SUSTAINABLE INVESTMENTS

How professional investors are approaching sustainability

Sustainable investments are on the rise in the financial sector, as professional investors are increasingly considering sustainability risks and opportunities in investment decisions. This study investigates several different approaches to sustainable investing that are practiced among investors.

Tobias Persson

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Chapter 1

Introduction

The annual cost of achieving the UN Sustainable Development Goals has been estimated to between USD 5 to 7 trillion, with an investment gap in developing countries of about USD 2,5 trillion[1]. While government spending and development funding is making a contribution to the funding, it is not expected to exceed more than USD 1 trillion per year[2]. This investment gap of a significant magnitude raises questions on who will help fill the gap, and one part of the answer could be the investors allocating accumulated capital from pension funds and other asset owners. The United Nations-supported investor network Principles of Responsible Investments, acknowledges that new flows of private sector capital will be key to reach the Sustainable Development Goals, either through

1. UNCTAD (2017)
2. UNPRI (2017)

new allocations or by re-routing existing capital flows[3]. Moreover, the Sustainable Development Goals stress that long-term investments are needed in critical sectors, in particular in developing countries, and that the public sector has an important role to set the direction with regulations and incentive structures that attract investments for a long-term sustainable growth[4].

This report is discussing the evolution of sustainable investments and how investors are integrating sustainability in investment decisions, with an elaboration of the different approaches. The investment industry is often understood as complex, and the purpose of this report is hence to provide the reader with an understanding of the industry and the development of sustainable investment practices in the private sector. Furthermore, the reader will learn about policies and initiatives that may be contributing to the development of sustainable investments, with focus on some pioneering European markets following in the final section. The information has been gathered from academic literature, policy papers and other relevant sources. The intention with the report is to provide the reader with tools to develop her own understanding of how investments can contribute to build a long-term sustainable society.

Mark Carney, the governor of Bank of England,

3. UNPRI (2017)
4. United Nations (2017)

popularized the expression tragedy of the horizon in a speech about the economic consequences of climate change in 2015[5]. Climate change, as well as many other threats from environmental degradation, including the pressure set on the planetary boundaries[6], will have an impact on future generations but there are limited incentives for the current generation to fix it in a world focusing on short-term profits. The EU Commission's High-Level Expert Group on Sustainable Finance acknowledge that the mismatch between the short- and long-term is deeply embedded in the financial system; the financial sector has historically prioritized short-term performance, while there are less incentives to address non-financial externalities as well as long-term opportunities and risks since they will materialize in a longer time horizon.[7]

It is not quite clear how to distinguish the difference between short and long term. A short-term investment is typically an investment that is expected to be converted into cash within one year[8]. The concept of tragedy of the horizon is, however, rather an issue of a financial outlook that is too short to factor in environmental and social issues. Investors who are seeking long-term investments are often subject to short-term market and

5. Bank of England (2015)
6. Stockholm Resilience Centre (2015)
7. High-Level Expert Group on Sustainable Finance (2017)
8. Investopedia (2017)

regulatory pressures, leading to an under-investing in human, technological and natural capital. The result is mismatches between long-term projects, long-term risk materialization and short-term market liabilities.[9]

One can think of finance as a control center for the economy that is directing where our capital is allocated. In a strict sense, an investment is an asset purchased with the idea that it will provide income in the future or will be sold at a higher price for a profit. It allows people to smooth lifetime savings and help organizations to save money for worse days. The investment industry helps with managing risks by allocating savings into productive projects and companies. While the investment industry is surrounded by complexities there are also moral and philosophical aspects that can frame our view of the purpose of investments, and whether they are sustainable or not. Hence, the notion of sustainable investments is largely a question of what society wants the investment industry to do and make governments set the incentives to achieve those.[10]

There are several different interpretations on how to define sustainable investments. While it is hard to pin down an exact definition of sustainable investing, one can from a broad perspective say that it brings in social and environmental performance in the financial system

9. High-Level Expert Group on Sustainable Finance (2017)
10. Silver (2017)

and investment decisions. This report elaborates on how the integration of social and environmental performance has evolved throughout the years, and what different approaches that are used by investors to factor in sustainability in investment decisions.

Chapter 2

The investment industry and tragedy of the horizon

Since the mid 1970s there has been a significant transformation in the ownership of corporate equities from individuals to institutional investors[1], an entity that pools money and invests on behalf of its beneficiaries. Large institutional investors have become dominant players in the financial system, representing more than 70 percent of today's shareholders[2].

The investment industry is generally understood as a delegation between asset owners and asset managers, who are mandated to manage the asset owners' capital. The term asset owner is often used to describe institutional investors such as pension funds, foundations, endowments and insurance companies. The asset owners are thought of as being at the top of the investment chain since they decide on how to

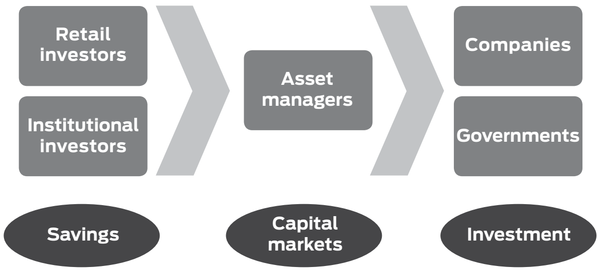
1. Hawley (2015)
2. Hebb, T., et al (2015)

invest their assets.[3] Asset owners may appoint one or several asset managers to invest in different asset classes, like bonds and equity. The very large asset owners might also invest most of the assets themselves, while perhaps delegating specialist mandates to asset managers in the investment fields where they have less in-house expertise.[4]

In reality, the investment management industry displays a longer chain of delegation relationship. The top of the chain is in fact often individual investors who are, as the name infers, individuals who invest their savings in pensions funds and mutual funds or through their savings accounts and insurance contracts. Hence, the asset owners are in many cases not themselves the ultimate owners of the capital, since they are holding capital from individual investors.[5] Moreover, asset managers are the final stage before the capital enters the markets, by investments in e.g. corporate shares and bonds. The bottom of the investment management industry could thus in fact be interpreted as the corporate executives whom have been delegated the mandate to decide on how to allocate capital across productive projects.[6] This means that the investment chain rather could be interpreted

3. Gifford (2015)
4. Silver (2017)
5. Pouget (2015)
6. Pouget (2015)

Figure 1. The investment chain



Source: EFAMA (2017)

as a delegation of responsibility to manage and invest capital in several steps.

The finance system is certainly much more diverse than what is described in this report. There are two channels through which people can save their money: the deposit channel and the savings channel. The deposit channel is for saving money in a bank, which lends out money to other people, and is often used when liquidity is important, meaning that it is easier to withdraw money in the short-term.[7] This report is focusing on the savings channel, which is used for longer term investments, for example via a pension fund.

7. Silver (2017)

Short-termism in the hunt for yield

Traditionally the definition of investing is focused on the practice of maximizing financial, risk-adjusted returns on capital, without explicitly considering the concept of non-financial performance. Non-financial returns have traditionally been seen as externalities of an investment, typically referring to social and environmental outcomes. The future direction of the economy will be shaped by how capital is invested, but it is not the job of the intermediary to invest in something that may be perceived as useful from a wider societal and environmental perspective. The intermediary's job is to earn income for her company and beneficiaries by getting a good return.[8] The traditional logic behind financial values implies that if you have a resource such as an oil reserve, a forest or a social relationship this will be turned into something that could be traded, like petrol, wood or a sales channel. The transfer will add financial value; hence the capital market will seek to exploit these resources justified by the added value.[9]

The asset management industry has historically been focused on delivering short-turn returns rather than a long-term preservation of capital and addressing of longer-term sustainability issues. This means

8. Silver (2017)
9. Silver (2017)

that many asset managers have in general not been concerned with engaging with firms on sustainable development issues, unless they are relevant to a firm because of risks for a material impact on its cash flows.[10] Historically, this has also implied that corporations have generally been focusing on meeting short-term earnings expectations from its investors, without taking enough notice to the long-term social and environmental impacts from their business. Asymmetric information regarding the quality of firms' projects or investors' commitment can lead to a short-termism at the corporate level. Moreover, corporate executives may prompt corporate strategies that are not in the best interest of long-term shareholders because of managerial career concerns or incentives through compensation schemes that are based on earnings in the short-term.[11]

The reason for the short termism of investment practices can also be traced to the short-term mandates from asset owners, to which the asset managers adapt their investment strategies and ensure implementation according to the capital owners' preferences.[12] Bonus schemes in the asset management industry, which are commonly based on financial performance and paid on an annual basis, incenti-

10. High-Level Expert Group on Sustainable Finance (2017)
11. Pouget (2015)
12.High-Level Expert Group on Sustainable Finance (2017)

vize short-turn thinking from the asset manager's perspective. On the other hand, the asset owners are often regularly monitoring the performance of the asset manager, who can lose mandates because of underperformance compared to benchmark indices.[13] Loosing mandates from asset owners meaning less money in the investment fund and hence also less earnings for the asset manager and her employer. The fact that the business of asset management is built on trust to invest asset owners' capital imply that they, to a large extent, will mirror their investment strategies to the benchmark index and expectations of the asset owners[14].

The asset owners themselves has the opportunity to clearly state what they expect from asset managers when it comes to sustainability, which is most efficiently achieved by listing those expectations in the asset management agreement when appointing their asset managers[15]. A growing aggregated demand for sustainable investments among the asset owners and their beneficiaries could hence provide an opportunity for changing investment flows. The asset owners may, however, also urge fund managers to consider sustainability aspects in investment decisions as these can imply a material risk that will impact the

13. Pouget (2016)
14. Silver (2027)
15. High-Level Expert Group on Sustainable Finance (2017)

return on an investment. Hence, the asset owners may see sustainability considerations of investment decisions as an imperative for their fiduciary duty to clients and beneficiaries.

During the past years there has been a trend shift with a growing number of actors in the investment industry that are considering ESG (Environmental, Social and Governance) related risks and opportunities in investment decisions. The growth of sustainable investments is partially a response to costs and risks related to externalities in certain assets, and partially a response to the failure of many governmental and inter-governmental actions to mitigate externalities that can prompt systematic financial risks, leading to an increasing demand for sustainable investments from asset owners.[16]

However, The European Commission's High-Level Expert Group on Sustainable Finance acknowledge that many large publicly-listed firms are still complaining that they are pressured from asset managers on short-term results even if they have long-term mandates. Moreover, financial analysts are also largely focusing their forecasts on the short-term. Some firms see a gap between what asset managers say publicly, when they stress the need for long-term sustainable orientation, and the focus on current year

16. Hawley (2015)

High-Level Expert Group on Sustainable Finance

European Commission decided to establish a High-Level Expert Group on Sustainable Finance in October 2016. The group is composed of 20 senior experts from civil society, the business community and other non-public sector institutions, with a mission to submit a set of policy recommendations aimed at facilitating the flow of public and private capital towards sustainable investments, and minimizing possible risks to the EU financial system due to climate, environment and other sustainability risks.[17]

The High-Level Expert Group launched its interims report in July 2017, providing early recommendations and suggestions of topics for further discussions. The early recommendations for example include: creating a EU classification for assets and products that capture all ESG aspects; the introduction of an official European green bonds standard and labels for sustainable funds; the establishment of principles for fiduciary duty and related concepts; strengthening the disclosures by firms and financial institutions of material information on sustainability issues; positioning the European supervisory agencies on sustainability issues; and considering a dedicated match-making facility between private investors and public authorities seeking to build and finance infrastructure.[18]

The High-Level Expert Group is expected to deliver its final report in December 2017 and the European Commission has stated that they are planning on proceeding with adopting policy changes based on the recommendations in 2018. The proposed reforms are meant to support the efforts of building a Capital Markets Union in the European Union.[19]

and financial metrics by their analysts and portfolio managers. The High-Level Expert Group stress that this split between the long- and short-term is one of the most fundamental challenges to overcome for long-term finance.[20]

17. European Commission (2016)
18. High-Level Expert Group on Sustainable Finance (2017)
19. High-Level Expert Group on Sustainable Finance (2017)
20. High-Level Expert Group on Sustainable Finance (2017)

Chapter 3

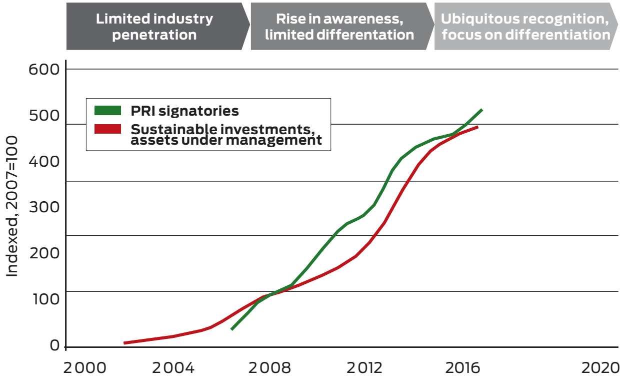
The emergence of sustainable investments

The interest in sustainable investments has grown rapidly during the recent decade, with a significantly increasing awareness among institutional investors before and after the Paris Agreement was signed.[1]

The modern origin of sustainable investments is, generally traced back to the 1960s. Back then the concept was generally framed as socially responsible investments, SRI, emphasizing ethical aspects of investments. During the late 1960s and early 1970s divestment campaigns were raised as a response to the Vietnam war, targeting companies like Dow Chemical for its production of napalm. Later in the 1970s the campaigns started to focus on the apartheid regime in South Africa. SRI and ethical funds grew from this origin, often but not always driven by religious convictions. These funds were mostly exclusionary by a negative screening of asset

1. Hawley (2015)

Figure 2. The growth in sustainable investments



The green green representes numbers of signatories in Principles for Responsible Investment and the red line represents combined assets under management invested in different ESG strategies, adjusted for double-counting. Source: Schroders (2017)

classes, for example weapons, or specific companies because of their behavior or production. The spread of SRI and ethical investment funds grew during the 1980s and into the new century, with developments of a number of strategies to construct portfolios. The negative screening approach evolved into a positive screening that focuses on those firms whose products, processes and behavior fit the investment firm's principles.[2]

When the Brundtland Commission launched the concept of sustainable development in 1987, it came with an identification of ecological constraints that human activity must respect. The launch coincided with the collapse of state communism and hence

2. Hawley (2015)

a realization emerged that a sustainable economy would take place within the context of market-based capitalism. However, when the Business Council for Sustainable Development launched its landmark report, Changing Course, for the Earth Summit in 1992 it acknowledged that little was known about the constraints, possibilities and interrelationships between capital markets, the environment and the needs of future generations. Even though ethical and socially responsible investments were growing among institutional investors in Europe and the US at this time, it was still only a handful of the world's institutional investors which had begun to pay attention to sustainability aspects in their investments strategies.[3]

Since the initiatives of the early 1990s, sustainable investing has attracted growing flows of assets as well as created new models for assessing fund performance. Rising expectations around environmental protection, health and safety, and equal opportunities at work have formed the basis for tightening policy frameworks across the world. The investors aligning with sustainability criteria recognized that reputational and social pressures, as well as physical and competitive ones, put environmental and social issues at the heart of the market practice and thus starting to become critical to business success. The financial success of many sustai-

3. Robins (2008)

Principles for Responsible Investments

Principles for Responsible Investments, PRI, is a United Nations-supported, international investor network that was founded in 2005. The network consists of more than 1 750 signatories, from more than 50 countries, representing approximately USD 70 trillion in assets under management.[5] Signatories commit to six principles for responsible investments: incorporating ESG issues into investment analysis and decision-making; be an active owners and incorporate ESG issues in ownership policies and practices; seek appropriate disclosure on ESG issues by entities invested in; promote implementation of the principles within the investment industry; work together to enhance the effectiveness of implementation of the principles; and report activities and progress in implementation of the principles.[6]

While the non-financial, ESG, integration in investments has been an focal point from PRI during the past years, it is worth to mention that recent initiatives from the network is also for example trying to cope with market short-termism[7] and build the investment case for the sustainable development goals[8].

nability-focused funds at the end of the 1990s helped to create a basis of evidence for amending financial regulation to reflect this new reality.[9] In other words, the emerging interest for sustainable investments came along with an increasing understanding that non-financial aspects, including for example human capital as well as environmental harmful activities, could have a negative impact on the return of investments.

The start of the 21st century has seen a growth in sustainable investments, which coincide with the adoption of the framing of responsible investments which came into existence more or less along with the

4. UNPRI (2017:2)
6. UNPRI (2017:3)
7. UNPRI (2017:4)
8. UNPRI (2017)
9. Robins (2008)

establishment of the United Nations-supported investor network Principles for Responsible Investments, PRI, in 2005. The idea behind PRI was to mainstream concepts that has previously been labeled as socially responsible investments, ethical investments or green investments. In turn, terms and concepts such as ESG and responsible investments became increasingly used by a wide range of institutional investors that had previously avoided these issues.[10] Despite the widespread adoption of the term responsible investments, it is still used by various organizations and people to cover a wide range of meanings. The above mentioned different concepts and labeling of sustainable investments are often interchangeable, implying that they to some degree has come to lose meaning and specificity.[11]

According to PRI, the concept of responsible investments do not require the use of certain products, such as themed funds or green bonds, but is rather about bringing additional data and analysis in the existing approaches.[12] The underlying idea behind establishing the term responsible investments was to argue that ESG factors are material to a corporation's value, which distinguish responsible investments from previous concepts of sustainable investments that were more focused on the ethical aspects of investing in

10. Hawley (2015)
11. Hawley (2015)
12. UNPRI (2017:5)

certain companies and industries.[13] In short, PRI defines responsible investments as:

> »[A]*n approach to investing that aims to incorporate environmental, social and governance* (*ESG*) *factors into investment decisions, to better manage risk and generate sustainable, long-term returns.*« [14]

PRI argues that while approaches such as socially responsible investments and impact investing seek to combine financial return with a moral or ethical benefit, responsible investment should be pursued by investors whose sole purpose is financial return. This is because ignoring ESG factors *»is to ignore risks and opportunities that have a material effect on the returns delivered to clients and beneficiaries«*.[15] The risks and opportunities are not only restricted by environmental limits, but also the fact that legal frameworks and changing consumer behavior may change the success of businesses. Hence, one could interpret the growing notice of responsible investments as an emerging recognition of risks related to harmful corporate activities, along with investment opportunities in the new sustainable economy. The note of 'responsible' could hence be understood as the investor's responsibility as a fidu-

13. Hawley (2015)
14. UNPRI (2017:5)
15. UNPRI (2017:5)

ciary, when pursuing a risk-adjusted return, rather than a sole purpose of investing for an environmentally and socially sustainable development. In a report on sustainable investments from Deutsche Asset Management, one of the leading asset management firms in Europe, their Chief Investment Officer for Responsible Investing, Petra Pflaum, share this interpretation:

> *»We must always remember that we act as a fiduciary partner for our clients and that they expect us to protect and grow their assets. As I said earlier, it is not our role to save the world for the sake of it. Even so, there is an impact we can achieve.«*[16]

However, this does not necessarily imply that the trend in an increasing emphasizing on sustainable and responsible investments from institutional investors is some kind of greenwashing, or that PRI's achievement in mainstreaming the adoption of responsible investments is not leading to a positive change. Petra Pflaum also argues that by not investing in companies or sovereigns, investors send a clear signal for them to improve their ESG footprint; *»It boils down to a simple truth about capital markets: there will be a correction over the longer term if there is no demand«*.[17]

16. Deutsche Asset Management (2017:2)
17. Deutsche Asset Management (2017:2)

Questions may however arise whether it is sufficient with a correction over the long term, as long as the main purpose of the investment industry is to protect the capital of a few beneficiaries on a global scale. UNEP emphasize that there is an urgent need for accelerated short-term action and enhanced longer-term ambitions to remain the Paris Agreement achievable[16]. On the other hand, PRI with its more than 1 750 signatories has an opportunity to influence the direction of the market behavior and re-directions of capital flows may change quickly as the understanding of material financial impacts of ESG risks and opportunities is growing.

During the past two years, the G20 initiative Task Force on Climate-related Disclosures has worked out guidelines for how companies should disclose climate-related risks, in order to enable investors to build in this in investment decisions. Morover, the non-profit organization CDP, formerly known as Carbon Disclosure Project, have worked for years with collecting non-financial information from companies, and translating it to quantitative metrics. These kinds of initiatives for improving the disclosure of non-financial financial information may certainly be guiding companies in a more sustainable direction, particularly as this is becoming guiding for investment decisions.

16. UNEP (2017)

Task Force on Climate-related Financial Disclosures

The Task Force on Climate-related Financial Disclosures, TCFD, is an industry led group with a mission to review how the financial sector can best take account of climate-related issues. The initiative to establish the group came from the G20 Finance ministers and central bank governors, and was announced in December 2015. The purpose of the group is to help investors, lenders, insurers and other financial stakeholders to build climate-related risks into their decisions, by forming a recognized framework for corporations to identify, quantify and report climate-related financial risks.[17]

TCFD released its final report in June 2017, which included recommendations on climate-related financial disclosures that are applicable to organizations across sectors and jurisdictions. The recommendations are designed to solicit decision-useful, forward-looking information on financial impacts, with a strong focus on risks and opportunities related to the transition to a lower-carbon economy. According to Michael Bloomberg, chairman of TCFD, a widespread adoption of the recommendations will »ensure that the effects of climate change become routinely considered in business and investment decisions«.[18]

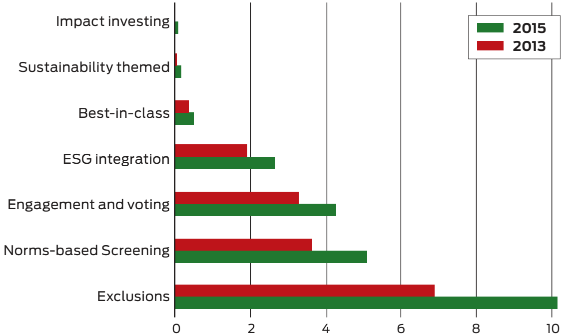
When the final report of TCFD was released, more than 100 firms with a market capitalization of over USD 3,3 trillion and financial firms responsible for assets of more than USD 24 trillion encouraged the take-up of the recommendations[19]. The TCFD has stated that they will continue its work until at least September 2018, focusing on promoting and monitoring adoption of the recommendations going forward[20].

Approaches to sustainable investments

Independent observers tend to think of sustainable investments as a negative approach to ESG challenges, meaning that investors are screening out companies or sectors from the portfolio based on certain requirements, regardless of the implications for the financial performance. This negative kind of approach has

17. KPMG (2017)
18. TCFD (2017)
19. TCFD (2017:2)
20. TCFD (2017:3)

Figure 3. The growth of sustainable investments in Europe



Total Assets under management in trillion Euro. Source: Eurosif (2016)

dominated previous sustainable investment practices, but during recent years the field has been growing away from a pure negative approach to a more positive, forward-looking approach which is screening in companies and sectors that are perceived as solutions to social and environmental problems.[21]

There are seven different methods for investors to bring sustainability considerations into decision making according to the European Sustainable Investment Forum, Eurosif. The methods that Eurosif are referring to are: exclusionary screening, norms-based screening, best-in-class selection, sustainability themed investing, engagement and voting, impact investing and ESG integration.[26] The CFA institute, a global

21. Krosinsky (2015)
22. EU Transparency Register (2017)

Eurosif

Eurosif is a European association promoting sustainable and responsible investments in Europe, with the direct support of their network spanning more than 400 Europe-based organizations such as pension funds, asset managers and ESG research agencies. The main activities of Eurosif are public policy, research and creating platforms for nurturing best practices in sustainable investing.[22] Research from the organization includes the bi-annual study about the European market for sustainable investments[23].

Eurosif works as a non-profit partnership of several national Europe-based national Sustainable Investment Forums (SIFs) with support and involvement of member affiliates. The countries represented in the national sustainable investment forums include Belgium, Austria, Germany, Switzerland, Italy, France, Spain, Sweden, UK and the Netherlands. The national SIFs are a channel to the legislative work within the European Union by Eurosif. Furthermore, they function as a network and meeting point for exchange of knowledge and experience.[24] Eurosif is also a founding member of the Global Sustainable Investing Alliance which is an association of the largest SIFs around the world[25].

association of investment professionals that specify and maintain standards in the industry, refer to the same methods with the exception that they perceive norms-based screening to be a part of exclusionary screening. The different methods for applying sustainability considerations are not mutually exclusive and are often used in combinations.[27] The seven methods are described more detailed, based on information from Eurosif and CFA Institute, on the coming pages.

23. EU Transparency Register (2017)
24. GSI Alliance (2017)
25. EU Transparency Register (2017)
26. Eurosif (2016)
27. CFA Institute (2015)

Exclusionary screening

Exclusionary screening of certain companies or sectors from the investment portfolio is a strategy that has seen a consistent exponential growth throughout the years, and it is the most widely used responsible investment approach in Europe.[28] The exclusion may be based on ESG criteria or have a norm-based dimension, and is commonly a way to limit potential reputational risk for investors. The most common exclusions by type are linked to production and trade of weapons, followed by tobacco, nuclear energy, pornography, gambling and alcohol.

Norms-based Screening

Norms-based screening is focused on a screening of companies that are adhering to global norms of environmental protection, human rights, labor standards and anti-corruption. The norms are set out in international agreements and initiatives, such as the UN Global Compact, ILO Conventions and the OECD Guidelines for Multinational Enterprises. When companies that are in the investment portfolio are found to be in breach of one of these standards, investors can engage with them in order to decide on whether an exclusion is necessary.

28. Eurosif (2016)

ShareAction

ShareAction is a British charity working with promoting responsible investments. The organization is regularly running campaigns in which they are using the power of the investment system to solve environmental, social and governance problems. Throughout the years the methods used has included coordination of shareholder resolutions and training supporters to attend annual general meetings of publicly listed companies to question subjects such as executive pay or Arctic drilling.[29]

ShareAction is collaborating with institutional investors to enforce larger pressure from shareholders. In 2015, they ran a campaign to engage pension funds on the financial risks and opportunities on climate change focusing on BP and Shell, where the resolutions got pass by over 98 percent, resulting in binding obligations on both companies.[30] In July 2017, ShareAction coordinated a coalition of 79 institutional investors, demanding deeper insight into companies' workforce policies and practices.[31] In September 2017, ShareAction coordinated an open letter with a call on some of the world's largest banks to disclose climate-related financial information.[32]

Engagement and voting

Engagement refers to the practice of having a dialogue with companies on ESG issues, and exercising ownership rights to effect change. This is a matter of active ownership when the investor maintains a continuous dialogue with the management of investee firms to encourage improvement on ESG issues, in order to serve the institution's and its beneficiaries' long-term interest. Being a shareholder implies that investors have an opportunity to attend annual general meetings for the shareholder company, and by putting forward resolutions and voting for ESG improvements the investor

29. ShareAction (2016)
30. ShareAction (2016)
31. ShareAction (2017)
32. ShareAction (2017:2)

can influence the company's behavior. The practice of engagement and voting has a strong link with fiduciary duty, and is driven in large by the view that shareholders are stewards of assets and hence accountable to their beneficiaries for how they manage those assets.

Active ownership is in sharp contrast with the idea that investors should sell off the investments with questionable practices. Achieving the desired results of active ownership takes time and demands resources, most notably staff time. Hence it is common that investors pool resources and outsource some activities related to engagement, which has been more common among institutional investors in resent years[33].

ESG Integration

ESG integration refers to systematic inclusion of ESG risks and opportunities in investment analysis. CFA Institute acknowledge that integration of ESG risks and opportunities into investment analysis is relevant for most, if not all, investors. This method does not require a criterion for inclusion and exclusion, and unlike the best-in-class method it does not necessarily require a benchmarking to peers in sectors. The method is simply focusing on integrating ESG factors in investing on a systematic level, to a large extent with a purpose to mitigate risks.

33. Hebb et al (2015)

IORP 2 directive

In December 2016, the European Parliament approved the Institutions for Occupational Retirement Provision, IORP 2, directive. The directive requires European occupational pension firms above a certain size to consider ESG and declare how ESG risks are incorporated in the investment process. The directive must now be transposed into member state law by January 2019.[35]

There is a growing evidence that investment professionals in one way or another consider ESG factors in investments. PRI emphasize in their principles that signatories should integrate ESG issues into investment analysis, and seek appropriate disclosure on ESG issues by the entities invested in. With more than 1 750 signatories there is no question that ESG integration is becoming a common investment practice.

Best-in-class selection

Best-in-class selection refers to the practice of investing in companies with better or improving ESG performance relative to its peers. The methodology is also sometimes referred to as positive selection, since it is a matter of opting in the companies with better ESG performance rather than opting out the laggards. All sectors and asset classes can be represented with the strategy, meaning that a best-in-class fund can have a criterion that allows it to invest in oil and gas companies as long as they are best-in-class in the sector.

34. EUR-Lex (2016)

Sustainability themed investing

Sustainability themed, also called thematic, investing is referring to investments based on trends, such as social, industrial and demographic trends. This imply that investors choose specific areas of investments, with a close link to sustainable development. Investors tend to look favorably on climate sensitive topics, where renewable energy, the building sector and sustainable transports are the major themes.

Impact investing

Impact investing refers to investments with the intention to generate and measure social and environmental benefits. While the intention to have a positive social or environmental impact is essential for impact investments, the investments are also expected to generate a financial return or at least a return of capital, which makes it differ to philanthropy and charity. The Global Impact Investing Network notes that the investments can range of return expectations and across asset classes, while the hallmark of impact investing is the commitment to measure and report social and environmental performance and progress of the underlying investments. Impact investments can be made in both emerging and developed markets.[35]

35. GIIN (2017)

Chapter 4

Challenges on the road to sustainable investments

In this section follows a discussion of pros and cons about the different approaches of sustainable investing. The discussion is mainly focusing on the potential to ensure that investments are leading to a positive social or environmental impact. It can be worth to stress that there may be contradicting views to some of the inferences stated in this section.

Escape or engage as an owner?

While the exclusionary, negative screening, approach to responsible investments has received a lot of attention following the divestment campaigns throughout the years, it should be stated that research has shown that a more trustworthy approach to responsible investment is to engage as an active owner[1]. Michael Viehs, research director at University of Oxford, mean

1. Viehs (2015)

that excluding a company from a portfolio without trying to engage with their management on sustainability issues leads to a missed opportunity to make an impact, since divesting in certain stocks simply means that an investor put the shares in the hands of potentially less responsible investors[2]. On the other hand, some argue that while investors can convince some companies to change their business practice marginally, fundamental changes to the business model companies are unlikely[3]. Ultimately investors might need to screen out companies from the portfolios when engagement practices are not leading to improvements. This was the case with the Swedish AP funds who for years tried to engage with Walmart on the company's working conditions without success, and thus decided to exclude the company from their portfolios[4].

While the fossil divestment campaigns have brought a raised awareness on how investments are fueling fossil industries, there may be a reason to question their approach. Cary Krosinsky, co-founder of the Carbon Tracker Initiative, points out that divestments from fossil-fuel companies is not fostering the required changes, which he argues is evident when studying ownership patterns. Instead, he stresses that change

2. Viehs (2015)
3. Deutsche Asset Management (2017:3)
4. Forbes (2013)

Carbon Tracker Initiative

Carbon Tracker Initiative is an independent financial think tank, carrying out in-depth analysis on the impact of the energy transition on capital markets and the potential investment in high-cost, carbon-intensive fossil fuels. Carbon Tracker has cemented the terms »carbon bubble«, »unburnable carbon« and »stranded assets« among professionals in the financial and environmental sectors, by doing research using industry databases to map risks and opportunities for investors on the path to a low-carbon future.[5] The organizations goal is to align capital markets with natural ecological limits to growth.[6]

comes from owning a systematic problem, with intention to fix it. To divest in fossil-fuel companies comes without responsibility for any underlying problem and could thus be a considered as an action of copout from solving the problems.[7] As an example, the fact that many investors with strong ESG policies have divested in tobacco companies have contributed to very low impact on tobacco shareholder results. Furthermore, research examining fossil fuel and divestment campaigns has concluded that the direct impacts are likely limited, since share prices are unlikely to suffer and holdings will probably be taken up by neutral investors. The divestment campaigns will only succeed if the neutral investors change their views on the probability that a company will have declining future cash flows.[8] One benefit of the exclusionary approach may however be that it can provide an indirect effect

5. Carbon Tracker Initiative (2017)
6. Carbon Tracker Initiative (2017:2)
7. Krosinsky (2015)
8. Deutsche Asset Management (2017:3)

in shifting debates, by removing the social license of certain companies to operate[9]. Moreover, it can help free up capital to allocate in other, potentially more sustainable companies and industries.

A similar problem as with the negative exclusionary screening arises with the increasing focus on decarbonized portfolios, as a result of the PRI's Montréal Carbon Pledge announced in 2014. By signing the pledge, investors commit to measure and publicly disclose the carbon footprint of their investment portfolio on an annual basis, without any commitments for further measures[10]. Measuring the carbon footprint of portfolios may help investors to understand emissions, and take notice of the climate-related risks, but Cary Krosinsky points out that similar issues as with the fossil-fuel divestment campaign manifests itself here, since *»the largest opportunities to decarbonize are either missed or not prioritized«*[11].

Footprinting techniques use the largely accepted Greenhouse Gas Protocol to either estimate or precisely measure greenhouse gas emissions of companies based on their scope 1 (operations), scope 2 (indirect energy emissions) and scope 3 (emissions across the entire value chain). Krosinsky stresses that the weakness in carbon footprinting techniques involves scope 3, and particularly the use of products, which is

9. Schiefeling and Hoffman (2017)
10. Investors on Climate Change (2017)
11. Krosinsky (2015)

currently missed out. A major part of a traditional car manufacturer's emissions is related to the use of products, when the consumers are driving the car. Moreover, a bank generally does not reflect the impact of the projects it is financing in their reporting on carbon footprint.[12] Excluding the carbon intensive companies could hence miss opportunities to actually help decarbonize the economy. On the other hand, a growing understanding for portfolios' carbon footprint and apprehension for the risks associated with fossil-fuel companies can lead to an increasing concern for climate-related risks among institutional investors.

It might be worth to mention that the active ownership approach comes with its own transparency issues. During the past years there has been plenty of headlines in media about large institutional investors warning on climate change, engaging with shareholder companies, and demanding fossil companies to disclose climate-related risks.[13] The management of ExxonMobil was recently defeated by a shareholder rebellion over climate change, when investors voted at an annual general meeting to instruct the oil giant to report on climate-related risks . Some of the world's largest asset management companies, including BlackRock and Vanguard, received good PR from the activity but what was not

12. Krosinsky (2015)
13. Washington Post (2017)

said was that they have voted against several similar resolutions at annual general meetings with other oil and gas companies. This behavior is typically explained with an assurance that the investor has engaged with the company's management, an activity that is often held privately during the year and in particular before annual general meetings. In this particular case, BlackRock explained that they would have voted yes for the proposal to impose climate-risk reporting if they thought that the engagement had not led to any change.[14] The fact that engagement activities are often said to be confidential discussions between the investor and the management, implies that it comes with some uncertainty of greenwashing. One could argue that active ownership will need to consider the climate-related costs and opportunities that the global and local communities are facing, and not just for the portfolio and beneficiary, in order to be a true driver for sustainability.

While one could question the fairness of accumulated capital among certain regions or individuals, in particular when it may be a result of a fossil driven growth, it may be hard to argue that the wealthy few should share this capital evenly among the whole population. On the other hand, one could argue that there is a responsibility associated with investing this capital, as the planet and people may suffer as a

14. Financial Times (2017)

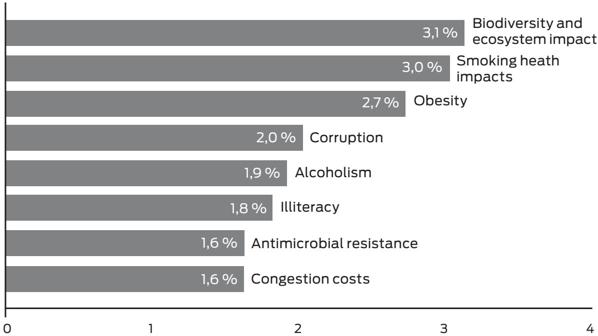
consequence. Roger Urwin from the risk advisory and insurance broking firm Willis Tower Watson developed the concept of universal owners, insinuating that investments comes with a responsibility:

> *»Universal owners are asset owners who recognize that through their portfolios they own a slice of the whole economy and the market. They adapt their actions to enhance the return prospects of their portfolios, and hence the prospects for the whole economy and the market as well. Universal owners will support the goals of sustainable growth and well-functioning financial markets. A universal owner will also view these goals holistically and seek ways to reduce the company level externalities that produce economy-wide efficiency losses«*[15]

Shortly after Roger Urwin launched the concept of universal owners, UNEP FI estimated that human activity caused USD 6,6 trillion of environmental damage, equaling 11 percent of global GDP in 2011. This kind of evidence has accelerated asset owners urge to take a more holistic view on environmental risks and opportunities. However, short termism remains an issue and addressing issues such as excessive fees and misaligned incentive structures could enable asset

15. Urwin (2011)

Figure 4. Cost of social issues (percentage of global GDP, 2014)



The societal economic burden of major social issues, as a percentage of global GDP in 2014. Not shown is 'Violence and armed conflict', which has the largest impact at 9.1% of GDP.
Source: Deutsche Asset Management (2017:3)

owners to act more like real, universal owners as a part of their fiduciary duty.[16] Both PRI and the High-Level Expert Group on Sustainable Finance, HLEG, have identified that the interpretation of fiduciary duty has profound consequences for the consideration of sustainability factors in investments. HLEG writes in its interims report that: »*the central problem relates to the lack of appropriate standards in some instances as well as a lack of clarity of legal rules on the overarching investment objective in case of trade-offs and potential conflicts of interest*«, referring to the trade-off between maximum rate of return and considering ESG factors. They stress the importance of regulatory authorities to make it clear to all involved in the investment chain that mana-

16. Deutsche Asset Management (2017:3)

ging ESG risks is integral to fulfilling fiduciary duty.[17] A broad commitment or obligation to incorporate long-term ESG risks in the investors' responsibility could lead to a larger impact on divesting in certain companies or industries. This would definitely be the case in certain industries if the investors was obligated to consider the full societal cost of externalities.

Unlocking capital for sustainable investing

HLEG points out in its interim report that the European Union is not on track to deliver the capital required for investments to meet its 2030 energy policy targets. The latest estimations put the annual investment gap at around EUR 177 billion between 2021 and 2030, totaling EUR 1,77 trillion.[17] Furthermore they acknowledge that the next few years should not only focus on climate:

> *»If a deeper re-engineering of the financial system and its functioning is undertaken, it should also include the support of fundamentally important sectors such as sustainable fisheries and sustainable agriculture. And it should support the full range of environmental issues, such as water and air quality, biodiversity, waste and resource efficiency, many of which are linked to the EU's Circular Economy Strategy.«*[18]

17. High-Level Expert Group on Sustainable Finance (2017)
18. High-Level Expert Group on Sustainable Finance (2017)

While the investment gap in the European Union pose a threat for the region to align with the Paris Agreement and Sustainable Development Goals, it could be worth to mention that the required investments on a global scale has been estimated to be USD 93 trillion between 2015 and 2030[19]. To get from where we are to a climate-resilient economy thus requires huge investments equivalent to a new industrial revolution[20]. The challenge confronting investors is hence larger than divesting from certain companies and measuring carbon footprints of portfolios; the challenge for sustainable investors is to reconcile the short-term with the long-term perspective, since the uncertainties from the complex linkages between financial, environmental and social factors cannot be reduced through traditional risk assessments[21].

The credit boom in the US and in parts of western Europe in the last decades has been very damaging from the perspective of distribution and sustainability. While globalization has opened up a pathway for economic growth in some countries, and increased consumption where it had already been at its highest, there remain losers who are struggling to find their way to prosperity. This is not only a question of global inequality but also opens up questions on how deve-

19. New Climate Economy (2014)
20. Silver (2017)
21. Clark et al (2015)

loping and emerging companies can grow in a sustainable way. The less developed countries need capital and investments to leap-frog the fossil-driven and resource inefficient growth that the Western world has had for decades. Therefore one may argue that is crucial with long-term investments in emerging economies for improving global sustainability, and hence these regions represent focal areas for sustainable investing in order to make the most difference.[22]

Sony Kapoor, managing director of the think tank Re-Define, recently made an evaluation of the holdings in the Norwegian Government Pension Fund, the world's largest sovereign wealth fund. He found that almost the entire portfolio – more than 90 percent – was comprised of investments in liquid securities, i.e. public equity and bonds, in developed countries and that the fund has a high exposure to oil. Sony Kapoor concludes that it would be senseless for a fund with a long investment horizon to base all investments on the shape of the world economy as it used to be, while ignoring the fast pace at with a new future economy is emerging. This heavy weight on investment in mature economies does not make sense since both emerging markets and poor low-income countries will grow faster than OECD economies for a long period. Hence a shift towards investments in developing economies is

22. Clark et al (2015)

necessary to generate the target rate of return for the fund in the longer term, and on the other hand many developing countries are in need of stable sources of funds for the purpose of a sustainable development. Sony Kapoor concludes that there is no better source for this than Norway's sovereign wealth fund, which *»by its nature has a very long-term horizon, a responsibility mandate and a higher than average tolerance for short-term losses in pursuit of longer-term profitability«.*[23] Pension funds has by nature a long-term investing horizon and could thus provide a source of capital for investments that may generate profits in a distant future, rather than chasing profits in the quarter.

Today, a major share of the pension capital in Europe is actually not invested in projects that enable a sustainable development. Nick Silver, the founder of Climate Bonds Initiative, has estimated that 96 percent of the pension savings in the United Kingdom is not actually invested at all and therefore not directly contribute to the long-term development of the real economy. Barely 4 percent of the pension capital contributes to the development of the economy, by investing in for example infrastructure and new business. The rest of the capital is funneled to the secondary financial markets, mostly in government bonds, company securities and real estate. Bonds are effectively a

23. Kapoor (2017)

debt instrument, meaning that if a government issue a bond it is borrowing from future generations, which could be good if future generations will be richer or it helps to strengthen the resilience of the economy and environment. 52 percent of all assets that UK pension funds holds are invested in public equity, i.e. shares of companies. Nick Silver compare the equity market to a stock of capital, meaning a portion of the savings that could be used by publicly listed companies for useful investments. But in the United Kingdom only 0,7 percent per annum of the capital funneled to company securities is actually drawn down by companies and used for investments, while 99,3 percent remains as virtual assets circulating the financial system.[24]

> *»Rather than investing, many companies are engaged in returning money to shareholders, either through share buy-backs; that is purchasing shares from shareholders, or by acquiring companies for cash in takeovers. This is a disinvestment by companies; they are returning investment to the shareholders and reducing the amount of equity, the opposite of a rights issue or IPO. When you net-off this against new issuance, the result is that there has been a negative investment in companies via the equity market in 8 of the last 11 years«*[25]

24. Silver (2017)
25. Silver (2017)

When governments encourage people to save for the pension they are basically funneling cash, and hence power, to the financial sector. In a quite harsh critique to the financial system, Nick Silver concludes that the industry uses these funds to enrich itself; the assets of our economy are invested by professional asset managers, who are incentivized to boost short-term performance, meaning that in turn the management of companies are incentivized by asset managers to boost earnings by linking executive pay to share price. Earnings can for example be boosted by holding down staff costs, resulting in stagnation of wages for the majority and massive increase in earnings for the capital owners. Earnings can also for example be boosted by reducing investment in research and development, avoiding taxes, or by passing on externality costs to society, which increase governments' fiscal burden and reduce the economy's resilience. Nick Silver stresses that while he uses UK pension as an example the analysis applies generally to all the asset owners delegating the management of their assets to professional asset managers.[26]

The financial sector emphasizes that ESG aspects, such as climate-risks, are to an increasing extent factored into investment decisions, even though there is no clear sign on to what extent. While it so far mostly

26. Silver (2017)

seems to be a matter of risk assessment, it can also put pressure on public companies to work with increasing their ESG score. A possible development could be that management of public companies are incentivized to boost sustainability performance in the long-term, for example by linking executive pay to the ESG score rather than the share price. This idea was recently proposed by Fiona Reynholds, managing director of PRI, and Lise Kingo, executive director of UN Global Compact[27]. While the secondary financial markets play a role in the financial system, it may be fruitful that these companies are not only driven by enriching its shareholders.

Investing for a sustainable purpose

Although the exclusionary approach in responsible investments is still dominating in Europe, impact investing along with sustainability themed funds has seen the highest growth rate throughout the past years. The rationale behind impact investing is that, compared to philanthropy, the investment should provide an environmental or social impact along with revenue, since if it can generate a revenue it will grow or be copied and hence the impact will be greater than if it was given as a grant. Nick Silver concludes that since *»non-impact investors are not investing at all, so*

27. Financial News (2017)

perhaps it is a case that profit-seeking impact investors are what normal investors should look like«.[28]

The most used asset classes in impact investing is private equity, private debt and real assets[29]. As stated in the previous section a major share of the pension capital is invested in public equity and bonds, to a large extent on the secondary market. Hence, an increasing focus on investing with a sustainable impact might need a reconciliation on how to split the divide of pension capital between public and private equity. In the French pension system it is common to include at least one 'fond solidaire', which is a typical French funds that include 10 percent of unlisted assets targeting community investing and social entrepreneurship while the other 90 percent is allocated to listed assets[30]. In Sweden, the government has recently proposed a law amendment for the public pension funds, AP-funds, which is opening up for a larger inclusion of alternative assets. If the law is adopted the AP-funds will be able to increase the investments in for example private equity, which may provide opportunities to increase focus on impact investing.[31]

Impact investments are still representing a minor share of the total assets under management, but sur-

28. Silver (2017),
29. GIIN (2017:2)
30. Giamporcaro (2015)
31. Swedish Government (2017)

veys from the Global Impact Investing Network shows that institutional investors are expecting that impact investments will constitute larger shares of their portfolios during the coming years[32]. Moreover, reports are showing that the millennial generation is increasingly recognizing that their investment decisions can make an impact, hence also demanding more considerations to sustainable investments from their fiduciaries[33]. However, a growing demand for sustainable investments might need an improved transparency on how the investments are making an impact.

In the previous section, we touched on government bonds which constitute one of the largest asset class in terms of assets under management in the UK. In fact, global debt instruments are today the major asset class on a global level, representing nearly 30 percent of the total value of all investments or about USD 100 trillion, meaning that a lot of money is locked up in existing loans and projects[34]. Meanwhile, there is a huge demand among investors for green bonds today, a market currently seeing an excess demand. Green bonds are debt instruments that are issued by for example a company, municipality or government, typically with a purpose to use the proceeds of the investments for projects that mitigate or adapt to climate change.

32. Deutsche Asset Management (2017)
33. Morgan Stanley (2017)
34. Krosinsky (2016)

Climate Bonds Initiative

Climate Bonds Initiative is a UK based international organization working on mobilizing the largest capital markets, the USD 100 trillion bond market, for climate change solutions. As an investor-focused non-profit organization, Climate Bonds Initiative is working with promoting investments in projects and assets for a rapid transition to a low-carbon and climate resilient economy. The strategy is to develop the market for green bonds and climate bonds, in order to drive down the cost of capital for climate projects in developed and emerging markets. In practice, the work includes supporting governments willing to seek climate finance on the capital markets and developing standards that helps investors and governments in prioritizing investments that contribute to addressing climate change.[35] Climate Bonds Initiative's partners include the world's largest asset management firm BlackRock, the German insurance giant's investment arm Allianz Global Investors and the British bank Barclays[36].

In the run-up to the 23rd Climate Change Conference in Bonn, Fiji became the first developing country to issue a sovereign green bond. The issuance of 100 million Fiji dollars provide the highly vulnerable Pacific island capital to invest in climate adaptation and mitigation projects. As the first developing country, and third country in the world, to issue a green bond, Fiji is aiming to demonstrate that green capital markets can be created in emerging economies.[37] The largest sovereign green bond was issued in France in January 2017, when the government decided to borrow EUR 7 billion on the capital markets for funding of their energy transition. The total demand for the French green bond reached the sum of more than

35. Climate Bonds Initiative (2017)
36. Climate Bonds Initiative (2017:2)
37. World bank (2017)

EUR 23 billion, from a wide variety of international and European investors, showing that there is a strong urge for green bonds on the capital markets.[38] While these developments sounds promising it might be worth to mention that so far there are USD 694 billions of climate aligned green bonds that have been issued, which is an impressive amount but a 100-fold increase is needed to change the economy[39].

One problem that arises with green bonds, along with impact investments and other sustainability labeled assets, is the possibility to measure the environmental and social impact in an efficient and transparent way. This barrier may be overcome by using blockchain technology to measure the impact, which is currently under development by the Swedish venture Stockholm Green Digital Finance. The technology is expected to help grow the market for green investments by lowering the threshold for issuers and enabling investors to verify and measure the impact of green investment products. During the pilot phase, they are testing the technology on green bonds together with different stakeholders, including an asset manager and a green bond issuer.[40]

Another initiative for improving of the measurement of the environmental effect of green bonds is

38. Republique Francaise (2017)
39. Silver (2017)
40. Stockholm Fintech Hub (2017)

the Nordic effect guide for environmental impact of green bonds. The guide has been developed by a group of ten Nordic public issuers of green bonds and was launched in October 2017. The guide, which is focusing on impact reporting, aims to build a platform for effect reporting for issuers and the investors of green bonds. The purpose is to provide transparent insights into the environmental projects finances through green bonds, which can benefit both investors and issuers of green bonds. The effort builds upon the reporting approaches suggested by the Green Bond Principles, the most acknowledged framework for green bonds in the market, and multilateral development banks, but it adds indicators for categories such as clean transportation and green buildings which have previously not been addressed.[40] These kind of initiatives can serve to help overcome the issue of verifying the environmental impact of green bonds.

Impact investing and green bonds are challenging the premise that investing based on financial value is in the best interest of society, meaning that anything that is not captured by the financial value proposition is peripheral to the process. While impact investing is more of a ground-up solution that is financing projects or organizations that can create social and environmental benefits, green bonds attempts to shift

40. Kommuninvest (2017)

conventional investment into infrastructure at a scale required for a future proof economy.[41] ESG integration and active ownership provide opportunities for the financial industry to help transform existing businesses in environmental and social dimensions, but it may be important to emphasize the need to mobilize private capital in the short-term for investments that is leading to a long-term and globally sustainable economy.

41. Silver (2017)

Pioneering countries

Sweden

Eurosif describes Sweden as a mature and progressive market for responsible investments[1]. Swedish asset owners are the world's most progressive in terms of considering climate risks in investments[2], and all of the large institutional investors in Sweden have some form of policy for sustainable or responsible investments in place.[3] More than 70 Swedish asset managers and asset owners are signatories to the PRI, indicating that there is a strong support for responsible investments among institutional investors in Sweden.

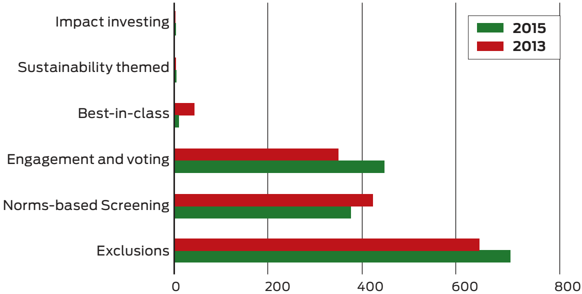
Sweden has some of the world's most progressive environmental policies, including the world's highest carbon tax and a target committing the country to emitting zero net greenhouse gas emissions by 2045. The maturing of the Swedish market for responsible investments has, however, not really been driven by an explicit legal framework for the financial sector. The development has rather been driven bottom-up by the Swedish financial industry itself, with front runners such as the national pension funds, the Swedish Church and Folksam[4].

While there may be several reasons behind the bottom up driven Swedish market for responsible investments, one important factor is that generally speaking all Swedes have investments on the financial market as a result of the current pensions system, introduced in 1999. One part of the system, the premium pension system, gives all individuals the option to choose how their pension savings should be allocated. The system provides pension savers the opportunity to choose between more than 800 funds that are managed by institutional investors, with information on risk levels and guidance on how to think about their own level of risk aversion.[5] The relatively high concern for the environment, and in particular climate change, among Swedish citizens[6] implies that institutional investors see a need to adapt to a growing demand for sustainable investments from the pension savers.

Since 2013, the pension savers in the premium pension system are also informed about the ESG profile of funds through a sustainability label. The label has been developed by Swedish Forum for Sustainable Investments, Swesif, together with its members, including all of the major institutional investors in Sweden. The label is a standardized leaflet that is compulsory for all funds whose fact sheet states that the fund considers sustainability issues.[7]

One significant event for the mainstreaming of responsible investments in Sweden was in 2001 when the five largest national pension funds (AP-funds) became forced by law to include environment and ethics in their investment policies and annually report to the government how they adhered to these.[8] This means that despite a lack of a broad regulatory framework

Figure 5. Growth of sustainable investments in Sweden



Total Assets under management in billion Euro. Source: Eurosif (2016)

that mandates all investors to consider sustainability, policy has had a role in mainstreaming investments. The sophistication of Swedish responsible investments actors has, however, also been driven by the emergence and increase of service providers such as GES Investment Services and Ethix[9].

A common practice among Swedish institutional investors is to combine several responsible investment strategies, including exclusions and engagement, as a part of a holistic approach to integrate ESG factors in the investment policy, process and decision making.[10] Looking at statistics from Eurosif, one can see that exclusions and engagement is the most widely used responsible investment strategies in Sweden[11]. While sustainability themed funds and impact investing is still an underrepresented strategy in Sweden, one can also observe that there has been a negative trend for the best-in-class approach which has a positive trend in the other twelve European countries researched by Eurosif[12].

1. Eurosif (2016)
2. AODP (2017)
3. Eurosif (2016)
4. Eurosif (2016)
5. Du Rietz (2015)
6. European Commission (2017:3)
7. Swesif (2017)
8. Bengtsson (2008)
9. Bengtsson (2008)
10. Eurosif (2016)
11. Du Rietz (2016)
12. Eurosif (2016)

The Netherlands

The Netherlands has a strong financial sector and is an attractive asset management location because of its tax system. The country is, together with the UK, one of the two biggest countries in Europe in terms of pension funds' assets, with a long-standing savings and investing tradition. Moreover, the Netherlands has one of the world's most sophisticated markets for responsible investments, which in large is an effect of a high degree of cooperation between the public and private sectors. The market for impact investments is one of the world's largest. While exclusionary screenings make up a significant portion of the Dutch responsible investment market, strategies such as positive selection and engagement are gaining ground.[13]

The market for responsible investments is becoming increasingly mainstream, and most asset managers and asset owners at least have a responsible investment policy in place, even though the level of maturity differs. A trend in the Netherlands is that frontrunners in the financial industry increasingly implement responsible investment strategies for their whole portfolio.[14]

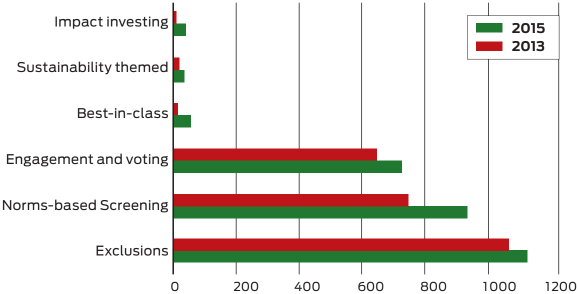
Responsible investing has a long history in the Netherlands, starting back in the 1970s with the introduction of ethical banks. Despite the longer stretching history of ethical banks the first ethical fund was established in 1991 by Triodos bank. During the 2000s it has been more common for retail banks to practice responsible investment practices and since 2007 institutional investors have also turned to responsible investments due to increasing attention to the topic in media.[15]

The Dutch government has been a strong advocate for responsible investment initiatives, hence the growth can partly be attributed to government support.[16] One of the earliest form of government support was the Green Funds Scheme, introduced in 1995 to promote private sector investment in environmental projects. The program encourages private individuals to provide capital for green projects with a lower tax rate, by investing in green funds managed by banks. This enables banks to lend the money to green projects at more favorable terms.[17]

In 2013, the Pension Fund Code was introduced which requires pension funds to publicly define their responsible investment strategy. Since the code is embedded in the Pensions Funds Act it applies to all Dutch pension funds.[18] Another important step was in 2015, when the government of the Dutch Central Bank, DNB, announced that the it sees sustainability as a part of its mandate and therefore work actively with promoting responsible investments.[19]

While the government has played an important role in the maturing of the Dutch responsible investment market, the significant

Figure 6. Growth of sustainable investments the Netherlands



Total Assets under management in billion Euro. Source: Eurosif (2016)

growth can also be attributed to the private sector. Corporate pension funds have been active in promoting the responsible investment market, and recently institutional investors have been active in promoting more opportunities for impact investments. For example, Dutch institutional investors have established a privately-owned company that is mandated to facilitate investments directly in the Dutch real economy, with a focus on long-term financing of sectors such as the SME and sustainable energy.

On the banking side, the ethical retail bank Triodos has been involved in creating the impact investment measurement standards, the Global Impact Investing Rating System, and the bank actively works with promoting impact investing among retail investors on a global scale. On the private side, it is also worth to mention that the Netherlands is the home of Sustainalytics, which is a global leader in sustainability financial research.[20]

13. Hachigian (2015)
14. Eurosif (2016)
15. Eurosif (2016)
16. Hachigian (2015)
17. European Commission (2017:4)
18. Hachigian (2015)
19. Eurosif (2016)
20. Hachigian (2015)

France

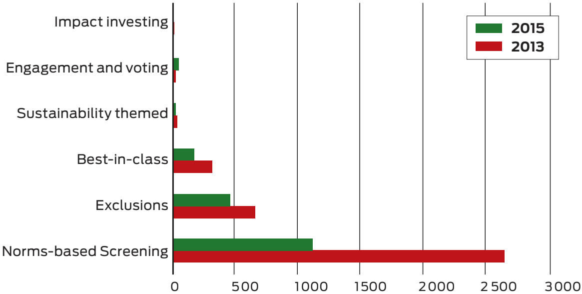
France is one of the biggest responsible investment players in Europe. The socially responsible investment market has grown significantly during the past years, and insurance companies are one of the main contributors to this growth as the French socially responsible investment market is driven by asset owners who own a clear majority of the assets.[21] France is a stronghold for ESG screening, sustainability themed investing and best-in-class approaches, while the exclusionary approach and shareholder activism is less developed compared to many other pioneering responsible investment markets.[22]

Historically the concept of ethical investments appeared in France between 1995 and 2000, through the influence of religious groups. At this stage, ethical investment was not strictly defined as negative screening, as in many other countries, but also allowed for possibility of positive screening. While there were only a handful ethical funds in France in the late 1990s there has been a significant growth of responsible investment funds and assets under management until today, which can be attributed to a wide range of public- and private-sector actors. For example, in 1999, a French CSR rating agency, ARESE, was financed by the public bank Caisse des Depots, enabling French fund managers to develop best-in-class screening practices. In 2001, the public bank launched the think tank and media platform Novethic to promote CSR, sustainability and socially responsible investments.[23]

Another explanation why France is a stronghold in responsible investments is the political framing of responsible investments. The private retirement income in France is almost entirely based on compulsory systems.[24] The perspective of managing employee savings according to responsible investment standards attracted the attention of trade unions and state officials from 2000, hence responsible investment became a part of the debates surrounding the employee pension plans. Another direct leverage for responsible investment came in 2008 when the employee savings program was the inclusion of at least one ‘fond solidaire’, meaning that the fund includes at least 10 percent of unlisted assets targeting community investing and social entrepreneurship.[26]

A third explanation for the mature French market is the calculative framing of responsible investments, meaning measuring the ESG impact of investments. The CSR rating agency ARESE that was established in 1997 had a mission to provide investors with quantified information on French company stocks’ social responsibility, presented as quantified scores easily integrated by investment managers. The growth of ESG rating agencies, which sometimes provided contradictory ratings, led French responsible investors to develop in-house expertise in quantifying ESG scores. After a while critique grew about the transparency of

Figure 7. Growth of sustainable investments France



Total Assets under management in billion Euro. Source: Eurosif (2016)

the practices adopted by the internal responsible investment capacities. In response to this critique Novethic launched an online rating device in the early 2000s, with a purpose to measure extra-financial quality of responsible investment funds, meaning that the focus on assessment was not on the stocks invested in but the social responsibility of funds. In 2009, the rating system was transformed into a label, the first of its kind in Europe, with a purpose to guide retail investors in responsible investments.[27]

Article 173 in the Energy Transition Law

The French Energy Transition for Green Growth Law was adopted in August 2015, and marks a turning point in carbon reporting. Article 173 of the Energy Transition Law, which entered into force on January 2016, strengthen the mandatory carbon disclosure requirements for listed companies. Furthermore, the law requires institutional investors to report on the integration of ESG criteria and climate change-related risks, as well as how their policies align with the national strategy for energy and ecological transition. The law is expected to cause more analysis on climate risk and more reporting about exposure levels by investors[28], and has picked up interest across the globe due to its pioneering plan to combat climate change and diversify sources of energy.[29]

21. Eurosif (2016)
22. Giamporcaro (2015)
23. Giamporcaro (2015)
24. Giamporcaro (2015)
25. Eurosif (2016)
26. Giamporcaro (2015)
27. Giamporcaro (2015)
28. UNPRI (2017:6)
29. Top1000Funds (2017)

The United Kingdom

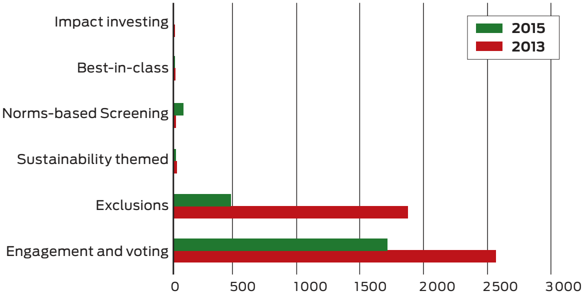
The fund industry in the United Kingdom is highly international, with around 40 percent of the GBP 5,5 trillion assets under management coming from overseas clients, and pension schemes as a dominant client source. The market for responsible investments in the UK is diversified and flourishing, and there are signs indicating that responsible investments is becoming mainstream in fund management.[30]

Responsible investments have a long history in the UK with early roots in ethical investment funds and other dedicated portfolios managed on an ethical basis. Until the 1960s, ethical investments were practices predominantly by religious organizations, and the funds were generally run according to screening strategy, meaning that companies were screened out or in. While the ethical investment had a growth until the turn of the century, the increase did not lead to an uptake of ethical investments by mainstream institutional investors. It was first when the strategic approach to sustainable investments changed that the mainstream started to become interested. Since the late 1990s the most significant change has been a shift from screening to a best-in-sector or best-in-class approach whereby investors do not screen out specific industries, but choose the best companies in each sector. This did not only lead to an uptake of sustainable investments by the mainstream institutional investors, but also a reframing from 'ethical investments' to 'socially responsible investments'.[31]

Around 2015 there was a new shift in the financial center of London when institutional investors began to consider ESG issues in their investment decisions, hence also becoming more firmly linked with corporate governance. The increased focus on ESG issues as material risks has come with a growing perception among institutional investors that responsible investments increase rather than reduce the investment return. The acknowledgement that ESG issues, particularly climate change, presented as significant and material risk, is a major reason why the responsible investment agenda has come into the mainstream.[32] In 2016, The Pension Regulator endorsed a legal interpretation of fiduciary duty that imply that trustees should take ESG issues into account when they are financially significant, and where appropriate the trustees should seek to influence managers' stewardship policies and if practicable agree on specific shareholder voting criteria.[33]

While ESG integration and exclusion is major themes of responsible investments in the UK, British institutional investors also tend to be more advanced in engagement and dialogue with shareholder companies than in other places around the world. This is partly due to the investors being more proactive and also due

Figure 8. Growth of sustainable investments the UK



Total Assets under management in billion Euro. Source: Eurosif (2016)

to greater receptiveness among investee companies.[34] Furthermore, Institutional asset owners in the UK work increasingly with shareholder activism. For example, the Pension Fund Roundtable, an informal group of large funds, has outlined what they want in important respect from fund managers.[35] The increasing engagement on ESG issues can also be traced to the Stewardship Code which includes an allusion to the need for institutional investors to escalate their engagement activities where an ESG issue is detected. The code is voluntary for asset managers, asset owners, and service providers, but it is mandatory for UK-regulated asset managers to report on a 'comply or explain' basis.[36]

As UK is the top financial center in the world, it is not a big surprise that it is also home to a large number of NGOs and think tanks targeting the financial sector. Bodies such as Carbon Tracker, CDP, PRI and Asset Owners Disclosure Project are all UK based and a significant amount of single-issue campaigns are active in the country. According to the UK Sustainable Investment and Finance Association, UKSIF, the agenda and intellectual content used by responsible investors is increasingly reflected by work done by bodies outside of the financial services sector.[37]

30. Eurosif (2016)
31. Biehl & Atkins (2015)
32. Biehl & Atkins (2015)
33. Eurosif (2016)
34. Eurosif (2016)
35. Eurosif (2016)
36. Biehl & Atkins (2015)
37. Eurosif (2016)

Chapter 5

Concluding remarks

The investment industry is moving in a more sustainability-oriented direction, taking increasing notice to responsible investments. While the main objective of investments seems to continue with an emphasis that investing based on financial value is in the best interest for society, it is promising that institutional investors are increasingly aware of the long-term risks and opportunities faced by climate change and other environmental harmful activities.

With this report, the hope is to encourage people to engage in the debate on how investments can be a force for a long-term sustainable development.

Since the rules for the financial system is made up by governments and its purpose is to serve people, it may be important that also non-financial professionals are involved in the debate, particularly now when sustainable finance is becoming a priority on the policy agenda.

References

AODP (2017). »Global Climate Index 2017: Rating the World's Investors on Climate Related Financial Risks«, http://aodproject.net/wp-content/uploads/2017/04/AODP-GLOBAL-INDEX-REPORT-2017_FINAL_VIEW.pdf, accessed 6 November 2017

Bank of England (2015). »Breaking the tragedy of the horizon - climate change and financial stability - speech by Mark Carney«, http://www.bankofengland.co.uk/publications/Pages/speeches/2015/844.aspx, accessed 29 October 2017

Bengtsson, Elias (2018). »A History of Scandinavian Socially Responsible Investing«. Journal of Business Ethics, Vol. 82, No. 4, pp. 969-983. Springer. http://www.jstor.org/stable/25482342

Biehl, Cristoph & Atkins, Jill (2015). »Responsible Investments in the United Kingdom«. In Hebb, T., et al., eds. The Routledge Handbook of Responsible Investing. London: Routledge.

Boston Consulting Group (2017). »Global Wealth 2017: Transforming the Client Experience«, http://image-src.bcg.com/Images/BCG-Transforming-the-Client-Experience-June-2017_2_tcm9-161685.pdf

Carbon Tracker Initiative (2017). »About us«, https://www.carbontracker.org/about/, accessed 11 November 2017
Carbon Tracker Initiative (2017:2). »Mark Campanale«, https://www.carbontracker.org/team/mark-campanale/, accessed 11 November 2017
Clark, G. et al (2015). » Addressing the challenges of transformation through sustainable investment«. In Hebb, T., et al., eds. The Routledge Handbook of Responsible Investing. London: Routledge.
CFA Institute (2015). »Environmental, Social, and Governance Issues in Investing: A Guide to Investment Professionals«, http://www.cfapubs.org/doi/pdf/10.2469/ccb.v2015.n11.1
Climate Bonds Initiative (2017). »About us«, https://www.climatebonds.net/about, accessed 10 November 2017
Climate Bonds Initiative (2017:2). »Partners Program: Be part of the growing Green & Climate Bonds Market«, https://www.climatebonds.net/files/files/-Partners_Brochure_services_Jan2017.pdf, accessed 10 November 2017
Deutsche Asset Management (2017). »Sustainable Finance Report, Issue #2«
Deutsche Asset Management (2017:2). »Responsible Investing: Our contribution to a sustainable future«. https://deutscheam.com/globalassets/deutsche-awm-global/datasources-for-new-cio-landing-page/esg/responsible-investing.pdf
Deutsche Asset Management (2017:3). »Tobacco's Investment Returns and Societal Costs: A New Perspective on Tobcco Engagement and Divestment«
Du Rietz, Sabina (2015). »Responsible Investments in Sweden«. In Hebb, T., et al., eds. The Routledge Handbook

of Responsible Investing. London: Routledge.
EFAMA (2017). »Asset Management in Europe« https://www.efama.org/Publications/Statistics/Asset%20Management%20Report/EFAMA%20Asset%20Management%20Report%202017.pdf
EUR-lex (2016). »Directive (EU) 2016/2341: On the activities and supervision of institutions for occupational retirement provision (IORPs)«, http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32016L2341, accessed 10 November 2017
EU Transparency Register (2017). »EUROSIF A.I.S.B.L (EUROPEAN SUSTAINABLE INVESTMENT FORUM)«, http://ec.europa.eu/transparency/regexpert/index.cfm?do=memberDetail.memberDetail&memberID=65119&orig=group, accessed 4 November 2017
European Commission (2016). »Commission Decision: on the creation of a High-Level Expert Group on Sustainable Finance in the context of the Capital Markets Union«, https://ec.europa.eu/info/system/files/161028-decision_en.pdf, accessed 3 November 2017
European Commission (2017:2). »»Register of Commission Expert Groups and other similar entities: Member Details«, http://ec.europa.eu/transparency/regexpert/index.cfm?do=memberDetail.memberDetail&memberID=65119&orig=group, accessed 4 November 2017
European Commission (2017:3). »Special Eurobarometer 459: Climate Change«, https://ec.europa.eu/clima/sites/clima/files/support/docs/report_2017_en.pdf
European Commission (2017:4). »Promoting Investment in Sustainability: Green Funds«, https://ec.europa.eu/environment/ecoap/about-eco-innovation/business-fundings/

netherlands/13112012-promoting-investment-in-sustainability-green-funds_en, accessed 10 November 2017

Eurosif (2016). »European SRI Study 2016«, http://www.eurosif.org/wp-content/uploads/2016/11/SRI-study-2016-HR.pdf

Financial Centre Futures (2017). »The Global Financial Centres Index 22«, www.longfinance.net/images/gfci/gfci_22.pdf, accessed 10 November 2017

Financial News (2017). »Change corporate pay structures to tackle short-termism«, https://www.fnlondon.com/articles/change-corporate-pay-structures-to-tackle-short-termism-20171114, accessed 27 November 2017

Financial Times (2017). »BlackRock and Vanguard's climate change efforts are glacial«, https://www.ft.com/content/adc7973a-b001-11e7-beba-5521c713abf4

Forbes (2013). »How Angry Walmart Workers Helped Convince Foreign Investors To Dump Shares«, https://www.forbes.com/sites/clareoconnor/2013/10/07/how-angry-walmart-workers-helped-convince-foreign-investors-to-dump-shares/#54170670b48a, accessed 12 November 2017

Giamporcaro, Stéphanie (2015). »Responsible Investments in France«. In Hebb, T., et al., eds. The Routledge Handbook of Responsible Investing. London: Routledge.

Gifford, J. (2015). » The changing role of asset owners in responsible investment: reflections on the principles for responsible investment – the last decade and the next«. In Hebb, T., et al., eds. The Routledge Handbook of Responsible Investing. London: Routledge.

GIIN (2017). »What You Need to Know About Impact Investing«, https://thegiin.org/impact-investing/need-to-know/#s8, accessed 31 October 2017

GSI Alliance (2017). »Eurosif: The European Sustainable Investment Forum, www.gsi-alliance.org/alliance-members/eurosif/, accessed 4 November 2017

Hawley, J. (2015). »Setting the scene: The basics and basis of responsible investment«. In Hebb, T., et al., eds. The Routledge Handbook of Responsible Investing. London: Routledge.

Hachigian, Heather (2015). »Responsible Investments in the Netherlands«. In Hebb, T., et al., eds. The Routledge Handbook of Responsible Investing. London: Routledge.

Hebb, T., et al (2015). »Introduction to The Routledge Handbook of Responsible Investment«. In Hebb, T., et al., eds. The Routledge Handbook of Responsible Investing. London: Routledge.

High-Level Expert Group on Sustainable Finance (2017). »Financing a Sustainable European Economy« https://ec.europa.eu/info/sites/info/files/170713-sustainable-finance-report_en.pdf

Investopedia (2017). »Short-Term Investments«, https://www.investopedia.com/terms/s/shorterminvestments.asp, accessed 27 November 2017

Investors on Climate Change (2017). »About the Montréal Carbon Pledge«, http://investorsonclimatechange.org/portfolio/montreal-pledge/, accessed 31 October 2017

Kapoor, S. (2017). »Investing for the Future«, http://re-define.org/sites/default/files/images/SWF-Report_Final.pdf

Kommuninvest (2017). »Press Release: Nordic issuers release guide on green bonds impact reporting«, http://kommuninvest.se/2017/10/press-release-nordic-issuers-release-guide-on-green-bonds-impact-reporting/, accessed 11 November 2017

Kommuninvest (2017). »Nodric Public Sector Issuers: Position Paper on Green Bonds Impact Reporting«, http://kommuninvest.se/wp-content/uploads/2017/10/NPSI_Position_paper_2017.pdf, accessed 11 November 2017

KPMG (2017). »FSB Task Force on Climate-related Financial Disclosures«, https://assets.kpmg.com/content/dam/kpmg/xx/pdf/2017/01/fsb-task-force.pdf, accessed 5 November 2017

Krosinsky, C. (2015). »Overcoming distractions on the road to increased levels of ESG integration«. In Hebb, T., et al., eds. The Routledge Handbook of Responsible Investing. London: Routledge.

Morgan Stanley (2017). »Millennials Drive Growth in Sustainable Investing«, https://www.morganstanley.com/ideas/sustainable-socially-responsible-investing-millennials-drive-growth, accessed 29 October 2017

Figueres, C. et al (2017). »Three years to safeguard our climate«, Nature 546, 593–595. Available at: http://www.nature.com/news/three-years-to-safeguard-our-climate-1.22201

Neher, Agnes L. (2015). »Responsible investment in Austria, Germany and Swtizerland«. In Hebb, T., et al., eds. The Routledge Handbook of Responsible Investing. London: Routledge.

New Climate Economy (2014). »Better Growth Better Climate: The New Climate Economy Report«, http://static.newclimateeconomy.report/wp-content/uploads/2014/08/BetterGrowth-BetterClimate_NCE_Synthesis-Report_web.pdf

Piketty, T., & Goldhammer, A. (2014). Capital in the twenty-first century. Cambridge Massachusetts: The Belknap Press of Harvard University Press.

Pouget, S., et al (2015). »Financial markets' inefficiencies and long-term investments«. In Hebb, T., et al., eds. The Routledge Handbook of Responsible Investing. London: Routledge.

PwC (2017). »Asset & Wealth Management Revolution: Embracing Exponential Change«, http://www.pwc.com/gx/en/asset-management/asset-management-insights/assets/awm-revolution-full-report-final.pdf

Republique Francaise (2017). »Success for France's first sovereign green bond«, http://www.gouvernement.fr/en/success-for-france-s-first-sovereign-green-bond, accessed 31 October 2017

Robins, S. (2008). »The Emergence of Sustainable Investing«. In Krosinsky, C.; Robins, N eds. Sustainable Investing: The Art of Long Term Performance. New York: Taylor & Francis

Schifeling, T. and Hoffman, A. (2017). »Bill McKibben's Influence on U.S. Climate Change Discourse: Shifting Field-Level Debates Through Radical Flank Effects«. Organization & Environment, Forthcoming; Ross School of Business Paper No. 1364. Available at SSRN: https://ssrn.com/abstract=2957590

Schröders (2017). »Understanding sustainable investment and ESG terms«, http://www.schroders.com/en/sysglobalassets/global-assets/english/campaign/sustainability/interpret/understanding-sustainable-investment-and-esg-terms.pdf

Silver, N. (2017). Finance, Society and Sustainability: How to Make the FInancial System Work for the Economy, People and Planet. London: Springer Nature.

ShareAction (2016). »ShareAction: Strategic Framework

2016-2021«, https://shareaction.org/wp-content/uploads/2016/10/SAStrategyFramework2016-2021.pdf, accessed 4 November 2017.
ShareAction (2017). »Press Release: $7.9 trillion investor coalition pushes companies for disclosure on global workforces«, https://shareaction.org/press-release/7-9-trillion-investor-coalition-pushes-companies-for-disclosure-on-global-workforces/, accessed 4 November 2017
ShareAction (2017:2). »Press Release: A hundred investors with assets totalling nearly $2 trillion call on world's largest banks to disclose climate-related financial information«, https://shareaction.org/press-release/investor-letter-bank-low-carbon/, accessed 4 November 2017
Stockholm Fintech Hub (2017). »Stockholm Green Digital Finance Launches Initiative to Validate Green Investments Using Blockchain Technology«, https://stockholmfin.tech/press/stockholm-green-digital-finance-launches-initiative-to-validate-green-investments-using-blockchain-technology/, accessed 29 October 2017
Stockholm Green Digital Finance (2017). »Press Release: New initiative to deliver green finance for fintech launched«, https://stockholmfin.tech/media/1011/press-release-stockholm-green-digital-finance-lauch.pdf, accessed 10 November 2017
Stockholm Resilience Centre (2015). »Planetary boundaries research«, http://www.stockholmresilience.org/research/planetary-boundaries.html, accessed 29 October 2017
Swedish Government (2017). » Ändrade regler för Första–Fjärde AP-fonderna«, http://www.regeringen.se/49f639/

contentassets/780107f1d3ab44438723545l164193cf/andrade-regler-for-forstafjarde-ap-fonderna, accessed 30 November 2017
Swesif (2017). »Hållbarhetsprofilen (Swesif's sustainability declaration for funds)«, www.swesif.org/swesif/hallbarhetsprofilen-english/, accessed 10 November 2017
TCFD (2017). »Final Report: Recommendations of the Task Force on Climate-related Financial Disclosures«, https://www.fsb-tcfd.org/wp-content/uploads/2017/06/FINAL-TCFD-Report-062817.pdf, accessed 5 November 2017
TCFD (2017:2). »Press release: Task Force publishes recommendations on climate-related disclosures«, https://www.fsb-tcfd.org/wp-content/uploads/2017/06/Press-Release-FSB-Task-Force-publishes-recommendations-on-climate-related-financial-disclosures-29-June-2017.pdf, accessed 5 November 2017
TCFD (2017:3). »Press release: Final Recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) Help Companies Disclose Climate-related Risks and Opportunities Efficiently and Effectively«, https://www.fsb-tcfd.org/wp-content/uploads/2017/06/Press-Release-Final-TCFD-Recommendations-Report-Release-29-June-2017-FINAL-IMMEDIATE-RELEASE-UPDATED-SUPPORTERS-LINK.pdf, accessed 5 November 2017
Top1000Funds (2017). »ESG Policy Initiatives Gain Momentum«, https://www.top1000funds.com/featured-homepage-posts/2017/11/03/esg-policy-initiatives-gain-momentum/, accessed 8 November 2017
UNCTAD (2017). World Investment Report 2017, http://unctad.org/en/PublicationsLibrary/wir2017_en.pdf

UNEP (2017), »The Emissions Gap Report 2017: A UN Environment Synthesis Report«, https://wedocs.unep.org/bitstream/handle/20.500.11822/22070/EGR_2017.pdf, accessed 1 November 2017
United Nations (2017). »Goal 17: Revitalize the global partnership for sustainable development« http://www.un.org/sustainabledevelopment/globalpartnerships/, accessed 29 October 2017
UNPRI (2017). »The SDG Investment Case«, https://www.unpri.org/download_report/42251
UNPRI (2017:2). About the PRI, https://www.unpri.org/about, accessed 31 October 2017
UNPRI (2017:3). »A Blueprint for Reponsible Investment«, https://www.unpri.org/download_report/30783, accessed 12 November 2017
UNPRI (2017:4). »Coping, shifting, changing: corporate and investor strategies for managing market short-termism«, https://www.unpri.org/download_report/40246, accessed 12 November 2017
UNPRI (2017:5). »What is Responsible Investing?«, https://www.unpri.org/about/what-is-responsible-investment, accessed 31 October 2017.
UNPRI (2017:6). »French Energy Transition Law: Global Investor Briefing«, https://www.unpri.org/download_report/14573, accessed 3 November 2017
Urwin, R. (2011). Pension Funds as Universal Owners. Rotman International Journal of Pension Management, 4(1).
Viehs, M (2015). »Understanding ESG Investing: Fundamentals and Implementation«, http://www.cfapubs.org/doi/pdf/10.2469/cp.v32.n3.7
Washington Post (2017). »Financial firms lead shareholder

rebellion against ExxonMobil climate change policies«, https://www.washingtonpost.com/news/energy-environment/wp/2017/05/31/exxonmobil-is-trying-to-fend-off-a-shareholder-rebellion-over-climate-change/?utm_term=.c308565bba98

World bank (2017). »Fiji Issues First Developing Country Green Bond, Raising $50 Million for Climate Resilience«, http://www.worldbank.org/en/news/press-release/2017/10/17/fiji-issues-first-developing-country-green-bond-raising-50-million-for-climate-resilience, accessed 29 October 2017

WMO (2017), »WMO Greenhouse Gas Bulletin: The State of Greenhouse Gases in the Atmosphere Based on Global Observations Through 2016«, https://ane4bf-datap1.s3-eu-west-1.amazonaws.com/wmocms/s3fs-public/ckeditor/files/GHG_Bulletin_13_EN_final_1_1.pdf?LGJNmHpwKkEG2Qw4mEQjdm6bWxgWAJHa

Sustainable investments
How professional investors are
approaching sustainability