecommunications, water and sanitation, or climate change mitigation, require similar amounts. In total, the UNCTAD estimated that the current investment gap in developing countries in key SDG sectors (including health and education) stands at US$2.4 trillion per year[12].

SWFs have invested heavily in infrastructure and natural resources. On average, these two broad asset-class groupings have represented a quarter of the transactions made every year by SWFs since 2010 up to 2014. In the last two years, the impact of the oil price crises has derailed SWFs from entering into commodity sectors, yet the role of real estate and infrastructure has grown. According to the data in the Chapter 4 on real estate and infrastructure, these sectors amounted to 60% of all foreign direct investments by SWFs in 2016.

Yet, SWFs have developed various initiatives to introduce sustainable investment criteria in their infrastructure and sustainable development portfolios. More interestingly, SWFs from countries with urgent and large investment needs are developing strategies and structuring their funds to comply with these needs and help to direct the domestic economies achieve the SDGs. This is the case of Senegal, Nigeria and Morocco.

Three examples of green infrastructure from African SWFs: Senegal, Nigeria and Morocco

Senegal has made large offshore oil and gas discoveries since 2014. It is estimated that Senegalese discoveries may reach 1 billion barrels of recoverable hydrocarbons, starting to pump in 2021. So far, before the first barrel of oil is extracted, the "Fonds souverain d'investissement stratégiques" (FONSIS) looks more like a development-SWF than a saving-SWF. Today, the main objective of FONSIS is to source and facilitate deals which are considered "strategic" by the government of Senegal through capital investments, partnerships and designing vehicles reducing funding risks. In three years, the Fund has closed 8 transactions worth over US$160 million by investing and attracting co-investments and debt, with a multiplier (leverage ratio) of 12 to 1. There is a strong commitment with renewable energy. Senegal's FONSIS partnered with French investors to build the largest solar farm of West Africa. Also, FONSIS is backing another 20MW project in north Senegal, where it has invested US$1 million and has attracted other US$46 million in equity and bank debt, showing the capacity of FONSIS to develop and

11. This section is largely based on the analysis of the SWFs green investments which can be found in Capapé, J. 2018. "Financing sustainable development: The role of sovereign wealth funds for green investment." UN Environment Working Paper. Geneva: UN Environment.

12. More details in UNCTAD. 2014. World Investment Report. Geneva: UNCTAD

structure strategic and bankable greenfield and brownfield projects to attract foreign capital in sustainable business areas. Senegal, on its part, joined the International Finance Corporation's Scaling Solar program in January 2016. Under this initiative, the IFC is organizing auctions for solar, as well as providing financing and guarantees for investors in order to reduce funding risks.[13]

Nigeria is supporting several initiatives with clear sustainable development impacts. The Nigeria Sovereign Investment Authority (NSIA) was established in 2011. NSIA has a triple mission: develop domestic infrastructure, stabilize government budgets and to save for future generations. Yet, only few investments have been made by infrastructure branch of the NSIA (capitalized with US$600 million). One of the first deals has focused sustainable agriculture in Nigeria. NSIA has backed the fundraising of FAFIN, a 10-year fund with a final close of US$66 million. The asset managers have elaborated its own ESG guidelines to provide a "robust framework", which they use to assess operations of potential target companies prior to investing. This particular foreign-government-backed fund only invests in those Nigerian companies that meet (or can meet) the manager's ESG guidelines. Also, NSIA partnered and formed a joint venture with Old Mutual to set up a US$200 million agriculture fund. Both parties provided seed capital (US$50 million each). The fund focus is on integrated commercial farming and agriculture food processing projects in Nigeria. Main investment objectives include food security and import substitution in addition to commercial returns.

The Moroccan SWF, renamed Ithmar Capital, announced in late 2016 that it has signed a Memorandum of Understanding with the World Bank to launch the Green Growth Infrastructure Facility for Africa (GGIF). It is the first green investment fund dedicated to the African continent. GGIF for Africa, structured as a private equity fund, will aim to attract private investors in search of responsible and green investments. The main goal of the GGIF is to direct the flow of private capital to responsible infrastructure investments. Ithmar is seeking to raise $1 billion-$2 billion from infrastructure specialists and other sovereign funds. GGIF will focus on clean energy and water projects. Recently, Ithmar Capital and the Ghana Infrastructure Investment Fund (GIIF) have signed a strategic partnership to explore co-investment opportunities in several African countries. This validates the growing interest among institutional investors for green investment opportunities. Also, Morocco signed several public-private and private-private partnerships with Senegalese institutions, FONSIS included. They have joined forces to develop solar large scale projects and share expertise on renewable energy. These multi-country co-investments on green assets are growing in West Africa and represent an opportunity to cover large infrastructure gaps, mainly energy shortages, that remain critical for economic sustainable development.

Global recent renewable energy investments by SWFs

Recent investment activity has risen on renewable energy investments. SWFs with expertise in infrastructure, such as GIC, ADIA or CIC, and more conservative investors such as Alaska Permanent Fund Corporation, have all invested in new renewable energy projects, paving the path for other SWFs and institutional investors to join them in supporting clean energy companies and projects. "The credibility of governments' clean-energy premiums and tariff agreements are critical regulatory risks in this sector." For the majority of SWFs, to invest into renewable energy is not only a way to support SDGs but to diversify their infrastructure portfolios too.

In October 2017, a group of private-equity investors led by New York-based Global Infrastructure Partners (GIP) and China's sovereign wealth fund announced the acquisition of a portfolio of Asian wind and solar energy projects from Singapore-based Equis for US$3.7 billion. When finalized, this would be the largest renewable energy generation acquisition in history. And CIC Capital, the private equity arm of China Investment Corporation, is participating on it. GIP, it is an old friend of SWFs which has already dealt with SWFs in developed markets infrastructure acquisitions. In 2016, GIP partnered with Australia's Future Fund in the acquisition of the 50-year lease of the Port of Melbourne. The same year, GIP sold the London City airport to a consortium of investors joined by the infrastructure arm of the Kuwait Investment Authority. GIP launched the largest-ever infrastructure fund (GIP III) in November 2017, it is said to count on several SWFs among its limited-partners.

Also, the Alaska Permanent Fund Corporation (APFC) participated in the last funding round of Generate Capital, a leading financer, owner, and operator of distributed energy and resource infrastructure. Generate Capital plans to use

13. More detailed information is available at https://www.pv-magazine.com/2017/06/30/senegals-first-solar-park-comes-online/

Infographic 3

Green investments by SWFs

VALUE (US$M)

DIRECT IMPACT

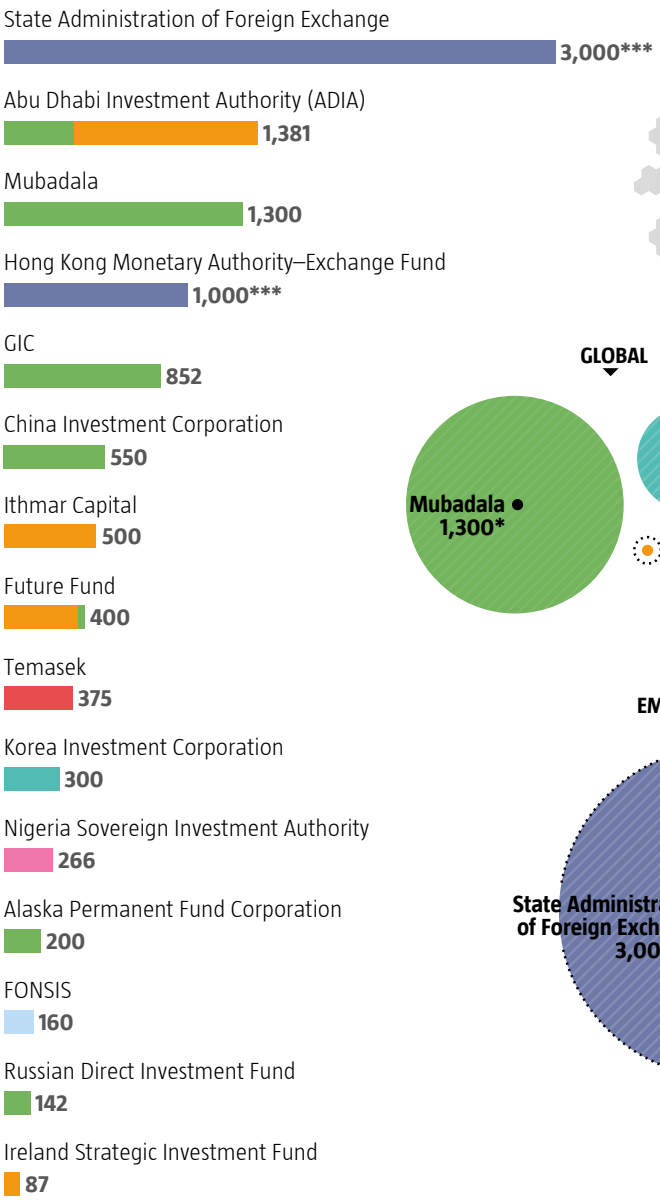
CONTRIBUTION TO INVESTMENT PLATFORM

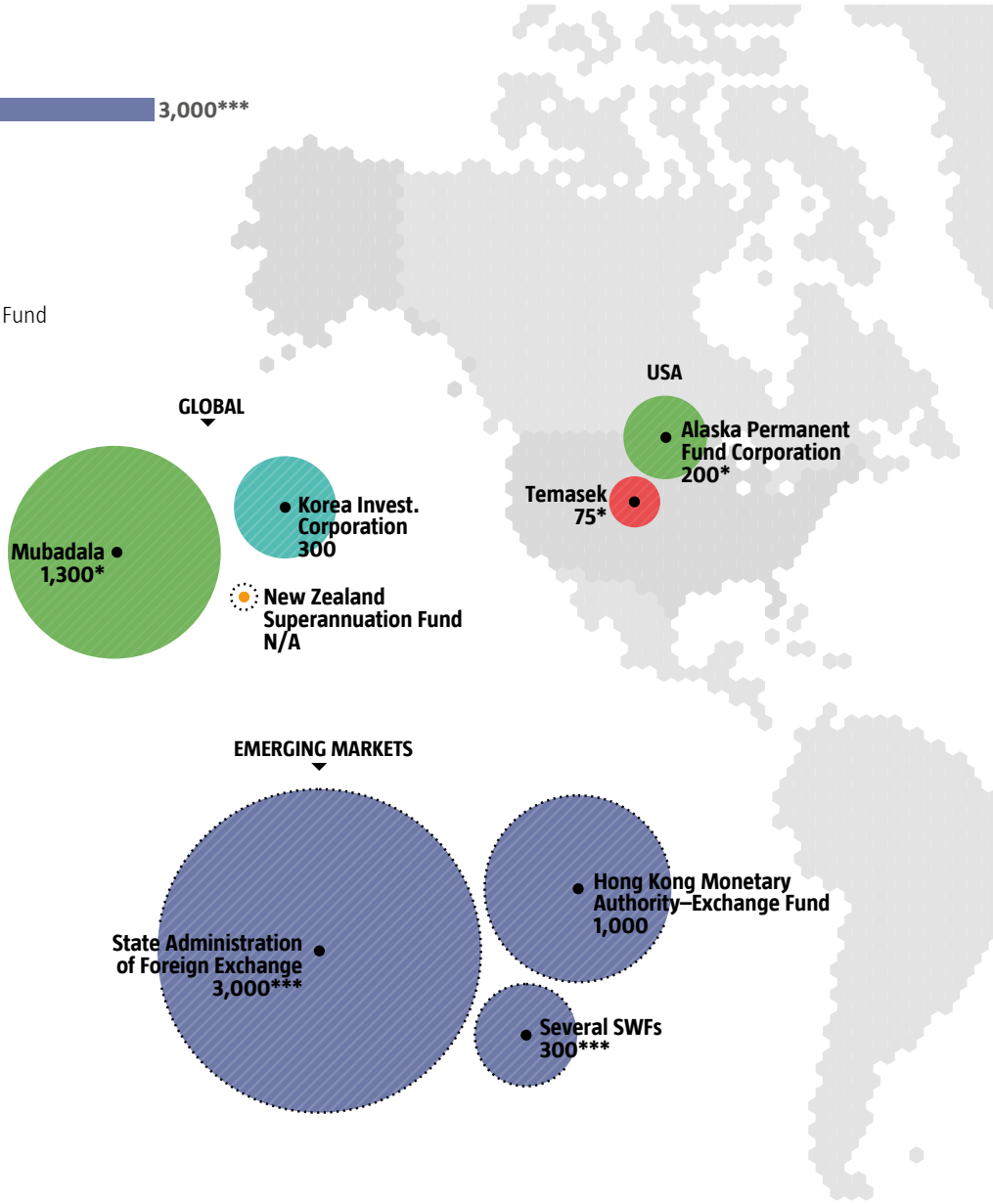
Green debt fund & platform **4,300*****

Renewable energy **3,465**

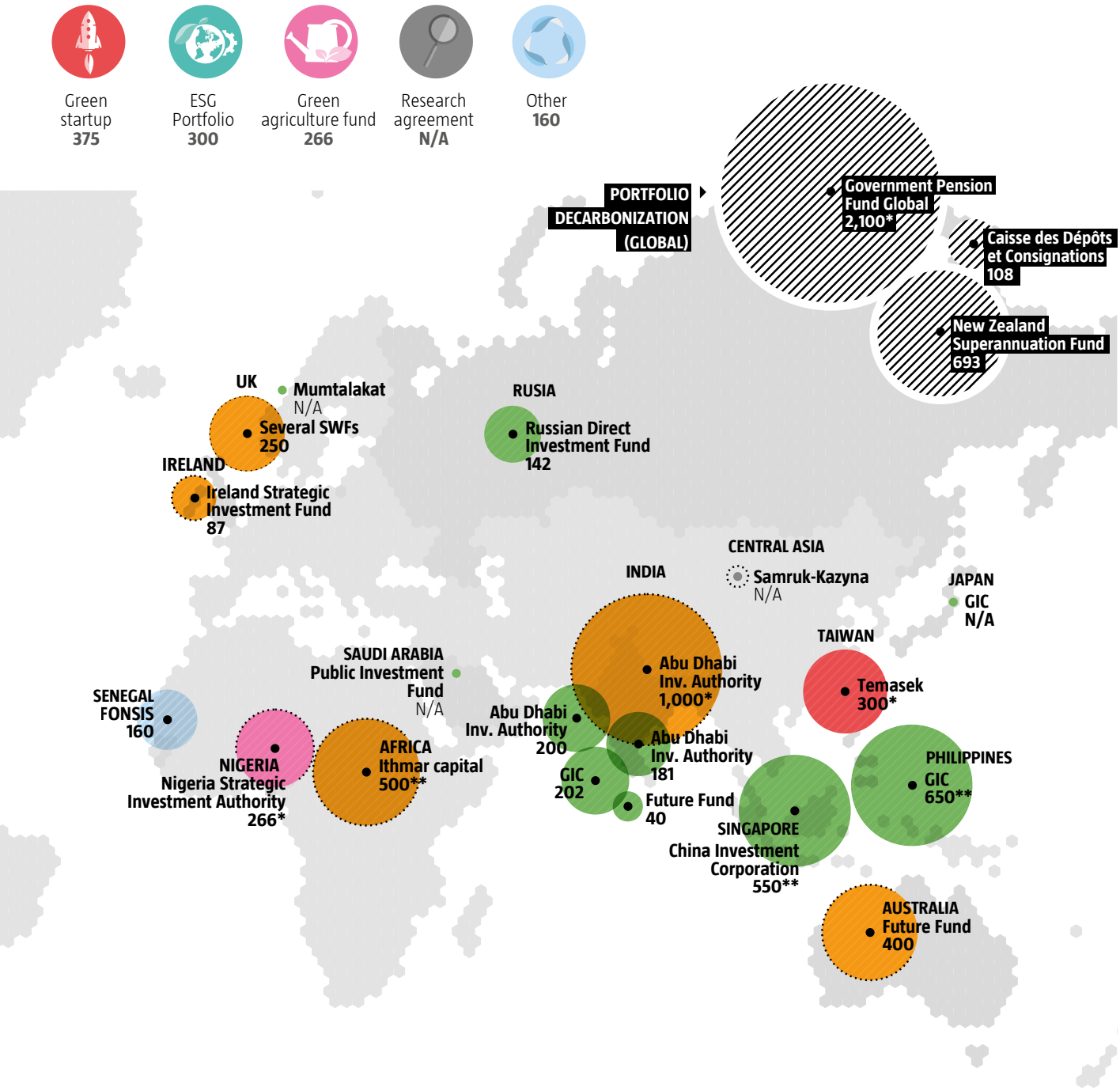
Green infrastructure **2,237**

SWFs exposure to green assets (2015-2017) (US$M)





Source: Author's elaboration.



*Total deal value including other coinvestors
**Author's estimate
***Commitments to several IFC green-debt platforms. Not realized investments.

the new funds to continue building and participating in projects including community solar assets, innovative wastewater treatment, energy-efficient battery storage roll-outs., and waste-to-energy facilities, across the United States. APFC led a round of US$200 million in equity which can unlock $1 billion in investment capacity for distributed green energy projects. In this way, APFC joins the group of SWFs which has entered into the green energy as an asset class.

GIC, the Singaporean SWF, has recently announced its strategic alliance with a Goldman Sachs subsidiary, Japan Renewables Energy, devoted to develop green energy. The announcement was made in October 2017 after a GIC investment in JRE, for an undisclosed amount. JRE develops and operates solar, wind, biomass and other clean-energy projects in Japan. It is the first time GIC invests in Japan's infrastructure and renewable energy sector. Another recent example, also involved GIC. In August 2017, GIC along with Macquaire Infrastructure and Real Assets (MIRA), acquired 31.7% of Energy Development Company (EDC) for US billion. EDC is owned by the top clean energy provider in the Philippines and is a world leader in the geothermal industry. GIC plans to commit and grow the company into this "vibrant" energy sector.[14]

GIC has partnered with ADIA, the investment fund from Abu Dhabi, to tap into the vast renewable markets of India. GIC and ADIA have funded Greenko Energy Holdings, the Hyderabad-based clean energy leader. Since 2013, both SWFs have invested more than US$500 million in three equity rounds. GIC is the majority shareholder of Greenko with a stake of 60-65%, while ADIA has around 15%. The rest is held by the two Indian founders. Listed at the London Stock Exchange's Alternative Investment Market, this 10-year old green energy startup now has 2.7 GW of operating capacity and another 800 MW under construction from 60 projects.[15]

The group of green SWFs will not be completed without the inclusion of Mubadala. This government-owned investment company from Abu Dhabi has backed some of the largest wind and solar energy projects during the last decade. In total, Mubadala has invested US$2.7 billion in projects around the globe, including US$1.3 billion since 2015. A major example is the London Array, the then largest offshore wind farm project, which includes 175 turbines with a combined capacity of 630MW and serves directly the London grid. It has been backed by Masdar, a Mubadala's fully-owned subsidiary, and a Canadian pension fund. Mubadala has financed Shams 1, one of the largest concentrated solar panels (CSP) plants in the World. It is owned, operated and developed by a joint venture between Masdar (80%) and Total (20%). It produces energy for 20,000 UAE homes. Shams 1 was designed to displace 175,000 tons of CO2 every year, equivalent to planting 1.5 million trees or taking approximately 15,000 cars off the road. Another joint-venture in renewables is Torresol Energy. Jointly with Sener, a Spain's engineering leader, it has built solar power plans in the Spanish "sunbelt". So far, the three projects have operating capacity of 120MW. The first project, Gemasolar, diverts roughly 30,000 tons of CO2 emissions from the atmosphere each year.[16]

Interestingly, Mubadala is investing in renewable energy sectors in developing countries. In 2015, it inaugurated a 117MW wind farm in Jordan. The project generates enough electricity to power 83,000 homes and it was the first commercial utility-scale wind power project in the Middle East. Currently, Mubadala through Masdar Clean Energy is developing five projects with combined energy output of 840MW in solar and wind facilities. Projects outside mature markets, such as Scotland and England, are located in Oman and Serbia. The importance of Mubadala investing in Jordan, Oman or Serbia is triple. First, the power capacity installed is relevant compared to the country total energy output. Second, Mubadala-backed projects represent the first large-scale green energy projects of these countries which lack the experience. Third, the combined projects displace 1.2 million tons of CO2 emissions each year.[17]

In the Gulf Cooperation Council, the Public Investment Fund (PIF) from Saudi Arabia is participating in one of the largest photovoltaic solar energy projects ever witnessed. The SoftBank Vision Fund (SBVF) backed by PIF and Mubadala (See Infographic 2) announced a strategic partnership with Saudi Electric, the national utility majority owned by PIF. The memorandum of understanding plans to develop 3 GW of solar energy in 2018. If completed, it would meet

14. From the press release: http://www.gic.com.sg/newsroom?id=665&Itemid=159

15. More detailed info in https://economictimes.indiatimes.com/small-biz/startups/from-1-gw-in-10-years-to-its-second-in-only-12-months-greenko-group-is-now-powering-on/articleshow/60302913.cms

16. More details at http://www.torresolenergy.com/TORRESOL/home/en

17. See http://www.masdar.ae/assets/downloads/content/264/masdar_clean_energy_factsheet-final-jan_8,_2017.pdf and http://www.utilities-me.com/article-5028-oman-prepares-to-build-the-first-large-scale-wind-farm-in-the-gcc/ for more information.

one third of the 9.5GW 2023 National Renewable Energy Program's target.[18]

Investments in green energy assets are not the only way to support sustainable development. In fact, investments in technology and innovation may also generate a relevant impact in the transition towards low carbon economies. A good example is the investment made by Temasek in August 2017 in Impossible Foods, a company that develops plant-based burger patties with the look, taste and texture of meat. Compared to animal sources, the production of burgers from plants requires less land and water, and emits less greenhouse gases. Temasek led the investment round of $75 million in the California-based company. It is not the first time Temasek invests in meat-free startups. Last year, the state fund invested in Modern Meadow, a New York-based developer of lab-grown bio fabricated leather.

3. SWFs AS RESPONSIBLE LONG-TERM SHAREHOLDERS

Sovereign wealth funds are long-term investors. From this angle, to consider climate change related risks into the matrix of risks is key. But there are other ways SWFs may have a long term impact and to boost sustainable economic models. One of the main ways to influence global businesses is done through active ownership. As large owners, SWFs may have a tremendous impact in private and chiefly listed companies by exercising its shareholder rights thus enhacing sustainability of the businesses of their portfolio companies.

The Sovereign Wealth Lab by IE Business School estimates that SWFs own 8% of all listed shares globally. This means that the potential role of SWFs to influence global business towards better governance practices, increased reporting, climate change awareness, social impact, etc., is huge.

Sovereign wealth funds are not interested in operating the majority of their investment positions. Yet, there is a growing trend among institutional investors, including SWFs, to improve the monitoring role of large shareholders. Lower information costs due to new and accessible technologies, the presence of proxy advisors (helping institutional investors to decide how to vote in shareholder annual meetings), major recent corruption scandals, and the role of some activist investors, have pushed institutional investors toward more active ownership strategies.

More active owners demand better governance provisions, and require improved reporting standards to their portfolio companies. This should help to generate sustainable business too, given the linkage between better governed companies and profitability. Also, by upgrading the reporting and transparency of portfolio companies, would pave the way for the implementation of national disclosure standards on climate change issues.

Despite some SWFs are acting as stewards and looking for improvement of their active ownership, there is still a clear winner when it comes to engagement and communication with boards and management of its portfolio companies. It is Norway. The next section focuses on the history of NBIM and the impact it has had on portfolio companies.

4. THE CASE OF NORWAY

According to NBIM's statements, the mission of its Fund is not only to achieve a certain risk-adjusted return, but also "to contribute to efficient and well-functioning markets and promote work on international standards for responsible investment." That is, Norway is interested in being recognized as a benchmark for other institutional investors on transparency, responsible investment and long-term view.

NBIM responsible ownership tries to raise awareness about environment, social and governance issues of the companies they invest in. There are two different strategies NBIM uses to attain this goal. First, through its divestment policy, NBIM excludes companies from its investment universe based on product or conduct risks such as production of nuclear weapons, coal and tobacco producers, or severe violations of human rights or damages to the environment. It can be said that this divestment policy is reactive. This chapter has detailed divestments made by NBIM based on the thermal coal criteria.

18. More details available at https://www.pv-magazine.com/2017/10/24/softbank-vision-fund-to-build-3-gw-of-solar-and-storage-in-saudi-arabia/

Second, there are two channels used by NBIM to follow a more proactive strategy towards sustainability and long-term value. One channel is the portfolio allocation, and the positions NBIM takes to ensure a sustainable risk-adjusted return in the long run. The second channel is through exercising voting rights, engagement and formulating expectations on the quality of governance, social and governance issues. This second channel is a proactive ownership strategy: to vote during annual meetings, to engage and meet companies' boards and managers, and to focus on specific companies and sectors which would ensure long-term sustainable returns.

Reactive strategies: Ethical Guidelines, Council on Ethics, and observation and exclusion

The Ministry of Finance is the owner of the Fund, which is managed by NBIM. The Ministry is the responsible for defining the overall strategy for responsible investments and the criteria for observation and exclusion of the portfolio companies of GPFG. In 2004, by a Royal Decree, a set of ethical guidelines for observation and exclusion was established.

The ethical guidelines set the criteria for product and conduct-based violations. Among the product-based criteria, GPFG shall not be invested in companies which themselves or through subsidiaries they control produce weapons that violate fundamental human rights; produce tobacco; sell weapons or military material to states excluded based on particularly large-scale UN sanctions. It has recently banned investments in mining companies and energy producers which derive 30 percent or more for their income from thermal coal or base 30 percent or more of their operations on thermal coal. Apart from product-based violations, GPFG shall not be invested in companies whose conduct implies serious or systematic human rights violations, such as murder, torture, deprivation of liberty, forced labor and the worst forms of child labor; serious violations of the rights of individuals in situations of war or conflict; severe environmental damage and acts or omissions that on an aggregate company level lead to unacceptable greenhouse gas emissions; gross corruption and other particularly serious violations of fundamental ethical norms. The original guidelines have been modified in several occasions banning tobacco producers (2009), unacceptable levels of greenhouse gas emissions (2015), or thermal coal producers and beneficiaries (2017).

The Council on Ethics

With these ethical guidelines in mind, the Ministry established the Council on Ethics, which continuously monitor the GPFG's portfolio looking for companies that are responsible for production or conducts described in the guidelines.

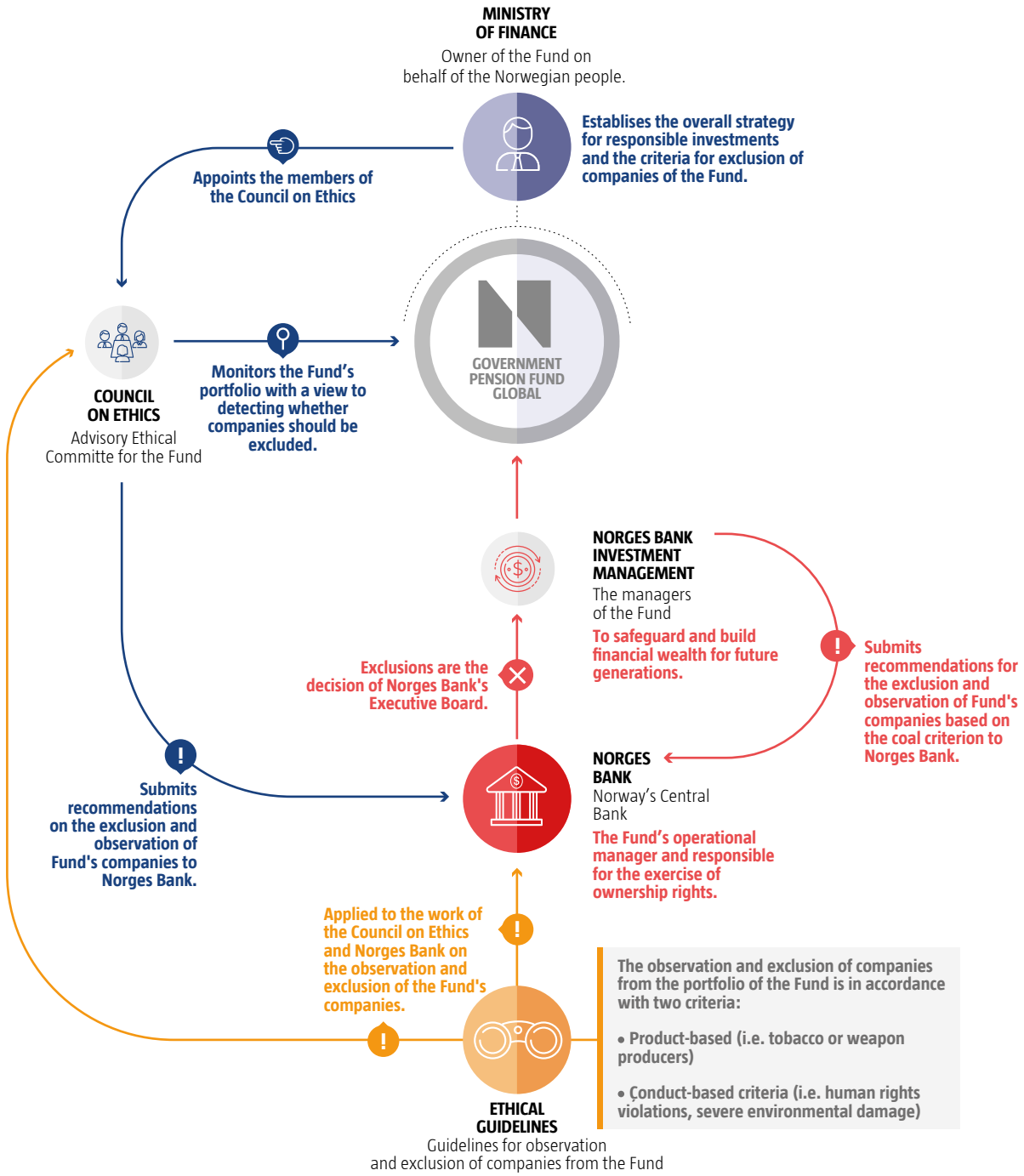
The Council on Ethics was established in November 2004, in parallel with the adoption of the ethical guidelines. It is an independent council which recommends the exclusion or observation of companies of the portfolio of the GPFG. Its five members are appointed by the Ministry of Finance after hearing the recommendation of NBIM. The Council has a Secretariat, with eight members, which investigates and prepares the cases for the Council.

The process to put on observation a company or to exclude it from the GPFG portfolio starts with the work of the Council. Specifically, the Secretariat continuously screens companies in the portfolio and receives enquiries from individuals or organizations requesting it to look into certain issues or individual companies. The work of the Council has increased with the number of companies owned by NBIM. By the end of 2016, NBIM had investments in 8,985 companies. In 2005, when the Council started its activities, NBIM had minority positions in "just" 3,288 companies. The number of screened companies have more than doubled and the size of the stakes owned by NBIM has multiplied by 6, from "just" US$85 billion in 2005 to US$547 billion, at the end of 2016.

However, an important change was introduced in 2015. Coinciding with the hiring of a new Council and the introduction of the thermal coal and GHG emissions new criteria, an important change was made in the exclusion procedure. Since January 2015, the Council makes recommendations directly to NBIM. Also, NBIM is allowed to initiate its own exclusions independently of the Council. Up to December 2014, the Council recommendations were made to the NBIM, but the ultimate word was the Ministry of Finance which decided to follow or not the recommendations of the Council. These changes reinforce the position of NBIM and more importantly project an image of independency. Given the final decision on exclusions had been made by the Ministry of Finance, the risk of seeing these exclusions as politically driven was big and motivated this change. Today, Norges Bank, along with the recommendations of the Council, is the ultimate responsible for ensuring the portfolio of the GPFG is not only ready to face financial risks but also ethical and environmental risks.

Figure 2

Government Pension Fund Global: Responsible Governance Structure



Source: Author's elaboration.

Observation and exclusion of companies

One of the most known channels used by NBIM to exert its responsible investment strategy is through exclusion of companies and consequent divestments. NBIM has excluded and divested stakes of 210 companies which do not comply with the ethical guidelines

Today, Norges Bank is assessed by the Council's recommendations but it can initiate its own recommendations for exclusion, as it is the case for the thermal coal exclusions integrated in the guidelines effective February 2016, as it has been already described above. Apart from the coal issues, other product-based decisions have excluded four companies for production of cluster munitions, 12 companies for nuclear weapons and 20 tobacco producers. Among the companies excluded for producing nuclear weapons are big names in the industry such as Airbus, Boeing, Lockheed Martin and Honeywell International.

The second section of the ethical guidelines refers to conduct-based violations. In this category it is particularly large the group of companies excluded due to severe environmental damage. 19 companies from Rio Tinto, the UK-based mining giant, to Freeport (managing one of the world's largest copper mines in New Guinea island), have been divested since May 2006 for severe environment damage.

Proactive strategies: Voting, engagement, and "cherry picking." Voting and Engagement

Institutional investors may choose between exiting a firm (the "exit" channel) or talk to corporate managers and boards when they disagree with investees (the "voice" channel). NBIM decided in 2012 to talk and engage more with companies. Through a "discussion note" released in November 2012, NBIM set up its expectations in the areas of board accountability and equal shareholder treatment. This "engagement strategy" have yielded positive results in a short period of time. Key corporate governance mechanisms have improved in a short period of time and both "exit" and "voice" channels have provoked an improvement in the quality of the corporate governance level of investee companies after the release of the note in November 2012.[19]

The NBIM has a restrictive investment strategy compared to other SWFs. It only invests on companies listed on regulated exchanges or in companies where the board has explicitly manifested its interest to be listed in an exchange. It is in the mandate of NBIM to own less than 10% of the shares of a single listed company.

19. Aguilera, Bermejo, Capapé & Cuñat, 2017, (Working Paper), "Too big to leave: The case of active owners".

Figure 3

NBIM portfolio distribution by ownership levels

OWNERSHIP %	COMPANIES Number	COMPANIES % Total	VALUE US$ billion	VALUE % Total
5% - 10%	28	0.31	17.66	3.23
3% - 4.99%	264	2.94	31.89	5.83
2% - 2.99%	8,70	9.68	67.69	12.38
1% - 1.99%	2,795	31.11	193.98	35.48
0 - 0,99%	5,028	55.96	235.56	43.08

Source: Sovereign Wealth Lab based on NBIM (2017).

In fact, at the end of 2016, NBIM has stakes of 5% or higher only in 28 companies of the total portfolio (8,985 companies), with US$17 billion invested in these 28 companies. Financial companies lead the pack of these "particularly interesting holdings" for NBIM, which combine stakes larger than US$1 billion and more than 5% of voting rights. The second group of interest is basic materials (18%), followed by industrials (14%). It is remarkable to note that among basic materials and industrials, it can be identified a particular preference towards paper-related companies.

Indeed, one of the frequently asked questions to NBIM refers to the role of the Council as a negative screening tool instead of a way to select green companies. The question is "Why does the Council not recommend that, for example, more money should be invested in 'green' companies?" And the answer it provides reads as "it falls outside the scope of the Council on Ethics' mandate to issue recommendations as to where the Fund should invest. The Council is only required to submit recommendations regarding the observation of a company or its exclusion from the Fund." Interestingly, the Council will not recommend investments but only exclusions to the Fund. Yet, the particular case of paper companies, whose impact in terms of greenhouse gases sequestration capacity is huge along the value chain, makes a different case, and it may explain why NBIM has decided to look with special attention into this industry. The Intergovernmental Panel on Climate Change (IPCC) has stated that "in the long term, a sustainable forest management strategy aimed at maintaining or increasing forest carbon stocks, while producing an annual sustained yield of timber, fibre or energy from the forest, will generate the largest sustained mitigation benefit.". The IPCC estimates that forest biomass-derived energy could reduce global emissions by between 400 million and 4.4 billion tonnes of CO2 equivalent per year"[20]

NBIM invests in more than 9,000 listed companies. Yet, when the list of portfolio companies is ranked by the percentage of shares owned by NBIM, it shows that paper companies are a special type of companies for NBIM.

At the end of 2016, among the 28 companies with stakes above 5% of outstanding, there was an elevated proportion of paper-related and chemical companies. Four companies belong to the niche sub-industry of paper manufacturing. Indeed, two companies to this specific paper industry, the Irish Smurfit-Kappa and the Swedish Svenska Cellulosa, are ranked 2nd and 13th by ownership percentage. Moreover, in the case of Svenska, NBIM has invested a stake valued US$1.1 billion, representing 8.67% of voting rights. and making the Swedish company an especially strong bet, uncommon in the diversified NBIM portfolio. The case of Smurfit-Kappa is also important, given it is the second largest controlling stake in the vast NBIM portfolio, yet the stake is smaller. Other two Spanish companies, Viscofan and Iberpapel Gestión, form part of this particular group of companies preferred by Norway. Yet, this trend is not new, in 2015, along with Svenska and Smurfit, the Finnish UPM-Kymmene made it to the top 20 by ownership.

Norway runs a particular responsible investor strategy which allows to exclude companies based on ethical and environmental reasons advised by the Council on Ethics. This strategy has been classified as reactive, meaning that NBIM reacts to the threats that potentially damaging companies imply for the overall portfolio value. On the contrary, when deciding to invest and hold larger control of paper companies, NBIM is deploying a more active approach towards green energy and sustainable businesses. Indeed, as a responsible investor, NBIM punishes companies damaging through unethical products such as cluster munitions, nuclear weapons, or tobacco. Yet NBIM also follows a proactive approach investing in sustainable and climate smart companies. Paper companies, with a strong linkage with natural resources such as forestry, are critical for the whole planet, and for NBIM to have a more controlling position strengthens its voice and it also signals other institutional investors where to invest following the lead of a renowned and resourceful fund. It may lead to isomorphic trends[21] and facilitate other institutional investors to follow a similar responsible investment strategy.

20. FAO. 2010. "Impact of the global forest industry on atmospheric greenhouse gases" available here: http://www.fao.org/docrep/012/i1580e/i1580e00.pdf

21. See Vasudeva, G. 2013. Weaving Together the Normative and Regulative Roles of Government: How the Norwegian Sovereign Wealth Fund's Responsible Conduct Is Shaping Firms' Cross-Border Investments. Organization Science 6, 1662-1682.

Table 2

The most "controlled" companies in the NBIM portfolio (ownership > 5%)

Name	Country	Market Value(USD)	Ownership	Industry
Gecina SA	France	861,906,279	9.80	Financials
Smurfit Kappa Group PLC	United Kingdom	523,182,296	9.57	Industrials
Great Portland Estates PLC	United Kingdom	271,620,484	9.56	Financials
Shaftesbury PLC	United Kingdom	288,804,843	9.22	Financials
Capital & Counties Properties PLC	United Kingdom	252,940,846	8.15	Financials
Vonovia SE	Germany	1,130,575,243	7.44	Financials
Deutsche Wohnen AG	Germany	742,156,833	6.99	Financials
Brenntag AG	Germany	563,763,482	6.55	Basic Materials
Land Securities Group PLC	United Kingdom	660,033,921	6.34	Financials
Viscofan SA	Spain	141,269,933	6.13	Consumer Goods
Ameriprise Financial Inc	United States	1,045,076,877	5.96	Financials
Svenska Cellulosa AB SCA	Sweden	1,102,439,541	5.52	Consumer Goods
Ocado Group PLC	United Kingdom	112,593,816	5.52	Consumer Services
Tesco PLC	United Kingdom	1,150,297,289	5.51	Consumer Services
Derwent London PLC	United Kingdom	208,640,330	5.47	Financials
Tocalo Co Ltd	Japan	18,737,224	5.45	Basic Materials
Arkema SA	France	404,403,395	5.45	Basic Materials
Prudential PLC	United Kingdom	2,743,414,668	5.29	Financials
AMG Advanced Metallurgical Group NV	Netherlands	23,203,472	5.27	Industrials
BlackRock Inc	United States	3,225,289,983	5.18	Financials
CyrusOne Inc	United States	191,933,567	5.14	Financials
International Personal Finance PLC	United Kingdom	24,158,904	5.10	Financials
Iberpapel Gestion SA	Spain	13,445,581	5.09	Basic Materials
LSR Group PJSC	Russia	88,571,510	5.07	Industrials
Berjaya Food Bhd	Malaysia	6,633,932	5.07	Consumer Services
Aflac Inc	United States	1,433,801,621	5.05	Financials
Boliden AB	Sweden	360,424,550	5.03	Basic Materials
Applus Services SA	Spain	66,228,060	5.00	Industrials

Note: In orange, paper-related companies.

Source: Sovereign Wealth Lab based on NBIM (2017).

NBIM, VOLKSWAGEN, AND THE CASE FOR GOOD CORPORATE GOVERNANCE

The case for good corporate governance is one that has been taken on by NBIM. For almost twenty years the Fund has sustained a strong public position against improper behavior among corporate elites, attempting to press some of the world's largest, most influential companies to improve their governance on issues ranging from cultural diversity to board "specific skills or executive payment."

Yngve Slyngstad, the head of the fund, has defended this position as core to NBIM's investment approach, given its size and impact in the corporate world. The latter may baffle those not familiar with the scale of funds such as the one managed by NBIM: its $950 billion in assets under management represent more than twice Norway's GDP and it owns, on average, 2.5% of every listed company in Europe. The fund is listened to, even if it does not own, per its bylaws, more than 10% of one asset, and their stances have repercussion throughout the corporate world. Their impact has been evidenced by recent research[22] which compares the changes in corporate governance taken on by companies as an effect of the pressure exerted by NBIM

Considering this magnitude, NBIM's corporate position becomes ever relevant. Perhaps the most gripping case to acknowledge in this regard, both for its relevance and for the peculiar role NBIM has played within it, is Volkswagen's.

NBIM's disapproval of the German carmaker is longstanding, dating back to 2005 and the days –forgotten by most of us- when (alas) Porsche attempted to buy up Volkswagen and failed, a project ultimately failed due to its bad timing: in late 2008, banks refused to keep lending to Porsche and triggered a liquidity crisis unprecedented. Oversimplifying events, that is, to draw a general picture of the situation. Forgiving that Porsche's side of the story has much more to it, and that indeed many shareholders were unhappy with the market manipulation that Porsche enforced, NBIM's concerns with Volkswagen as a company arise from the events that developed as Porsche's purchasing ability dropped and the stakes took a radical shift: Volkswagen would end up acquiring Porsche in July of 2012 (four months before NBIM put in place its "active shareholder" note) in a move that aimed, or so did many shareholders think, to safeguard the families that owned both companies rather than benefit the company's interests.

NBIM shared this fear and criticized that the negotiations between Volkswagen and Porsche were being unacceptable in their support of the interests of the Piëch and Porsche families. On October 7th, 2009, NBIM publishes a statement[23] declaring its discontent with this approach that had been taken towards the Volkswagen-Porsche transactions. The requests put forward in the letter addressed to the chairman of the supervisory board, Ferdinand Piëch, and the supervisory board as a whole, emphasized the importance of protecting minority shareholders and treat them fairly, enhanced the need for transparency, and stated the lack of "justifiable reasons" to assist the Porsche and Piëch families "by buying out their privately held automobile trading business". It further demanded the purchase to be cancelled unless Volkswagen could demonstrate its specific strategic value. With little regard for euphemistic language, NBIM wrote that "the planned transactions [...] leave the impression of being designed to suit the needs of the Porsche controlling families at the expense of Volkswagen and its not-controlling owners".

Fast-forward six years to September 2015, and despite having remained Volkswagen's fourth largest shareholder, it is fair to say that to deem the nature of the relationship between NBIM and Volkswagen "tense" would be an understatement. This sets the background for their relationship when one of the greatest scandals of the financial world of this century broke out: on September 18th 2015, Volkswagen admits to having cheated on its emissions tests in the US –initial estimates calculated that cars manufactured by the carmaker could be producing up to 40 times the levels of pollution allowed.

22. (Working Paper). Aguilera, Bermejo, Capapé & Cuñat, 2017, Too big to leave: The case of active owners.

23. https://www.nbim.no/globalassets/documents/news/2009/2009-10-07_nbim_letter_volkswagen.pdf

Alike with every other shareholders' reaction, NBIM stated its disapproval of the company's position, further pursuing legal action by May 2016 in what the Financial Times deemed "merely the latest sign of the oil fund's growing willingness to criticize the carmaker." More interestingly, a quick look through the voting positions and results in Volkswagen's last two AGMs in comparison to the stands the fund had taken previously evidence the extent to which NBIM is opposing Volkswagen's current governance structure. Save one case (out of 30 requests), NBIM has opposed approving every single discharge suggested in the meetings in 2016 and 2017 (the board voted in favor of these discharges). By comparison, in the general meeting held in May 2015 NBIM voted in the same way as the majority of the shareholders –in the Volkswagen case, represented by the Porsche/Piëch families, the State of Lower Saxony, and Qatar Holding, the sovereign wealth fund.

Asked by the Financial Times about these decisions,[24] Mr Slyngstad underlined the fund's concerns over the quality of corporate governance in Volkswagen and did mention that "they [Volkswagen] are not listening clearly". He also remarked that minority shareholders were "unlikely to be able to push through change on their own", given the power, in terms of voting rights, held by the three main shareholders. The aforementioned research challenges this notion and emphasizes the impact of active shareholder strategies in improving corporate governance, even given that the improvement is small and does not apply not to all the factors that NBIM sets itself to work towards affecting.

Responsible and engaged owners can exert fruitful changes in the corporate governance quality of its portfolio companies, and NBIM has decidedly attempted to do so in the Volkswagen case. It is important to consider this specific case beyond the time-constraints of the emissions scandal that outraged shareholders in 2015 and analyze the conflict that existed previously in regards to the quality of its corporate governance. Given the way NBIM has positioned itself in the last two AGMs, it is fair to say that the emissions scandal presented a turning point on what the fund could stand by, but it would be absurd to deny the issues that NBIM already had with Volkswagen's supervisory board. It will be interesting to observe the way NBIM continues to seek to assert its influence on Volkswagen in the near future as a response to the (still unresolved) emissions scandals. Nonetheless, it will be far more interesting to look for similar cases of corporate irresponsibility, likely to be commonplace given the tendency to market concentration in the car-making industry and others, and analyze the way large, state-backed investors such as SWFs will respond to these actions.

24. https://www.ft.com/content/1c16d99c-191a-11e6-b8d5-4c1fcdbe169f